CHILDREN’S RIGHTS, CHILD WELL-BEING, AND MATERIAL DEPRIVATION IN INTERNATIONAL CONTEXTS
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ABSTRACT

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Over 37% of the world’s children live in poverty (UNICEF Data Center, 2017). However, their distribution across countries and regions are far from equal. This study utilizes the Children’s Worlds dataset in order to provide insights into resolving child poverty issues in diverse international contexts by applying children’s rights approach. This dissertation proposes that the implementation of the UNCRC (The United Nation Convention on the Rights of the Child; “children’s rights”) can serve as a key factor in achieving child well-being and addressing the issue of child poverty. In order to explore the role of children’s rights in this relationship, the material deprivation gap is explored and a new scale to measure children’s rights implementation is proposed. Therefore, three studies were conducted to achieve these goals.

The first study focuses on a pattern analysis of the material deprivation among children living in five regions of the world. This paper employs latent class analysis for the identification of the patterns and multinomial regression in the exploration of the factors impacting class membership. The findings suggest that a material deprivation gap exists among world regions and has regional patterns embedded in socio-cultural context. This manuscript is designed to inform anti-poverty policy development based on the children’s subjective experiences of poverty in line with the children’s rights approach.

The second manuscript is devoted to scale development that allows for measuring the outcomes of children’s rights implementation based on the standards of the UNCRC. The exploratory and confirmatory analysis were used in order to provide evidence of the strong
factorial structure of the scale. As a result, a scale for measuring Provision and Participation has
been proposed. The implications for the scale utilization in international research, practice, and
policy are discussed in the chapter.

The third paper is an offshoot pilot study of the previous manuscript. This study utilizes
the Provision and Participation Rights Scale developed in the second manuscript in order to elicit
the role of children’s rights implementation in the relationship between material deprivation and
child subjective well-being in Ethiopia, Norway, and the UK. This study employs mediation path
analysis based on SEM technique. This manuscript provides implications for international social
work and development practice and discusses the role of context in shaping the mediation
relationship and the effect of children’s rights implementation.
This dissertation is dedicated to all children living in poverty and social workers helping them to succeed.
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CHAPTER 1.

INTRODUCTION

“Grown-ups like numbers. When you tell them about a new friend, they never ask questions about what really matters. They never ask: ‘What does his voice sound like?’ ‘What games does he like best?’ ‘Does he collect butterflies?’ They ask: ‘How old is he?’ ‘How many brothers does he have?’ ‘How much does he weigh?’ ‘How much money does he have?’ Only then do they think they know him. If you tell grown-ups, ‘I saw a beautiful red brick house, with geraniums at the windows and doves at the roof…,’ they won’t be able to imagine such a house. You have to tell them, ‘I saw a house worth a thousand francs.’ Then they exclaim, ‘What a pretty house!”

- Antoine de Saint-Exupéry, The Little Prince

Background

State of Child Well-Being: International Inequalities

Are all children around the world equally happy? What helps them to feel well? How can we help children to be well in a variety of cultural contexts? The field of child well-being has been actively moving towards the understanding that in order to answer these questions the children themselves should be a part of the conversation. Current international comparative studies on child well-being (ex. Children’s Worlds survey, UNICEF Innocenti Report on Child Well-Being in Rich Countries, UNICEF State of the World’s Children Report) clearly show that the children’s voices are not universally included (Bradshaw, 2015). Children’s Worlds Survey is the only one on the list that was responsive to the participatory shift and focused its data collection solely on the children and their experiences.

The introduction of the United National Convention on the Rights of the Child (UNCRC) helped to shift the discourse on child well-being towards more participatory practices and prompted researchers to look at the subjective side of child well-being. This dissertation will focus on subjective well-being as a desired outcome and an indicator of child happiness.

Subjective and objective child well-being are designed to depict different sides of the well-being
story. A report on child well-being in European countries shows that there are significant discrepancies between adult-generated objective ranking of child well-being and child-reported subjective well-being (Bradshaw et al., 2013). This report highlights, for example, that Norway and Finland tend to be the leaders in objective child well-being taking 2nd and 4th spots among 25 countries while scoring only 10th and 11th on the dimension of subjective child well-being. The reverse is true for Slovenia and Austria, which scored in an average range on objective indicators, being 12th and 17th countries in the list, but were ranked 3rd and 4th in child subjective well-being in Europe. There is also some evidence that the data collected from children have the potential to explain more variance in child well-being than the data reported by their parents (Rees & Bradshaw, 2016; UK sample).

In addition to the emphasis on the subjective side of child well-being, the fourth chapter of this dissertation will focus on the existing inequalities in child well-being and examination of the factors affecting the well-being gap. One would assume that the inequalities with life satisfaction (one of the ways to measure well-being) will be related to the whether a country of child’s origin is developed or developing (Klocke, Clair & Bradshaw, 2013). The first wave of the Children’s Worlds survey showed that this does not necessarily hold true for the diverse set of eleven countries in the study (Rees & Dinisman, 2014). The findings suggest that the children do experience their lives differently across countries and express a different level of satisfaction as well (Rees & Dinisman, 2014). In addition, analysis of the Health Behavior among School Children data, an international survey of child well-being indicators, showed that the effect of the country level variables (ex. social policies it implements, GDP, etc.) are not fully able to explain the variations in child well-being across countries (Klocke, Clair & Bradshaw, 2013). Klocke and colleagues (2013) argue that consideration should be given to the cultural
factors influencing children’s lives in addition to the mere implementation of social policy or other macro-level characteristics.

**Poverty and Child Well-Being**

Over 37% of the world’s children live in poverty (UNICEF Data Center, 2017). However, on par with the child well-being research, their distribution across countries and regions are far from equal. Sixty-six percent of children in Sub-Saharan Africa; 50% in South Asia, 13% in Middle East and North Africa, 10% in East Asia and Pacific, 9% in Latin America and the Caribbean and 3% in Europe and Central Asia experience poverty measured by Global Multidimensional Poverty Index (UNICEF Data Center, 2017).

Poverty has been seen as a threat to child well-being by many researchers (Chaudry & Wimer, 2016; Main, 2014; Minujin & Nandy, 2012). Poverty deprives children of resources for healthy development and prevents them from enjoying their lives. Children living in different countries experience differences in the form and intensity of poverty. The inequality in access to resources is deeply rooted in the historical, political, economic, and cultural profile of a country. However, not just the quantity but also the quality of resources matter for child well-being. It has been established that subjective indicators of poverty (ex. material deprivation approach) are more strongly related to child well-being than monetary indicators (Bradshaw, Richardson & Ritakallio, 2007; Main, 2014). The first manuscript will explore the qualitative side of child poverty. This paper will focus on the concept of material deprivation, one of the approaches to child poverty, utilize the set of material resources available for the children in five regions of the world, and analyze patterns of material deprivation.
**Children’s Rights Implementation**

This dissertation proposes that the implementation of the UNCRC ("children’s rights") can serve as a key factor in achieving child well-being and addressing the issue of child poverty. Children’s rights have a basic premise: if we agree on what good childhood is, then this experience should be available for all children no matter where they live (Ben-Arieh, Dinisman & Rees, 2017). The challenge is that the implementation of the Convention has varied widely across countries. Comparative studies on children’s rights implementation and child well-being are needed in order to understand how good our social policies are, what we can do better for the children, and what we can learn from each other (Bradshaw, 2015).

From a procedural standpoint, children’s rights as a framework should be adopted by a country to make a state legally bound to implement the Convention. The adoption of the UNCRC includes two steps – signing and ratifying. Through this process acceptance, accession, and succession are also included. As of May 2018, 196 countries ratified or agreed in other forms and with some stipulations to adhere and implement the UNCRC. From the side of the UNICEF, the Commission on the Right of the Child is established in order to facilitate a relationship with the States, assist them in the implementation of the treaty and collect implementation data (Art, 2014; Earls, 2011). All signatory countries are required to create National Programs of Action (NPA) for achieving goals of the Convention (Walker, Brooks & Wrightsmans, 1999). These programs in combination with the system of reservations, that every country has a right to make when adopting the Convention for cultural adaptation purposes, contribute to the differential implementation of children’s rights.

The assessment of the effectiveness of the UNCRC varies across stakeholders (Arts, 2014). Academic literature tends to celebrate the Convention’s achievement in establishing new
children’s rights institutions and advancing legislative initiatives that protect children’s rights (Arts, 2014). However, it was noted that in the 27 years of the Convention’s existence there is no country in the world that would fully implement the Convention. Overall, children have a better chance to survive and thrive today than before 1989, when the Convention was adopted (UNICEF, 2014; Simmons, 2009). Children’s mortality rates decreased in half since the adoption of the Convention 27 years ago. (UNICEF, 2014). In the least developed countries, due to the Convention implementation, the rate of primary school enrollment increased by 30% since the UNCRC ratification (UNICEF, 2014). However, half of the world’s children still live in poverty, about 56% of the children have access to safe drinking water, only 65% of children have a birth certificate that entitles them to their rights, 15% of children in the world are engaged in child labor, and 20% of girls in the world became mothers before they turned 18 in 2010 (UNICEF, 2014).

**Conceptual Framework**

**Children’s Rights as an Approach**

A right can be defined as “the existence of an obligation toward a person and the ability of that person to activate this obligation” (Gal, 2011, p. 11). Very often, vulnerable groups such as children are limited in their capacity to activate their rights. In order to do so, children must be helped to overcome the abstract and complicated language of the rights discourse to recognize their life experiences that involve violation of their rights (Skott-Myhre & Tarulli, 2008). However, the activation of the children’s ability to be right holders is triggered by the way childhood is socially and culturally constructed by the adults (Liebel, 2012). For example, adults determine when and what capacities need to be developed including when a person can marry,
vote, be responsible for a crime (Freeman, 2013). In response to that, the children’s rights approach was developed. Children’s rights are governed by three main principles: non-discrimination, the best interest of the child, and rights to survival, development and participation (UNICEF, 2014; Peterson-Badali & Ruck, 2008; Ben-Arieh, 2010, Walker, Brooks & Wrightsmans, 1999; Arts 2014; Gal, 2011).

The principle of non-discrimination is based on the premise that children are a weak group subjected to power differences that are fertile ground for adultism. Adultism is a highly oppressive dynamic created by adults towards children which impedes the children’s rights advancement as it is counteractive to it. It is often manifested as adults’ disrespect to children’s needs, intelligence, and potential (Petr, 2003; Tate & Copas, 2003; Bell, 1995; Flasher, 1978). Adult power comes from their privilege and access to resources, institutional power of managing schools, social services, and families, and ability to exercise their rights fully (Oswell, 2013, Flasher, 1978).

The best interest of the child, the second children’s rights principle, claims that all children should enjoy the unique privilege of protection for them to develop in all aspects in an environment of freedom and dignity (Freeman, 2007). Those in power should keep this principle in mind when acting upon children’s interests. When the Convention has been adopted, there was little debate about the definition of the principle which gave a space for the adults to define and act upon their own definition of best interest (Freeman, 2007; Leibel, 2012). Therefore, this principle is still a place for manipulation especially when children’s rights clash with parental rights, which is discussed later.

Rights to survival, development, and participation are the core values of the children’s rights agenda. (Rogers & Wrightsman, 1978 as cited in Peterson-Badali & Ruck, 2008).
Protection rights are designed to help a child to survive and prevent child maltreatment and establish the responsibility of the state and caregivers to organize effective prevention. Provision rights focus on development and include the rights to affirmative assistance in the forms of welfare, health, schooling and social services. Participation rights provide children with an opportunity to be a stakeholder in decision-making and exercise freedom of expression, thought, conscience and religion, right to be heard in all matters affecting children, and freedom of association and peaceful assembly (Bartholet, 2011; Freeman, 2013). Children’s agency and voice are the key concepts that encompass the idea of participation rights (Woodhouse, 2014). Children’s voice is phenomenon focusing not only on the expression of opinions by the children but also the recognition and consideration of those opinions by the adults (Gowrie, 2015). Children’s agency is closely related to children’s voice and can be defined as the ability to “make choices and decisions to influence events, and to have an impact on their world” (Gowrie, 2015).

Participation is often opposed to protection. As a result, it is the least implementable principle in the children’s rights approach (Peterson-Badali & Ruck, 2008; KidsRights, 2015). Furthermore, cultural context plays a significant role in what is being emphasized – protection, provision, and/or participation - those directions are chosen by a nation in its understanding and social policy of childhood.

Children’s Rights and Culture

“Immaturity of children is a biological fact of life, but the ways in which this immaturity is understood and made meaningful is a fact of culture.” (James & Prout, 1990, p,7). Empirical evidence suggests that culture may impact the definition of children’s rights as well as the mechanisms of their implementation (Torney-Purta & Barber, 2011, Ben-Arieh, Khoury-Hassabri, and Haj-Yahia, 2006). The clash between protectionist discourse and participation
rights becomes particularly apparent when individualistic vs. collectivistic cultural values interfere with the implementation of the children’s rights approach (Peterson-Badali & Ruck, 2008). The dimension of individualism vs. collectivism has the most impact on the understanding of the children’s rights as it determines whose rights will be protected and how they intersect with familial/parental rights (Cherney, Greteman & Travers, 2008). Traditionally, Western societies tend to exhibit more individualistic traits than non-Western societies (Qvirtup, 1994; Oswell, 2013; Liebel, 2012; Stern, 2006). Therefore, in return, protection rights tend to be embedded more into collectivistic hierarchical thinking as they imply an obligation to make collective decisions on behalf of others. Participation rights stem from the individualistic paradigm of child development (Cherney, Greteman & Travers, 2008). Therefore, Ben-Arieh at el. (2005) suggested that some aspects of children’s rights might not be as accepted in non-Western context as they are in the Western world, especially, in Europe.

**Comparing Children’s Rights with Needs-Based Perspective and Parental Rights**

Two main counter perspectives to children’s rights need to be noted: Needs-Based Perspective (NBP) and parental rights discourse. NBP emphasizes that rights and needs are very close in meaning and therefore can be used interchangeably. However, NBP focuses solely on the obligation of need fulfillment and structure children as a needy group (Gal, 2011). Gal (2011) argues that need-based language can be more stigmatizing as it is related to the idea of social diagnosis. NBP is a foundation of the child welfare approach. Child welfare is an inherently protectionist approach that delineates from the society rather than integrates into it. This approach focuses on child safety and takes away from their capacity to be active actors in their life. When children are not allowed to be participants in societal institutions it segregates them. Protectionists romanticize childhood and construct the children as innocent, immature, and
therefore vulnerable (Pinkney, 2011). In NBP only children who are vulnerable will be able to claim their rights. In comparison with protectionists, the children’s rights discourse emphasizes the ability of children to not just be guarded but also to take part in their lives, decision-making, and receiving adequate opportunities for development. (Milne, 2015; Pinkney, 2011).

The parental rights (PR) movement focuses on the power of parental rights to protect and nurture children but not give them adequate self-determination rights (Walker et al., 1999; Reynaert, Bouverne-De Bie & Vandevelde, 2009). Hillary Clinton (Rodham, 1973), an active children’s rights advocate, underlined that the children’s rights approach will always be encountered by the parental rights perspective, which emphasizes that parents are the primary caretaker for children and holds all responsibility for them. The difference between PR approach and NBP is in the role of the state in fulfilling the protection rights. Parental rights advocates believe that state should not assume any responsibility for the children unless parents can not provide care for them; parenting adults will always consider the best interest of the child. Therefore, there is no need for the children to participate in decision-making because all adults already bear their best interests in mind (Rodham, 1973; Reynaert, Bouverne-De Bie & Vandevelde, 2009). In this case, the best interest principle plays against children in some sense because it allows adults to apply it in the way that pre-determines the child’s future without consulting with them (Rodham, 1973).

**Critiques of Children’s Rights**

Children’s rights opponents cite the incomparability of the children’s rights discourse with parental rights, lack of young children’s capacity to fulfill their rights, and neocolonialism as the main weaknesses of the children’s rights approach. From a legal perspective, every right comes with responsibility. This rule, however, does not fit young children who, due to their
developmental capacity, cannot be responsibility holders. This leads them to be more deprived of their rights, especially in regard to the participation block of rights. (Skott-Myhre & Tarulli, 2008; Alderson, 2010). Also, the children’s rights appeared to be too westernized, viewed as a continuation of neo-colonization conflicting with the parental rights and interests in some countries (Liebel, 2012). While the UNCRC allows for local cultural values to manifest themselves, room for the evolution of nonwestern childhoods is small (Liebel, 2012).

In response to these critiques, proponents of the children’s rights approach emphasize a humanistic approach (Freeman, 2009) to make adults more inclined to ask for and be aware of children’s perspectives when judging the best interest of a child (Liebel, 2012). Also, it is believed that children need to learn how to make decisions as future adults and children’s rights are pathways for this pedagogical goal (Eeklaar, 1992 as cited in Gal, 2011). Another response embeds the idea that the children’s rights approach is automatically being implemented when a child is loved and cared for by their parents (Gal, 2011). Proponents of the moral discourse on children’s rights emphasize that even if the right is not implementable right now, it does not mean that we should not strive for it. They stress that rights can be aspirational (implementable at the maximum extent that the state can afford), and conditional (come into play when physical and cognitive abilities of the child match with her ability to exercise the right) (Alderson, 2008).

**How is the Progress of Children’s Rights Evaluated?**

In order to monitor children’s rights implementation across the globe, researchers have developed some comparative indices. An issue that is important to raise here is from whose perspective the children’s rights implementation is being measured. Advancement in objective adult-created data on children’s rights is quite prevalent (Ben-Arieh & George, 2001; Ben-Arieh & Frones, 2011; Ben-Arieh, 2012; Gal, 2011). The practice of measuring children’s rights from
children’s perspectives has been making its way forward but still is seen as something rare and exotic. This is not a surprise due to the long dominance of the protectionist agenda that silences children as a group (Bradshaw, Martorano, Natali & De Neubourg, 2013; Ziegler, Andersen, Diehm & Sander, 2011). Also, the field of children’s rights monitoring and evaluation is primarily quantitative, as it has a goal of cross-country comparison (Merry & Wood, 2015). However, not all outcomes of the children’s rights are necessarily quantifiable, translatable, and comparable across cultures (Merry & Wood, 2015). The question of measurement equivalence is especially critical as the same concepts and principles of children’s rights are perceived and reported differently across the globe (Lin, Luh, Cheng. Yang, Su & Ma, 2013; Jafari, Stevanovic & Bagheri, 2016)

Indicators for children’s rights were largely driven by the UN-wide agenda of the Millennium goals (2000-2015) which primarily emphasized the provision and protection part of children’s rights, for example, through focusing primarily on mortality and survival rates (UN Millenium Goals, n.d; State of the World Children Report, 2015). The movement towards better inclusivity, participation, and glocalization are more evident in Sustainable development goals (UN Sustainable development goals, 2016) which leave hope for creating more holistic knowledge around children’s participation rights across the world.

**UNCRC Implementation Challenges**

Legal and cultural challenges are the barriers for the UNCRC implementation. Children’s rights scholars argue that these challenges are because the document was not formulated by children, rather is was proposed by the adults (Peterson-Badali & Ruck, 2008; Liebel, 2012, Freeman, 2009). In addition, focus only on legal implementation has not served the advancement of the UNCRC well (Liebel, 2012). A top-down approach does not work for changing the culture
of everyday life, especially in the spheres where children’s rights are not legally mandated (Liebel, 2012). It has been underlined that it is necessary to develop moral heuristics of this exploration in order to understand the broader area of implementation of children’s rights, for example in social policy or local agencies (Liebel, 2012). For example, the right-based scale developed in Chapter 3 can serve as such heuristic.

Others cite imperialistic origins as a barrier for implementation (Gal, 2011; Arts, 2014; Peterson-Badali & Ruck, 2008). Indeed, there are 2.5 billion children in the world (UNICEF, 2015). About 9 in 10 children and youth between 10-24 years old live in developing countries (The State of the World Population, 2014). Developing countries account for 97% of world children’s population growth (Haub, 2012). A problem arises when the UNCRC is seen as a Western invention only. However, pro-conventionalists (ex. Arts, 2014) state that while there is room for cultural relativism in the implementation of the Convention, the rights that it grants to the children do not impose threats to their well-being in any contexts. Some scholars and practitioners argue that cultural sensitivity is installed into the Convention from several perspectives including the ability to ratify the treaty with reservations and the ability to choose to implement its promises in a way that is culturally acceptable in a particular country (Gal, 2011).

**Subjective Child Well-Being as a Concept**

Child well-being has been defined as a multidimensional phenomenon by many researchers (Ben-Arieh & Frones, 2011; Pollard & Lee, 2003; Land, 2012; Heshmati, 2007; Rees et al., 2010; Organization for Economic Cooperation and Development, 2000). Child well-being as a field is not focused on universalization of the definition. As a result of diversity of interpretations, child well-being has been defined through a number of different concepts like dimensions of life (Columbo, 1986, in Pollard & Lee, 2003; Maguro & Moses, 1986), ability to

One of the ways that child well-being has been classified is by looking at its subjective vs. objective sides. The question of subjective and objective well-being is not a purely methodological decision that one makes to answer a research question. Subjective well-being is a combination of perception of one’s life regarding life satisfaction, positive affect about life and quality of relationship with oneself, others, and environment (Bradshaw et al., 2011; Ben-Zur, 2003; Diener, 2000; Main, 2014). In contrast, objective well-being is represented by sets of indicators that are constructed from external sources and might include school enrollment, completion, rates of children with health insurance, vaccinations, or the number of children with access to the bathrooms (Axford, Jodrell & Hobbs, 2014; UNICEF, 2016). Scanlon (1993) called objective child well-being the “ingredients” to a good life rather than the experience of it. In many cases, it is an ideological stand that researchers take in regard to children’s place in a society. Objective adult-generated indicators of child well-being have been utilized for years in international reporting (ex. State of the World’s children) and were deemed as more methodologically sound than data collected from children. While there is no doubt that objective
data on child well-being does provide us with rich data, the question arises as to what this data is not saying. The objective data collected on household or parental level does not attend to the voice that children have a right to (UNCRC Article 12), especially when the data on their well-being is used for policy-making. This voicelessness has its historical roots in the way children as a group have been treated through the centuries.

For the purpose of this paper, I will focus on one aspect of child subjective well-being – cognitive well-being or subjective life satisfaction. Cognitive well-being as a subcategory of well-being is concerned with one’s satisfaction with his/her life (Kim & Main, 2017; Main, 2014). One’s state of mind plays a key role in determining whether he or she is doing well (Raghavan & Alexandrova, 2014). In addition, cognitive well-being was chosen by some researchers due to the stability of its measurement over time in contrast with affective well-being (Eid & Diener, 2004; Kim & Main, 2017). This subjective side of well-being reporting provides insights that are not subject to political manipulation as a predetermined set of indicators of well-being. Giving children a voice in research (for example, via participation in data collection) on their well-being has the potential to provide data that enriches our understanding of their well-being and to help us develop better solutions for its improvement. Therefore, this study will utilize data on children’s subjective assessment of their well-being.

**Material Resources and Deprivation**

How do we know that the children are poor? There are two main approaches to determining who can be described as living in poverty – the economic income-based approach and the relative deprivation approach. Income-based poverty measures are taken at the household level. In the income-based approach, child poverty is defined based on the number of children living in the low-income households (White et al., 2003). However, income-based indicators of
poverty do not allow for the development of effective social policies (Bradshaw, 2015). For example, Yoo and Choi (2016) found that when comparing the effect of material deprivation and family income-to-needs ratio on children’s basic psychological well-being, the results are different with material deprivation being the only economic factor influencing psychological well-being.

Most of the studies done previously on children’s poverty employ income-based indicators that have strong limitations in regard to children. Recent theoretical advancements in understanding child poverty shift the focus from a purely economic basis of assessing poverty to a more in-depth capability approach that defines child poverty as a restriction of child’s freedom and opportunities to achieve her well-being (Vandenhole, 2013). As a possible answer to this conceptual dilemma, Townsend (1979) proposed a theory of relative deprivation. He believed that poverty exists across countries, but the comparison is impossible because we think about poverty as a dichotomous variable – poor or not poor – when poverty is truly a continuum of deprivation. Furthermore, a deprivation approach allows designing a standard set of necessities that every child should have access to. Otherwise, lack of access might deprive them of opportunities for adequate development. As a result, some Material Deprivation Indices (MDI) have been developed to measure the material aspect of a child’s poverty through assessing child’s subjective needs (Gordon & Nandy, 2012).

This approach works better in child poverty research for two main reasons. First, children cannot access the economic market as easily as the adults can. Therefore, measuring household income or defining poverty by minimum wage does not necessarily translate into accurate knowledge about children’s poverty, because we have to rely on parents or caregivers as proxies who earn and distribute the income within a family. This approach neglects the power differences
that exist between adults earning money and children as passive receivers. Distribution of resources within a family might be uneven between adults and children, as well as between siblings (Jones & Sumner, 2011). As a result, the wide-spread economic approaches (ex. income, the World Bank “dollar-a-day” method) do not provide insights into the depth of child poverty.

In accordance with the relative poverty tradition, UNICEF defines children living in poverty as those who ‘experience deprivation of the material, spiritual and emotional resources needed to survive, develop and thrive, leaving them unable to enjoy their rights, achieve their full potential or participate as full and equal members of the society’ (UNICEF, 2005, p.5). It is important to understand that material deprivation is only one type of deprivation, and therefore might not encompass the whole spectrum of poverty-related areas. Material deprivation is a poverty measure that reflects the extent to which resources are transformed into quality living (Willits, 2006). Material deprivation, in its classic form focuses on ownership of the important items that are possessed by the societal majority (Willits, 2006). UNICEF (2012) identifies deprivation when children do not possess at least 2 out of 14 items which include:

“three meals a day, at least one meal a day with meat, chicken or fish (or a vegetarian equivalent), fresh fruit and vegetable served every day, books suitable for the child’s age and knowledge level, outdoor leisure equipment (bicycle, roller-skates, etc.), regular leisure activities (swimming, playing an instrument, etc.), indoor games (computer games, etc.), money to participate in school trips and events, a quiet place with enough room and light to do homework, an internet connection, some new clothes (i.e., not all second-hand), two pairs of properly fitting shoes, the opportunity, from time to time, to invite friends home to play and eat, the opportunity to celebrate special occasions, birthdays.”

The Gap in the Literature

There are several gaps in the literature that the current study addresses:
(1) Children’s poverty is often addressed by objective income-based indicators. Relative measure of poverty, such as the Material Deprivation Index, need to be utilized to enrich our understanding of the relationship between child poverty and well-being.

(2) Subjective child well-being is a fairly new advancement in well-being studies. Previously, parents and caregivers participated in child well-being studies which impact what we know about children. Therefore, it is important to introduce children’s voices in the discourse on their well-being.

(3) Current empirical literature does not address the role of children’s rights implementation in the relationship between material deprivation and subjective child well-being.

Therefore, the purpose of the dissertation is threefold:

1. Utilize the rights-informed approach to the measurement of child poverty by exploring patterns of material deprivation in international contexts;
2. Develop a tool for measuring subjective outcomes of children’s rights as experienced by children themselves;
3. Explore the role of children’s rights implementation in the relationship between child material deprivation and well-being in international contexts.

**Significance**

This study aims at the integration of the children’s rights approach in the research on child material deprivation and well-being. Uncovering the international inequalities in access to material resources and the implementation of children’s rights would provide us the insights for improving child well-being. The first and third manuscripts will provide implications for developing programs and policies in a diverse set of countries. The second paper will offer a new
measure designed to evaluate the outcomes of the UNCRC from the children’s perspective. This dissertation moves U.S.-based social work forward by emphasizing the benefit of rights-based approaches in creating social solutions. In addition, these studies bring attention to the importance of the ratification of the Convention in the U.S.

**Organization of the Dissertation**

This dissertation consists of five chapters with three of them being empirical studies in the format of peer-review articles. The first chapter is the Introduction and the fifth chapter is the Conclusion highlighting the integration of the findings. The second chapter will represent the first study focusing on the pattern analysis of child material deprivation in 5 regions of the world. This paper employs latent class analysis and multinomial regression approach to the exploration of the factors impacting class membership. The exploratory factors include regions of origin, family structure, gender, child welfare status. This manuscript is designed to inform anti-poverty policy development based on the children’s subjective experiences of poverty in line with children’s rights approach.

The third chapter is devoted to scale development that allows for measuring the outcomes of children’s rights implementation based on the standard of the UNCRC. Exploratory and confirmatory analysis was used in order to provide evidence of the strong factorial structure of the measure. The implications for the scale utilization in international research, practice, and policy are discussed in the chapter.

The fourth chapter is an offshoot pilot study of the previous manuscript. It utilizes the Provision and Participation Rights Scale developed in the third chapter in order to elicit the role of children’s rights implementation in the relationship between material deprivation and child
subjective well-being in Ethiopia, Norway, and the UK. This study will employ mediation path analysis based on SEM technique. This manuscript provides implications for international social work and development practice and discusses the role of contexts in shaping the mediation relationship.

The fifth chapter will discuss how these three manuscripts are connected. This chapter proposes ways that the findings of this dissertation can move the field of international social work practice, policy, and research forward\(^1\).

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\(^1\) References for this section are placed after Chapter 5.
CHAPTER 2.

PATTERNS OF CHILD MATERIAL DEPRIVATION AND THEIR CORRELATES AMONG FIVE REGIONS OF THE WORLD

Abstract

Anti-child-poverty programs have not always been successful in helping children get out of deprivation circumstances, and the degree of their effectiveness varies in different international contexts. One explanation might be in the way that the elimination of child poverty is measured. Most anti-poverty program evaluations estimate the increase in disposable income without attention to how exactly these resources are benefiting children. Income can be used in multiple ways (ex. debt consolidation, medical bills) that would not benefit children directly and, therefore, does not impact their material well-being. In response to the challenges of income-based poverty measurement, the material deprivation approach has been proposed as a complementary perspective that enriches our view on child poverty and allows us to reach more children who need assistance. Therefore, this study answers the following questions: (1) Does child material deprivation have different patterns across world regions? (2) If so, what characteristic do these patterns of material deprivation have? (3) Are these patterns of material deprivation more likely to affect certain regions and groups of children?

This paper utilizes data from the International Survey of Child Well-Being. This study focuses on a sample of over 13000 12 year olds from 12 countries grouped by regions of the world. The analyses were based on the items available in the Child Material Deprivation Index. Latent class analysis and multinominal logistic regression were utilized to explore patterns of material deprivation. Findings suggest five patterns of child material deprivation including extreme, high, moderate transportation, modest housing/cell phone, and no deprivation classes.
The distribution of these patterns varies significantly across world regions. This study suggests that the distribution of resources to eliminate poverty should be based not only on income-based indicators but should also include an assessment based on perceived deprivation scales, especially for children.

**Introduction**

Thirty seven percent of the world’s population is younger than 18 years old, with most of this population, about 90%, living in the developing countries (Kosher & Ben-Arie, 2016; Liddel, 1998). Poverty has been one of the most complex and detrimental children’s rights violations (UNCRC Article 27, Adequate Standard of Living) across the world. Moreover, due to their dependent status, children are disproportionately represented among the poor, and individuals younger than 18 years old are twice as likely to live in poverty than adults (Gordon et al., 2005; Sumner, 2010; UNICEF, 2016). Child poverty deprives children of resources for healthy development and well-being. About 385 million children around the world live in extreme poverty, surviving on less than $1.90 per day (UNICEF & World Bank, 2016) with an even higher number of children facing material deprivation which is not considered extreme (Gordon et al, 2005; Sumner, 2010; UNICEF & World Bank, 2016). In 2012, UNICEF (United Nations Children’s Fund) reported that of the world’s children were living in extreme poverty, meaning less than $1.90 a day 53% come from Sub-Saharan Africa, 32% come from South Asia, 11% - from East Asia and Pacific, 4% - from Latin America and the Caribbean (UNICEF, 2016).

The measurement of child poverty internationally has faced some challenges. In order to make poverty comparable across the world, UNICEF had to increase the poverty threshold up to $3.10 a day and define “moderate” poverty as income level ranging from $1.91 to $3.10 a day. Using this benchmark, 67% of children in Sub-Saharan Africa live in moderate poverty, 25% in
the Middle East and North Africa, and 6% in Europe and Central Asia (UNICEF, 2016). Furthermore, averaging the child poverty rates does not produce an adequate picture, for example, in Europe, where poverty rates can be dramatically different depending on the region. Children living in Southern European countries (Italy and Greece – about 20%) and Eastern European countries (Poland and Estonia – about 10-15%) experience higher rates of poverty than their counterparts in Northern and Western Europe (from 2-5%) (OECD, 2017).

Children are also the largest minority group in the world. However, they are not given a voice in matters affecting them and are often oppressed by the decisions made by the adults, especially in terms of finding solutions for child poverty (White, Leavy & Masters, 2003). This situation calls for the application of a children’s rights paradigm in order to resolve the child poverty problem. This study provides suggestions for advancing the solutions to child poverty by using a rights-informed, child-centric tool of measuring child material deprivation, a facet of child poverty. This paper begins with a review of the literature on child poverty policies and the ways the policies were constructed as well as patterns of material deprivation. Then it turns to an examination of the methodological steps taken to explore the material deprivation patterns. The next section will focus on the results of latent class analysis and multinominal regressions. The paper concludes with the integration of the findings in cultural contexts and discussion on potential implication for policy and practice.

**Literature Review**

**Current Approaches to Child Poverty Policy Development**

Anti-child-poverty programs have not always been successful in helping children escape negative outcomes of material deprivation, and the degree of their effectiveness varies in
different international contexts (Anthony, King & Austin, 2011; Avram & Militaru, 2016; Fajth, Kurukulasuriya & Engilberstottir, 2012; Reeves, 2015; Urban Institute, 2010). One of the reasons for this variability might be the way the elimination of child poverty is measured. Most of the anti-poverty program evaluations estimate increases in disposable income within a family as a positive outcome (ex. Avram & Militaru, 2016; Eamon, Wu & Zhang, 2009) without attention to how the income benefits the children in these families (Main & Bradshaw, 2012). However, a new wave of research on child poverty identifies the multidimensional nature of poverty as a phenomenon and calls for the utilization of more holistic approaches to its measurement (Main & Bradshaw, 2012).

Despite the straightforward nature of income-based indicators as a measure of poverty, using them for child poverty research presents certain challenges (Notten, 2015). Income (including social transfers) can be used in multiple ways (e.g., debt consolidation, medical bills) that would not benefit children directly and, therefore, do not impact their material well-being. Household income is generally redistributed by the adults and the priorities of fulfilling children’s needs are determined by them as well (de Neubourg et al., 2012; Grodem, 2008). In addition, Main & Bradshaw (2012) argue that if children are asked directly about their parents’ income the data tend to have a measurement error because children might inflate the real income in order to avoid representing their parents in a bad light.

In response to the challenges of income-based poverty measurement, a material deprivation approach has been proposed as a complementary perspective that enriches our view of child poverty (Notten, 2015; White, Leavy & Masters, 2003). The main difference between material deprivation approach to poverty and income-based one is that the material deprivation approach (Townsend, 1979) focuses on tangible outcomes of having income, such as having
access to certain goods and services, not on the fact of having a certain level of income. The material deprivation approach to measuring child poverty estimates the possession of goods and activities that have a market value in a given society (Boarini & d'Ercole, 2006; Notten, 2015). This approach is grounded in the concept of socially perceived necessities (Mack & Lansley, 1985) that are based on the idea of child ownership of the set of goods/services that prevent them from feeling deprived. This set consists of the goods that are not needed just because the majority of the children owned them but rather signifies the sufficient resources that help to avoid social exclusion if a child does not own any items on the list. In addition, material deprivation has been shown to be a more powerful predictor of child happiness than household income (Main & Bradshaw, 2012). Material deprivation accounts for an unequal redistribution of resources within a family, providing insight into what children own (Main & Bradshaw, 2012). However, despite the benefits of using this approach, it is not widely integrated in policy development (Notten, 2015).

Due to the fact that the set of necessities can be assembled based on child specific needs, this approach has been referred to as a child-centered approach in poverty research. Main and Bradshaw (2015) suggest that this research approach can be more effective in fulfilling children’s rights as it provides children with a list of familiar items that are meaningful for their perceived feeling of deprivation. As a result, it can potentially help us find a better solution to the issue of child poverty and deprivation. The development of child material deprivation measures often involves children in the determination of the set of necessary good/services which allows children’s voices to be heard in the way the set is constructed. The utilization of the material deprivation approach opens an opportunity for the integration of the children’s’ rights perspective in child poverty studies as it allows data collection directly from children and
engages them in determining what is important in their life as necessary possessions (Article 12 Rights to be Heard) (Main & Bradshaw, 2012; Notten, 2015). In addition, a child-specific material deprivation measurement approach can lead to a greater focus in poverty policies on the child as a recipient of social good (and not adults in the family) corresponding with the child-centric perspective of the children’s rights agenda. Therefore, this approach addresses two dangerous assumptions that household income reflects child material well-being and, second, that parents are using the best interest of the child to redistribute resources within the family (Main & Bradshaw, 2012).

In general, anti-poverty policies exist in two basic forms: direct income transfers and distribution of goods/services that would buffer poverty impact on child outcomes (Reeves, 2015). The utilization of income-based indicators of poverty often leads to design of interventions that focus on cash redistribution, for example, in the form of social transfers and child tax breaks (Notten, 2015). However, evidence suggests that these types of interventions do not reach children and/or leave some ineligible for assistance. Children who are eligible for assistance based on income indicators are not always the same children who are materially deprived. Conversely, not every material deprived child meets poverty threshold based on income indicators (Main & Bradshaw, 2012; Notten, 2015; UNICEF Innocenti Report, 2012; UNICEF, 2016). This discrepancy between income-based and material deprivation measurement of child poverty was demonstrated in several international reports. UNICEF reports that 25% of children in Romania are living below the poverty line (UNICEF, 2012), which is defined as the proportion of children living in a household with income lower than the country’s median income. At the same time, 75% of Romanian children experience material deprivation (UNICEF, 2012).
A UNICEF report (2012) suggests that it is important to think about two different policy approaches to address child poverty from both an income and deprivation angle at the same time. Policy and programs designed with the material deprivation approach in mind allow the creation of other kind of programs that would provide access to subsidized goods instead or in addition to the redistribution of liquid money or social transfers (Notten, 2015). In addition, it would allow researchers to include children who are not eligible for assistance based on the income indicators but still experience material deprivation (Notten, 2015). Food assistance and housing vouchers are the most popular examples of subsidized goods available to low income families. However, it is fair to note that even food and housing is distributed based on income and not subjective deprivation indicators. Integration of the material deprivation approach to policy development is challenging due to the lack of our knowledge of patterns of child material deprivation. It is important to address the patterns in order to make child deprivation-focused policies more targeted. Reeves (2015) suggests that classifying and “declustering disadvantage” will provide us an opportunity to address poverty issues in more efficient ways.

Patterns of Child Material Deprivation

Existing research on the typology of deprivation is adult specific and has produced knowledge primarily of patterns of material deprivation in developed countries (ex. Boarini & d'Ercole, 2006; Callans et al, 1995; Chzen, de Neubourg, Plavgo & de Milliano, 2016; Denny, Lewycka, Utter, Fleming, Peiris-John, Sheridan, Rossen, Wynd, Teevale, Bullen & Clark, 2016). Callans, et al. (1995) studied poverty in Ireland and reported that they identified three groups of material deprivation including basic lifestyle, housing, and availability of consumer durables. Using the sample of 8500 secondary school students in New Zealand, Denny and colleagues (2016) applied latent class analysis and established three groups of children based on the severity
of their material deprivation (low, modest and high poverty). They did not find particular patterns of deprivation in terms of lacking certain kinds of goods but rather determined the threshold of material deprivation for each group. Another study conducted in Finland, Romania and the United Kindom was based on the sample of children between 1-18 years and has the Multiple Overlapping Deprivation Analysis (MODA) methodology at its core (Chzen et al., 2016). Chzen and colleagues found that children in Finland do not have distinct combinations of deprivation that would constitute a pattern. The vast majority have just one deprivation (ex. housing, nutrition) at a time, for example, about 3% of the children in the UK sample had housing and nutrition deprivation at the same time. However, the children from Romania had higher rates of deprivation and, therefore, have more distinctive patterns including housing and child development deprivation (28%), nutrition and child development deprivation (1%) and housing and nutrition deprivation (3%). MODA is based on frequency analysis of overlapping types of material deprivation (Chzen et al., 2016) and is different from latent class analysis which would allow for advanced statistical modeling that addresses the measurement issues as well as allow for latent patterns to emerge. Therefore, there is a need for applying latent class analysis to study child material deprivation.

The prevalent pattern of child material deprivation depends on the socio-cultural context of a given population and, therefore, can vary internationally. It is important to identify deprivation patterns of a country or region in order to address the issues of child poverty internationally and allocate funds for international aid more effectively. In particular, it is crucial to consider the existing deprivation gap between children in developing and developed countries. White, Leavy and Masters (2003) argue that the current literature on child poverty is segregated between the body of knowledge on children in the developed vs. developing worlds. They note that poverty
among children in developed countries is often manifested in the lack of family, community, and social resources for their development. At the same time, the research on poverty in developing countries focuses primarily on survival indicators and extreme forms of poverty including malnutrition, illiteracy, and child mortality (White, Leavy & Masters, 2003).

It has often been suggested that material deprivation is the concern of primarily developing nations and does not necessarily translate into the reality of developed nations. This assumption proposes that the bare minimum – including such items as having shelter, access to a toilet, and vaccination – is enough for child success. Given that child poverty is a restriction of child’s freedom and opportunities; it is important to raise the bar for a minimum requirement for child development that should include such rights proposed by the UN standards as access to information (having Internet and computer), access to means of communication (mobile phone), having resources for expressing their identity via access to clothes, and choosing their music and books to read across levels of development. Taking into account what matters to children in terms of their material necessities helps us understand what we need to provide for children to fulfill their rights holistically. Therefore, using a children’s rights perspective, I suggest that we need to employ an equalizing rights-based approach to child poverty inquiry, where children in both worlds – developing and developed- have rights; not only for basic survival but also to develop and thrive.

The Current Study

UNICEF (2016) states that the number of children living in poverty is steadily rising and will reach 167 million children living in extreme poverty around the world by 2030. It is clear that the old approach to understanding child poverty and child well-being does not always inform effective social solutions. This study proposes a different way of looking at child poverty
through the lens of child material deprivation which allows us to explore children’s lives based on their subjective perception. Knowing what helps and for whom builds a foundation that can fuel innovative approaches to social policy and programming around the issues.

Therefore, the following research questions have been proposed:

- Does child material deprivation have different patterns across five regions of the world?
- If so, what characteristic do these patterns of material deprivation have?
- Are these patterns of material deprivation more likely to affect certain regions and groups of children?

**Method**

**Dataset**

This paper utilizes the data from the International Survey of Child Well-Being (ISCWB; Children’s Worlds, n.d.). This dataset is unique in its potential for cross-country comparison based on the data reported by the children. ISCWB is a multinational, and multilingual survey that provides the data from the sample of 54,000 children in three age groups – 8, 10 and 12 years old – from 16 countries including Algeria, Nepal, Estonia, Spain, Colombia, Turkey, Ethiopia, South Korea, Germany, England, Romania, Poland, Israel, Norway, South Africa and Malta.

This study focuses on the sample of 12-year-old children from 12 countries – Algeria, Estonia, Spain, Turkey, Ethiopia, Germany, England, Romania, Israel, Norway, South Africa and Malta.

**Classification of Countries**

A total of 13,628 children who are 12 year olds from 12 countries were included in this study. Regional groupings, rather than individual countries were considered as the units of analyses because this approach allows for making the findings more comparable with major international reports on child poverty. Each of the 12 countries belongs to one of the following
regions including: Northern and Western Europe, Southern Europe, Eastern Europe, Middle East and North Africa (MENA) and Sub-Saharan Africa. This classification is based on regional UNICEF country classification (UNICEF, n.d). Certain modifications were made to place all studied countries in appropriate groups. While most of the classifications have prescriptive nature that distinguish between countries based on a benchmark, in reality some of the countries may have characteristics that place them in multiple groups\(^2\).

Study Sample

Table 1 provides descriptive data about the sample. It has a fairly equal number of boys and girls, with Norway having a higher percentage of female respondents and Algeria having the fewest number of girls in the sample. The majority of the sample (78\%) live with both biological parents. More children in the countries located in MENA region live with their biological parents than children in any other region. About 80\% of the sample live in the household with their siblings. Again, children living in MENA countries have higher rates of dwelling with siblings (88\%). The lowest proportion of children in Eastern European countries – Estonia and Romania – live with their siblings – 69\%. Children in countries representing Eastern Europe and Sub-Saharan Africa also live with their grandparents at the higher rates than in other regions. The majority of the children in the samples were born in the country where the survey took place (94\%) with Southern European countries – Malta and Spain – having the higher rates of children

\(^2\) This phenomenon was described as a proliferation of country classification and call for augmenting the country grouping for the specific analytical task (Fialho & Van Bergeijk, 2016). There are two countries in the sample that is subjected to high proliferation – Turkey and Estonia. Turkey has been classified as West Asia, South Europe, and MENA region by a variety of sources (Britannica, 2018). For this study, I will group Turkey with other countries in MENA regions. It can be possible based on the several arguments including its deep historical connections with Middle East (Hale, 1992), economic and trade agreements (Bektasoglu, Engelbert & Brockmeier, 2012) and its foreign policy (Altunisik & Martin, 2011) that affect child poverty. Another example of classification proliferation is Estonia that has changed its status from Eastern European country to Northern European country recently following the collapse of Soviet Union. However, Estonia and Romania, another Eastern European country in the sample, have at least one thing in common which is their Soviet past that inevitably still influences their social policies in regards to children and poverty (Aidukaite, 2009; Kuuse & Toros, 2017). Therefore, Estonia will be treated as a Eastern European country in this study.
with an immigrant background. About 2% of children on average live in foster homes and orphanages with this proportion being higher for Sub-Saharan Africa.

Table 1.

_Sample Descriptives (unweighted)_

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>Girls</th>
<th>Both Biological parents</th>
<th>Siblings</th>
<th>Grand parents</th>
<th>Immig. Status</th>
<th>Child Welfare Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern and Western Europe</td>
<td>3145</td>
<td>52%</td>
<td>71%</td>
<td>82%</td>
<td>4%</td>
<td>8%</td>
<td>1%</td>
</tr>
<tr>
<td>Norway</td>
<td>974</td>
<td>57%</td>
<td>74%</td>
<td>85%</td>
<td>3%</td>
<td>8%</td>
<td>1%</td>
</tr>
<tr>
<td>England</td>
<td>1319</td>
<td>49%</td>
<td>69%</td>
<td>84%</td>
<td>2%</td>
<td>9%</td>
<td>1%</td>
</tr>
<tr>
<td>Germany</td>
<td>852</td>
<td>53%</td>
<td>75%</td>
<td>78%</td>
<td>9%</td>
<td>5%</td>
<td>1%</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>2609</td>
<td>49%</td>
<td>79%</td>
<td>78%</td>
<td>5%</td>
<td>16%</td>
<td>1%</td>
</tr>
<tr>
<td>Spain</td>
<td>1667</td>
<td>47%</td>
<td>75%</td>
<td>79%</td>
<td>4%</td>
<td>21%</td>
<td>1%</td>
</tr>
<tr>
<td>Malta</td>
<td>942</td>
<td>52%</td>
<td>85%</td>
<td>77%</td>
<td>8%</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>Eastern Europe/Post Soviet</td>
<td>2536</td>
<td>49%</td>
<td>79%</td>
<td>69%</td>
<td>11%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Estonia</td>
<td>1029</td>
<td>50%</td>
<td>73%</td>
<td>72%</td>
<td>6%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Romania</td>
<td>1507</td>
<td>49%</td>
<td>83%</td>
<td>67%</td>
<td>15%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>The Middle East and North Africa</td>
<td>3227</td>
<td>49%</td>
<td>89%</td>
<td>88%</td>
<td>8%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Algeria</td>
<td>1283</td>
<td>43%</td>
<td>87%</td>
<td>85%</td>
<td>13%</td>
<td>1%</td>
<td>4%</td>
</tr>
<tr>
<td>Israel</td>
<td>926</td>
<td>50%</td>
<td>89%</td>
<td>92%</td>
<td>3%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Turkey</td>
<td>1018</td>
<td>54%</td>
<td>92%</td>
<td>90%</td>
<td>6%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Africa</td>
<td>2111</td>
<td>52%</td>
<td>72%</td>
<td>80%</td>
<td>10%</td>
<td>0%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>980</td>
<td>50%</td>
<td>80%</td>
<td>85%</td>
<td>8%</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>South Africa</td>
<td>1131</td>
<td>54%</td>
<td>65%</td>
<td>76%</td>
<td>13%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>13628</td>
<td>50%</td>
<td>78%</td>
<td>80%</td>
<td>8%</td>
<td>6%</td>
<td>2%</td>
</tr>
</tbody>
</table>

_Measure_

To explore the patterns of material deprivation, the items from Material Resource Index will be used. The Material Resource Index (MRI) has been utilized in a number of studies under
several names including MDI (Main, Montserrat, Andersen, Bradshaw & Lee, 2017), Material Resource Scale (Main & Bradshaw, 2012), and Material Deprivation Index (Gross-Manos, 2015). MRI has been used in the survey to assess whether children and their family have possessions, including:

- Clothes in good condition to go to school in;
- Access to a computer at home;
- Access to the Internet;
- Mobile phone;
- Your own room;
- Books to read for fun;
- A family car for transportation;
- Your own stuff to listen to music.

Items were scored using a dichotomous response format (0 = no; 1 = yes) which provides an opportunity for latent class analysis.

**Covariates**

In order to describe the characteristics of latent classes, covariates were used in this study. World regions of origin and other demographic characteristics such as having both biological parents living in the child’s primary household, grandparents living in the same household, child gender, immigration status (born or not born in the country where the survey is taken) and child welfare status (living in an orphanage or in a foster home) are used as covariates. All explanatory variables are coded as dichotomous with “Yes”/”No” responses.
Data Analysis

Analysis was performed in three steps: (1) descriptive and bivariate analysis; (2) latent class analysis and (3) multinominal logistic regression. Weighted data were used for the analysis except for descriptive analysis.

A descriptive analysis was first used to describe the sample characteristics including means and frequencies. Bivariate analysis was employed in order to compare the ownership rates of eight material resources across regions and with other explanatory variables utilizing the chi-square test of independence.

A latent class analysis (LCA) was then used to identify latent groups of children with distinct patterns of material deprivation. LCA has been widely used in exploring meaningful groups of people with similar response patterns on an observed set of variables (Muthen, 2004). LCA is also often referred to as a person-oriented approach as it describes distinct patterns of characteristics for each individual and therefore is often contrasted with a variable-based analysis such as factor analysis (Masyn, 2013).

The optimal number of classes were determined based on model fit indices. The model was fitted using MPlus with maximum likelihood with robust standard errors (Muthen & Muthen, 2012). Classification quality was assessed using loglikelihood, Akaike information criterion (AIC), the Bayesian information criterion (BIC), adjusted BIC (Nylund, Asparouhov & Muthen, 2007). Lower values of the indices indicate a better fit of the model (Masyn, 2013). It is important to note that all criteria have shown different levels of validity. Simulation studies suggest that BIC and aBIC are superior over other class enumeration statistics (Collins, Fidler, Wugalter & Long, 1993; Hagenaars & McCutcheon, 2002; Magidson & Vermunt, 2004). In addition, based on the recommendation of Nylund and colleges (2007), both information
criterion and likelihood-based tests should be taken into account when determining the number of classes. Therefore, the Vuong-Lo_Mendell-Rubin likelihood ratio test (VLMRL) and the Lo-Mendell-Rubin Adjusted LRT test (LMR LRT) were used to provide additional information for class enumeration. Both tests were assessed based on the p-value (lower than p <= .05) yield for each model. As a rule, the model with the smallest number of classes should be chosen. The testing is done for models with an ascending number of classes until a non-significant model is identified and preceding model is chosen as most appropriate (Lo, Mendell & Rubin, 2001; Togighi & Enders, 2007). Entropy were utilized to evaluate the classification. The closer the level of entropy to 1 the more distinguished the classes are (Masyn, 2013).

Theoretical explanations and parsimony principles were used in this study as well. Models were tested from the one with the lowest number of classes to the highest number of classes. Missing data for the main variable was estimated in the range from .8-2.5% and deemed to be ignorable and handled through full information maximum likelihood function available in MPlus (Muthen & Muthen, 2012). Standard errors for each item were assessed. Clustering and stratification of the respondents within each country were taken into account when performing the analysis.

The third step included the multinomial logistic regression designed to test the model of explanatory factors of class membership (Field, 2013; Vermunt, 2010). Regions of the world were the predictors of interest controlling for family structure (both parents, grandparents, and siblings) and child welfare status. The regression analysis was performed in Mplus 7.0 as well.
Results

Bivariate Statistics

The sample was grouped based on five regions where 23% of the children came from Northern and Western Europe, 24% from the Middle East and North Africa, 19% from Eastern Europe, 19% from Southern Europe, and 16% from Africa. Overall approximately 42% of the children own all eight items from the Material Resource Index. As for the indicators of material resources, the vast majority (97%) of the children had good clothes to go to school. About one-fifth of the children did not have an access to computer, internet or device to listen to music. About one quarter of 12-year-olds did not possess a mobile phone. About 31% of the respondents did not have their own room, 27% live in a family without a car, and 17% had no books to read for fun.

Children living in countries representing Northern and Western Europe had access to all resources at a higher rate. Bivariate analysis (Table 2) showed that their counterparts from Southern Europe experienced more deprivation in access to mobile phones ($\chi^2=16.296; df=1; p<.001$) and are less likely to have their own room ($\chi^2=247.193; df=1; p<.001$). Children from the countries of Eastern Europe were less likely to live in a family that owns a car ($\chi^2=19.562; df=1; p<.001$) and less likely than their Northern European counterparts to have their own room ($\chi^2=12.572; df=1; p<.001$). About a quarter of children from MENA countries did not have access to the computer ($\chi^2=97.354; df=1; p<.001$) and about 31% of the children did not have access to the internet ($\chi^2=270.326; df=1; p<.001$). The gap between MENA children and children from Northern and Western Europe is also prominent in possession of cell phones (57% vs. 96%; $\chi^2=714.733; df=1; p<.001$), having their own room (57% vs. 90%; $\chi^2=269.710; df=1; p<.001$), living in a family that owns a car (68% vs. 98%; $\chi^2=71.263; df=1; p<.001$) and owning a device to
listen to music to (62% vs. 98%; \(\chi^2=660.236;\) df=1; p<.001). Children from African countries in the sample were less likely to have any listed resources than their counterparts in any other regions.

Table 2.

**Bivariate Analysis of the Main Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>Clothes</th>
<th>Computer</th>
<th>Internet</th>
<th>Cell Phone</th>
<th>Own Room</th>
<th>Books</th>
<th>Car</th>
<th>Device to listen to music</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern and Western Europe(^3)</td>
<td>3145</td>
<td>99%</td>
<td>94%</td>
<td>98%</td>
<td>96%</td>
<td>90%</td>
<td>87%</td>
<td>93%</td>
<td>98%</td>
</tr>
<tr>
<td>Norway</td>
<td>974</td>
<td>100%</td>
<td>99%</td>
<td>100%</td>
<td>99%</td>
<td>94%</td>
<td>97%</td>
<td>97%</td>
<td>99%</td>
</tr>
<tr>
<td>England</td>
<td>1319</td>
<td>100%</td>
<td>95%</td>
<td>98%</td>
<td>95%</td>
<td>85%</td>
<td>89%</td>
<td>90%</td>
<td>97%</td>
</tr>
<tr>
<td>Germany</td>
<td>852</td>
<td>98%</td>
<td>86%</td>
<td>97%</td>
<td>96%</td>
<td>92%</td>
<td>72%</td>
<td>95%</td>
<td>97%</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>2609</td>
<td>99%</td>
<td>96%</td>
<td>96%</td>
<td>78%</td>
<td>82%</td>
<td>91%</td>
<td>89%</td>
<td>90%</td>
</tr>
<tr>
<td>Spain</td>
<td>1667</td>
<td>99%</td>
<td>96%</td>
<td>95%</td>
<td>76%</td>
<td>81%</td>
<td>88%</td>
<td>85%</td>
<td>92%</td>
</tr>
<tr>
<td>Malta</td>
<td>942</td>
<td>100%</td>
<td>98%</td>
<td>99%</td>
<td>82%</td>
<td>84%</td>
<td>95%</td>
<td>96%</td>
<td>87%</td>
</tr>
<tr>
<td>Eastern Europe/Post Soviet</td>
<td>2536</td>
<td>99%</td>
<td>92%</td>
<td>89%</td>
<td>90%</td>
<td>72%</td>
<td>90%</td>
<td>70%</td>
<td>91%</td>
</tr>
<tr>
<td>Estonia</td>
<td>1029</td>
<td>99%</td>
<td>97%</td>
<td>98%</td>
<td>93%</td>
<td>73%</td>
<td>95%</td>
<td>85%</td>
<td>93%</td>
</tr>
<tr>
<td>Romania</td>
<td>1507</td>
<td>99%</td>
<td>88%</td>
<td>82%</td>
<td>89%</td>
<td>71%</td>
<td>86%</td>
<td>59%</td>
<td>89%</td>
</tr>
<tr>
<td>The Middle East and North Africa</td>
<td>3227</td>
<td>98%</td>
<td>74%</td>
<td>69%</td>
<td>57%</td>
<td>57%</td>
<td>81%</td>
<td>68%</td>
<td>62%</td>
</tr>
<tr>
<td>Algeria</td>
<td>1283</td>
<td>98%</td>
<td>51%</td>
<td>43%</td>
<td>46%</td>
<td>37%</td>
<td>69%</td>
<td>56%</td>
<td>47%</td>
</tr>
<tr>
<td>Israel</td>
<td>926</td>
<td>99%</td>
<td>96%</td>
<td>96%</td>
<td>84%</td>
<td>75%</td>
<td>92%</td>
<td>93%</td>
<td>89%</td>
</tr>
<tr>
<td>Turkey</td>
<td>1018</td>
<td>97%</td>
<td>84%</td>
<td>79%</td>
<td>49%</td>
<td>66%</td>
<td>88%</td>
<td>58%</td>
<td>59%</td>
</tr>
<tr>
<td>Africa</td>
<td>2111</td>
<td>89%</td>
<td>34%</td>
<td>35%</td>
<td>49%</td>
<td>37%</td>
<td>60%</td>
<td>38%</td>
<td>47%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>980</td>
<td>80%</td>
<td>3%</td>
<td>1%</td>
<td>17%</td>
<td>13%</td>
<td>36%</td>
<td>1%</td>
<td>16%</td>
</tr>
<tr>
<td>South Africa</td>
<td>1131</td>
<td>96%</td>
<td>61%</td>
<td>64%</td>
<td>76%</td>
<td>57%</td>
<td>81%</td>
<td>69%</td>
<td>73%</td>
</tr>
</tbody>
</table>

\(^3\) The difference in distribution of material items in each regions is significant if compared with the rest of the sample (p<.001)
Table 2 (cont’d)

| Gender | Boys   | 6715 | 98% | 80% | 79% | 74% | 70% | 79% | 74% | 79% |
|        | Girls  | 6763 | 97% | 80% | 80% | 75% | 68% | 85% | 74% | 78% |

| Living with both biological parents | Yes | 10495 | 97% | 81% | 79% | 73% | 69% | 83% | 75% | 79% |
|                                    | No  | 2913  | 97% | 77% | 79% | 80% | 68% | 80% | 69% | 80% |

| Grandparents living in the same household | Yes | 997  | 97% | 75% | 73% | 74% | 67% | 77% | 69% | 75% |
|                                          | No  | 12409 | 97% | 80% | 80% | 74% | 69% | 83% | 74% | 79% |

| Living with the siblings in the same household | Yes | 10777 | 97% | 79% | 79% | 73% | 67% | 82% | 74% | 77% |
|                                               | No  | 2660  | 97% | 81% | 81% | 81% | 79% | 83% | 73% | 83% |

| Living in child welfare system | Yes | 227  | 91% | 52% | 45% | 52% | 52% | 67% | 45% | 56% |
|                                | No  | 13166 | 97% | 80% | 80% | 75% | 69% | 83% | 74% | 79% |
| Total                         |     | 13628 | 97% | 80% | 79% | 75% | 69% | 83% | 73% | 79% |

Gender differences in material deprivation are mostly statistically non-significant except girls were more likely to own books to read for fun than boys were (χ²=79.787; df=1; p<.001).

Immigration status also was not statistically significantly related to the possession of the material resources. Both gender and immigration status were removed from the multinomial regression analysis due to lack of statistical significance. Children who live with both biological mother and father were more likely to have a computer at home (χ²=14.244; df=1; p<.001 and have a family car (χ²=75.100; df=1; p<.001) than those who live in any other family structure including living
with single parents or biological parents and their partner or in a child welfare arrangement. Living with grandparents in the same household also made a significant difference for the children. These children were less likely to have access to a computer ($\chi^2=18.169; df=1; p<.001$), Internet ($\chi^2=34.744; df=1; p<.001$), owning books ($\chi^2=10.821; df=1; p=.001$) and having a car in the family ($\chi^2=15.619; df=1; p<.001$). Overall, children living with siblings had access to fewer resources listed in MRI as well. They were less likely to have a cell phone ($\chi^2=92.776; df=1; p<.001$) and their own room ($\chi^2=170.591; df=1; p<.001$) than the children without siblings. Children living in child welfare arrangement were less likely to have all listed resources than their counterparts not living in a foster home or orphanage.

**LCA: Class Enumeration**

Next, eight material resource items were included in the latent class analysis. The model fit indices assessed are shown in Table 3. As per Nylund and colleagues’ (2014) recommendation, the decrease in BIC and the preceding model to non-significant VLMRL and LMR LRT were used to determine the most appropriate model fit. A five class model was chosen as a result because BIC value decreased comparing with four class solution and plateaued on the same level in six class solution. The entropy level was not as good as in other models but still within the acceptable range (Celeux & Soromenho, 1996; Muthen, 2017). Also, this model was more interpretable from a theoretical standpoint than three - and four- class solutions as the differentiation between certain kinds of deprivation was not clear based on these models.
Table 3.

**Latent Class Analysis: Model Fit Results**

<table>
<thead>
<tr>
<th>Models</th>
<th>Loglikelihood</th>
<th>AIC</th>
<th>BIC</th>
<th>aBIC</th>
<th>Entropy</th>
<th>VLMRL (p values)</th>
<th>LMR LRT (p values)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 classes</td>
<td>-41778</td>
<td>83591</td>
<td>83719</td>
<td>83665</td>
<td>.916</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>3 classes</td>
<td>-41070</td>
<td>82192</td>
<td>82388</td>
<td>82305</td>
<td>.778</td>
<td>.009</td>
<td>.009</td>
</tr>
<tr>
<td>4 classes</td>
<td>-40719</td>
<td>81509</td>
<td>81772</td>
<td>81661</td>
<td>.751</td>
<td>.002</td>
<td>.002</td>
</tr>
<tr>
<td>5 classes</td>
<td>-40629</td>
<td><strong>81346</strong></td>
<td><strong>81677</strong></td>
<td><strong>81537</strong></td>
<td>.723</td>
<td><strong>.008</strong></td>
<td><strong>.008</strong></td>
</tr>
<tr>
<td>6 classes</td>
<td>-40567</td>
<td>81241</td>
<td>81640</td>
<td>81471</td>
<td>.744</td>
<td>.466</td>
<td>.470</td>
</tr>
</tbody>
</table>

Bivariate residual covariances were examined to ensure local independence, one of the latent class analysis assumptions. No standardized correlations higher than |1.96| were found which signifies independence of residual covariance (Muthen, 2009).

The interpretation of five classes is based on item response probabilities presented in Table 4. The items with low probability show item specific deprivation pertinent to a certain class. Figure 1 shows the visual profile of each class. Overall, five classes can be described as extreme deprivation, high deprivation (basic necessities), moderate deprivation (housing and mobile), moderate deprivation (transportation) and no/minimal deprivation.

Table 4.

**Probability of Children Having Items in Each Class**

<table>
<thead>
<tr>
<th>Classes</th>
<th>n</th>
<th>Latent Class Prob.</th>
<th>Clothes</th>
<th>Computer</th>
<th>Internet</th>
<th>Cell Phone</th>
<th>Own Room</th>
<th>Books</th>
<th>Car</th>
<th>Music Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class #1: Extreme Deprivation</td>
<td>1072 (8%)</td>
<td>.85</td>
<td>.79</td>
<td>.04</td>
<td>.00</td>
<td>.07</td>
<td>.06</td>
<td>.29</td>
<td>.06</td>
<td>.02</td>
</tr>
<tr>
<td>Class #2: Moderate Deprivation: Housing and Mobile</td>
<td>1938 (14%)</td>
<td>.82</td>
<td>.97</td>
<td>.96</td>
<td>.91</td>
<td>.44</td>
<td>.52</td>
<td>.85</td>
<td>.68</td>
<td>.53</td>
</tr>
<tr>
<td>Class #3: Material Transportatio n Deprivation</td>
<td>1136 (8%)</td>
<td>.57</td>
<td>1.00</td>
<td>.88</td>
<td>.86</td>
<td>1.00</td>
<td>.62</td>
<td>.78</td>
<td>.38</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Description of the Classes

Class #1 Extreme Deprivation constitutes 8% of the sample and can be described by very low probabilities of endorsing any of listed items except “Having good clothes to go to school.” Class #2 (Moderate Housing and Mobile Deprivation) include about 14% of the sample and can be characterized by low probabilities of having a cell phone (.44) and own room (.52). Class #3 (Moderate Transportation Deprivation) includes 8% of children is distinct from other classes in its low endorsement of “Having a family car” item. Class #4 (High Deprivation with Basic Necessities) includes 12% of children and can be characterized by having clothes to go to school and books to read (both can be considered basic necessities) with low probabilities of having a computer, internet, cell phone, own room, family car and device to listen to music. However, the probabilities of having these items for the children in this class is still higher than among those in Class # 1 (Extreme Deprivation). Class #4 can be described as “digitally disconnected children” in light of low to medium probabilities of any means of having access to digital media including a computer, the Internet, cell phones and devices to listen to music. Class #5 (No/Minimal Deprivation) is the most populated class with 58% of children falling into this category. Children in Class # 5 have a high probability of having all the items listed. Figure 1 (below) shows the differences in patterns of material deprivation among latent classes.
Bivariate Results: Class Membership and Exploratory Variables

The third research question focuses on regional differences in material deprivation patterns depending on class membership. Bivariate analysis (Table 5; see further) showed that class membership had not been equally distributed among the regions. The vast majority of the children (91%) living in the sampled countries of Northern and Eastern Europe belong to No/Minimal Deprivation class which is significantly higher than the proportion of this class for any other region ($\chi^2=1505.786; \text{df}=1; p<.001$). The same is true for children living on the sample countries of Southern Europe, although they also have 11% of children living in Moderate Housing and Cell Phone Deprivation ($\chi^2=602.788; \text{df}=1; p<.001$). Eastern Europe has a unique profile of class distribution. While a majority of the children living in the sampled countries within the region belong to No/Minimal Deprivation class, the children from Eastern European countries constitute the majority of the Moderate Transportation Deprivation class and also constitute 7% of the sample belonging to either the High Deprivation class or the Moderate

Figure 1. Patterns of Material Deprivation
Housing and Mobile deprivation ($\chi=661.866; \text{df}=1; \ p<.001$). Children from all three European regions have almost no likelihood of belonging to the Extreme Deprivation class. This is not true for the sampled children in African and MENA regions. Children who do not live with both parents are twice as likely to belong to the Transportation Deprivation class (14%) than those who live with both parents (7%) ($\chi=179.574; \text{df}=1; \ p<.001$). Children who don’t live with both parents are less likely to belong to the No/Minimal Deprivation class (59%) than their counterparts in two parent families (63%) ($\chi=179.574; \text{df}=1; \ p<.001$). Similarly, children who live with grandparents in the same household are less likely to belong to the No/Minimal Deprivation class (55%) than their counterparts who do not live with their grandparents (63%) ($\chi=52.233; \text{df}=1; \ p<.001$). Child welfare status is associated with increased likelihood of being a member of the Extreme Deprivation class and High Deprivation class when compared with children who live with their biological families ($\chi=171.909; \text{df}=1; \ p<.001$).

Table 5.

*Bivariate Relationships between Class Membership and Explanatory Variables*\(^4\)

<table>
<thead>
<tr>
<th>Classes</th>
<th>Class #1: Extreme Deprivation</th>
<th>Class #2: Moderate Deprivation: Housing and Mobile</th>
<th>Class #3: Transportation Deprivation</th>
<th>Class #4: High Deprivation with Basic Necessities</th>
<th>Class #5: No Deprivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Europe/Soviet Countries</td>
<td>1%</td>
<td>7%</td>
<td>19%</td>
<td>7%</td>
<td>66%</td>
</tr>
<tr>
<td>Africa</td>
<td>37%</td>
<td>6%</td>
<td>7%</td>
<td>26%</td>
<td>24%</td>
</tr>
<tr>
<td>Northern and Western Europe</td>
<td>0%</td>
<td>2%</td>
<td>5%</td>
<td>1%</td>
<td>91%</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>0%</td>
<td>11%</td>
<td>6%</td>
<td>3%</td>
<td>80%</td>
</tr>
<tr>
<td>Middle East</td>
<td>10%</td>
<td>22%</td>
<td>7%</td>
<td>19%</td>
<td>42%</td>
</tr>
<tr>
<td>Living with Both Biological Parents</td>
<td>Yes</td>
<td>9%</td>
<td>11%</td>
<td>7%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>8%</td>
<td>8%</td>
<td>14%</td>
<td>11%</td>
</tr>
</tbody>
</table>

\(^4\) All values are significant at $p<.001$ level
Table 5 (cont’d)

<table>
<thead>
<tr>
<th>Living with grandparents in the household</th>
<th>Yes</th>
<th>No</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9%</td>
<td>10%</td>
<td>11%</td>
<td>10%</td>
<td>55%</td>
<td>8%</td>
</tr>
<tr>
<td>Living in child welfare</td>
<td>27%</td>
<td>10%</td>
<td>7%</td>
<td>22%</td>
<td>34%</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>10%</td>
<td>8%</td>
<td>10%</td>
<td>63%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Multinominal logistic regression**

Multinominal logistic regression analysis was conducted using No/Minimal Deprivation as the reference class. Children in Northern and Western Europe were chosen as the reference category in the categorical predictor (Muthen, 2018, personal communication). The findings presented in Table 6 show that after adjusting for covariates (living with both parents, grandparents, siblings and in child welfare system), children in the Extreme Deprivation Class were 489 times (95% CI 118 – 2032) more likely to be from Middle East and North Africa and over 3300 times (95% CI 817-14028) more likely to be from Africa than children in the No/Minimal Deprivation group. If we look at differences in the odds of extreme deprivation membership in European countries, children living in the sampled Eastern European countries were 42.7 times more likely (95% CI 9.9 – 183.9) and children from countries representing Southern Europe were 7 times more likely (95% CI 1.4-36.9) to belong to this class than children from the No/Minimal Deprivation class. In addition, children in the child welfare system are 5.3 times (95% CI 3-9) more likely to belong to the Extreme Deprivation class compared with the No/Minimal Deprivation class.
It is important to note that the odds ratios in this regression model are large and unstable. This issue is related to the profound deprivation gap that exists between Africa, the most deprived, and Northern and Western Europe, the least deprived region, in the sample. The wideness of the international gap in child poverty has been documented in theoretical (ex. Minujin & Nandy, 2012; Ortiz, Daniels & Engilbertsdottir, 2012) and empirical literature (ex. Roelen & Notten, 2013). Therefore, the issue with high odds ratios is not surprising, especially because both reference class (No/Minimal Deprivation) and reference category (Northern and Western Europe) are on the opposite side of deprivation spectrum from the Extreme Deprivation class. Moreover, the number of children from Northern and Western Europe in Extreme Deprivation class is close to 0. It creates the situation where statistically we have to use a variable with zero variance within this class, and this is likely causing inflated odds ratios. The large odds ratios disappear when the reference class and category are changed. One approach to deal with large odds ratios in logistic regression is to remove outliers. However, removing the cases who have maximum or minimum resources in this study can lead to the removal of about 50% of all cases. Removing the countries which represent the opposite sides of the deprivation spectrum (ex. Norway and Ethiopia) would not do justice in answering the research questions. Therefore, odds ratios are presented as originally estimated.

Table 6.

*Multinominal Logistic Regression Results for Class #1 (Extreme Deprivation)*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>OR</th>
<th>p</th>
<th>OR CI (2.5% Lower Bound)</th>
<th>OR CI (2.5% Higher Bound)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living in:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Middle East and North Africa</td>
<td>6.194</td>
<td>489.804</td>
<td>.000</td>
<td>118.013</td>
<td>203.852</td>
</tr>
<tr>
<td>Easter Europe</td>
<td>8.128</td>
<td>3386.780</td>
<td>.000</td>
<td>817.621</td>
<td>14028.8</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>1.975</td>
<td>7.205</td>
<td>.018</td>
<td>1.403</td>
<td>34</td>
</tr>
</tbody>
</table>

44
Table 6 (cont’d)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>OR</th>
<th>p</th>
<th>OR CI (2.5% Lower Bound)</th>
<th>OR CI (2.5% Higher Bound)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living with both biological parents</td>
<td>-.123</td>
<td>.884</td>
<td>.269</td>
<td>.710</td>
<td>1.100</td>
</tr>
<tr>
<td>Living with grandparents in the same household</td>
<td>-.189</td>
<td>.828</td>
<td>.221</td>
<td>.612</td>
<td>1.120</td>
</tr>
<tr>
<td>Living with siblings in the same household</td>
<td>-.001</td>
<td>.999</td>
<td>.889</td>
<td>.990</td>
<td>1.009</td>
</tr>
<tr>
<td>Living in child welfare system</td>
<td>1.675</td>
<td>5.339</td>
<td>.000</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>

Children who belong to classes with the Housing and Mobile Deprivation are 21 times more likely (95% CI 15.7-28.7) to come from MENA region, almost 10 times more likely to be from one of the African countries (95% CI 7-14), 5.5 times more likely to be from Southern Europe (95% CI 4-7.5) and 4.5 times more likely (95% CI 3-6) to represent one of the Eastern European countries compared with children in the No/Minimal Deprivation class. Having siblings also slightly increases their chance of belonging to the Housing and Mobile Deprivation class.

Table 7.

*Multinominal Logistic Regression Results for Class #2 (Housing and Mobile Deprivation)*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>OR</th>
<th>p</th>
<th>OR CI (2.5% Lower Bound)</th>
<th>OR CI (2.5% Higher Bound)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living in:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Middle East and North Africa</td>
<td>3.056</td>
<td>21.241</td>
<td>.000</td>
<td>15.704</td>
<td>28.729</td>
</tr>
<tr>
<td>Easter Europe Africa</td>
<td>1.522</td>
<td>4.582</td>
<td>.000</td>
<td>3.292</td>
<td>6.376</td>
</tr>
<tr>
<td>Southern Europe Africa</td>
<td>2.299</td>
<td>9.965</td>
<td>.000</td>
<td>7.002</td>
<td>14.183</td>
</tr>
<tr>
<td>Living with both biological parents</td>
<td>-.132</td>
<td>.876</td>
<td>.157</td>
<td>.729</td>
<td>1.105</td>
</tr>
<tr>
<td>Living with grandparents in the same household</td>
<td>-.021</td>
<td>.979</td>
<td>.868</td>
<td>.767</td>
<td>1.251</td>
</tr>
<tr>
<td>Living with siblings in the same household</td>
<td>.369</td>
<td>1.011</td>
<td>.021</td>
<td>1.002</td>
<td>1.020</td>
</tr>
<tr>
<td>Living in child welfare system</td>
<td>1.675</td>
<td>1.447</td>
<td>.224</td>
<td>.798</td>
<td>2.625</td>
</tr>
</tbody>
</table>
Children who belong to Transportation Deprivation class also have a unique set of predictors (Table 8). They are 5.5 times more likely (95% CI 4-7) to come from of the sampled countries in Eastern Europe, 5 times more likely (95% CI 4.4-7) to be from Africa, 3 times more (95% CI 2.4-3.9) to be from MENA region and 1.6 times more likely (95% CI 2.4-3.9) to represent one of the countries in Southern Europe than children in the No/Minimal Deprivation class. In addition, children in this class were less likely to live with both their parents (OR .830; 95% CI .34 -.47).

Table 8.

*Multinominal Logistic Regression Results for Class #3 (Transportation Deprivation)*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>OR</th>
<th>p</th>
<th>OR CI (2.5% Lower Bound)</th>
<th>OR CI (2.5% Higher Bound)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living in:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Middle East and North Africa</td>
<td>1.119</td>
<td>3.063</td>
<td>.000</td>
<td>2.380</td>
<td>3.942</td>
</tr>
<tr>
<td>Easter Europe</td>
<td>1.715</td>
<td>5.557</td>
<td>.000</td>
<td>4.435</td>
<td>6.963</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>1.602</td>
<td>4.965</td>
<td>.000</td>
<td>3.753</td>
<td>6.569</td>
</tr>
<tr>
<td></td>
<td>.495</td>
<td>1.641</td>
<td>.000</td>
<td>1.253</td>
<td>2.149</td>
</tr>
<tr>
<td>Living with both biological parents</td>
<td>-.925</td>
<td>.397</td>
<td>.000</td>
<td>.338</td>
<td>.465</td>
</tr>
<tr>
<td>Living with grandparents in the same household</td>
<td>.128</td>
<td>1.137</td>
<td>.278</td>
<td>.902</td>
<td>1.433</td>
</tr>
<tr>
<td>Living with siblings in the same household</td>
<td>-.002</td>
<td>.998</td>
<td>.806</td>
<td>.986</td>
<td>1.011</td>
</tr>
<tr>
<td>Living in child welfare system</td>
<td>-.186</td>
<td>.830</td>
<td>.539</td>
<td>.458</td>
<td>1.505</td>
</tr>
</tbody>
</table>

Children from the High Deprivation (Basic Necessities Only) class were 76 times more likely to be from one of the sampled African countries (95% CI 50-115), almost 30 times more likely to be from MENA region (95% CI 20-45), 7 times more likely to represent one of the Eastern European countries (95% CI 5-11) and about twice times more likely to reside in Southern Europe (95% CI 1.5-3.9) compared to children in the No/Minimal Deprivation class.
Also, living with both parents decreases the likelihood of a child belonging to this group (OR=.67; 95% CI .56-.80). In contrast, living with grandparents and in child welfare system increases this likelihood 1.3 times (95% CI 1-1.6) and almost three times (95% CI 1.9-4.6) respectively compared to the children in the No/Minimal Deprivation class.

Table 9.

*Multinominal Logistic Regression Results for Class #4 (High Deprivation)*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>OR</th>
<th>p</th>
<th>OR CI (2.5% Lower Bound)</th>
<th>OR CI (2.5% Higher Bound)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living in:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>3.390</td>
<td>29.661</td>
<td>.000</td>
<td>19.738</td>
<td>44.572</td>
</tr>
<tr>
<td>Easter Europe</td>
<td>1.989</td>
<td>7.311</td>
<td>.000</td>
<td>4.775</td>
<td>11.194</td>
</tr>
<tr>
<td>Africa</td>
<td>4.334</td>
<td>76.232</td>
<td>.000</td>
<td>50.425</td>
<td>115.248</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>.892</td>
<td>2.439</td>
<td>.000</td>
<td>1.511</td>
<td>3.938</td>
</tr>
<tr>
<td>Living with both biological parents</td>
<td>-.404</td>
<td>.668</td>
<td>.000</td>
<td>.559</td>
<td>.797</td>
</tr>
<tr>
<td>Living with grandparents in the same household</td>
<td>.246</td>
<td>1.279</td>
<td>.043</td>
<td>1.007</td>
<td>1.624</td>
</tr>
<tr>
<td>Living with siblings in the same household</td>
<td>.004</td>
<td>1.004</td>
<td>.308</td>
<td>.996</td>
<td>1.012</td>
</tr>
<tr>
<td>Living in child welfare system</td>
<td>1.083</td>
<td>2.955</td>
<td>.000</td>
<td>1.882</td>
<td>4.640</td>
</tr>
</tbody>
</table>

**Discussion**

This study utilizes a child centric approach to the measurement of child poverty by applying the data collected by using the Material Resource Index. This approach was chosen as a response to existing challenges created by an exclusive income-based poverty measurement. However, it is fair to note that material deprivation is just one facet of deprivation that can complement an income-based indicator of poverty to provide a better picture of the patterns. Social contexts including culture, economy, policy dimensions can be particularly important in figuring out whether the deprivation is related to the lack of financial resources or independent of
it and merely being a choice of parents based on their parenting style and cultural beliefs about what their children can possess (Boarini & d'Ercole, 2006; Main & Bradshaw, 2012; White et al., 2003).

The results of this study suggest that there are five patterns of material deprivation among the children in the sample including extreme deprivation, high deprivation (basic necessities available), moderate housing and mobile deprivation, moderate transportation deprivation and no/minimal deprivation. The likelihood of children experiencing one of the material deprivation patterns is related to the region of their origin. Overall, children from Sub-Saharan Africa and the Middle East and North Africa appear to be more deprived and therefore more vulnerable as they are more likely to be represented in the Extreme Deprivation and High Deprivation classes. The heterogeneous nature of child material deprivation found in this study is supported by international studies done by UNICEF. Its report (2016) on child poverty suggests that the difference in the extreme child poverty rate in Africa is indeed 35 times higher than in Eastern and Central Europe, the least prosperous European regions, similar to the rates of regional differences found in this study. In addition, it is fair to note that even the developed countries of Europe are not homogeneous in material deprivation patterns. Northern and Western European countries were less deprived than Southern European countries, and Southern European countries were less deprived than Eastern European countries. This finding is supported by UNICEF Innocenti Report (2012) on child poverty in rich countries that highlights a trend in material deprivation similar to the findings of this study. This cross-region comparison assumes that the material deprivation means the same across societies. However, it is important to contextualize child material deprivation within the characteristics of environment pertinent to the geographical regions in focus.
Housing and Mobile Deprivation in the context of Middle East and Northern African Countries

The findings suggest that children living in one of the countries representing MENA regions are more likely to experience the pattern of material deprivation that involves lack of mobile phone and sharing rooms with others. The latter is seen as a proxy to housing deprivation and lack of child’s private space. A possible explanation of the prominence of this pattern in MENA regions follows.

Mobile Phone Deprivation

It can be speculated that, in general, two factors that might cause the mobile phone deprivation, a widespread phenomenon in MENA region, include (1) lack of financial resources to purchase a mobile phone for a child and/or (2) cultural expectations of parental control. GSMA Mobile Report (2018) shows that only 64% of adults in MENA region on average own a mobile phone, while 85% of adults in Europe and 44% of adults in Sub-Saharan Africa do. World Bank (n.d.) data shows that household consumption among MENA countries is much lower than in the countries of Northern and Western Europe. That might be an indicator of lack of resources for purchasing a cell phone. However, it is also important to note that the majority of the children in the MENA area had access to a computer and Internet at home which are more costly than a cell phone. This discrepancy might be rooted in cultural factors described further.

From the position of parenting, child ownership of mobile phones has been subjected to controversial discourse in the literature: some people see it as a positive resource for development, others perceive mobile phone as an age inappropriate device. On the one hand, owning a phone has been seen as a way to allow children to socialize and be safe as parents can check on their child’s safety (Bond, 2010; Pain, Grundy, Gill & Towner, 2005; Walsh, White &
Young, 2009; Williams & Williams, 2005; Yan, 2018). A qualitative study done with Australian youth showed that participants utilized their mobile phone for being more connected with their peers as well as its utilization ensures their belongingness to their peer group (Walsh, White & Young, 2009). Similar accounts come from the sample of British teenagers (Bond, 2010). Again, these similarities across Western countries might be reflective of cultural context that encourages liberal parenting values.

On the other hand, child ownership of a mobile phone can be seen as a dangerous opportunity for them to have access to the information that the adults deem inappropriate. Some researchers have shown that overuse of mobile phone may cause an addictive reaction and lead to mental health issues (Lee & Busiol, 2016). In addition, cell phone ownership creates children’s own space that parents see as being outside the relationship boundaries they have with the children and, therefore, requires parental control (Williams & Williams, 2005). This view focused on the negative effects assuming that children have no agency to determine how to use their phones in a positive way which is contradictory to the children’s rights approach. However, parental control does not necessarily lead to the elimination of the negative outcomes of mobile phone use; it is rather triggers the increase of children’s use of the mobile device (Lee, Lee, Yi, Park & Hong, 2016). In some sense, mobile phones can be seen as a liberation tool for the children that parents do not always want them to have (Crabtree and Nathan, 2003).

From the children’s rights perspective, the mobile phone can be a way for children to have their rights to information access fulfilled and the agency principle being implemented. Research suggests that the limited access to mobile phones can decrease children’s digital skills and increase the likelihood of social isolation (Charlton et al., 2002; Leung and Wei, 1999). However, it is subjected to parental regulation and ideas about the boundaries that a child can
have based on the cultural expectation from parenting. Research on child ownership of mobile phones almost entirely comes from the Western societies which make it difficult to explain the potential reason for mobile deprivation in Non-Western cultures. Non-Western countries might have culturally supported parental styles that evolve around traditional and authoritarian values (Rudy & Grusec, 2001; Uncu, Vural, Buyukulsal, Alper & Kilic, 2014; Celen & Kusdil, 2009). Therefore, this gap in international literature presents certain challenges for contextualizing mobile phone deprivation the same way across the world regions.

**Housing Deprivation**

Children in MENA region are less likely to have their own room. The ownership of personal space in the house often serves as a proxy for overcrowding and housing deprivation. MENA region housing has increasingly become unavailable for low income families as the demand of an ever growing population within this region are not met (Ernst & Young, 2013; Maliki, 2011). The UNICEF Report on Child Poverty in Arab States (2018) supports this argument in regard to Algeria, highlighting that a number of houses suffer from lack of space for housing large families as well as poor construction of housing infrastructure in general. As for Turkey, two main reasons for its housing shortage should be noted – rapid urbanization and housing construction policies (Yetgin & Lepkova, 2007). Taking into account that the sample of Turkish children came from Istanbul, the reason for some housing deprivation may lie in so-called politics of urban regeneration (Ozdemir, 2011). It might be the case that urban regeneration, a policy that focused on recovering existing housing stock in the city center, prevented people from getting spacious housing in the outskirts of Istanbul by making older, less spacious construction more available to them.
Another explanation of housing deprivation among MENA children can lie in the demographic of the family. On average, women give birth to 2.8 children in the Middle East and North Africa region which is higher than average fertility rate in the European Union (1.6 children per woman) (World Bank Data, 2016). However, it is still lower than in Sub-Saharan Africa, where on average one woman gives birth to 4.8 children (World Bank Data, 2016). In addition, the analysis suggests that the presence of siblings in the household decrease children’s chances to have their room and own a mobile phone is a deprivation pattern for MENA region.

Understanding the context is particularly important to understand the combination of both housing and mobile phone deprivation. It can be speculated that the children who lack their own room might have extended family living with them and might live in close knit communities where parents choose not to or do not have enough resource to buy their child a phone for merely safety reasons. It could also be that a number of additional caregivers are available to them (ex. grandparents, older siblings, neighbors).

**Transportation Deprivation and Living in Eastern European Countries**

It is not surprising that children living in Eastern European countries are more likely to belong to this type of deprivation pattern. The cost of car ownership was historically high in communist countries as governments promoted the use of public transportation (Pucher & Beuhler, n.d.). Owning a vehicle was seen as capitalistic and individualistic. Despite transitioning to democratic capitalist societies in both Eastern European countries – Estonia and Romania – and general growth in car ownership (The United Nation Report, 2018), the access to cars for a low-income family is still a challenge.

It might be the case that the children whose family does not use a car have been using public transportation instead (The United Nation Report, 2018). About 70% of people living in
Tallinn, the capital of Estonia, have access to a bus stop and/or subway station with no less than ten departures per hour (Poelman & Dijkerta, 2015). However, some sources suggest that areas outside of the Estonian capital and rural areas are not served as well, and development of public transportation has actually slowed down (The United Nation Report, 2018). This lack of access to transportation can be potentially harmful to the most disadvantaged families who can’t afford a car. This situation can limit children’s ability to access educational, health, and extracurricular programs. However, some researchers suggest that transportation deprivation (such as not having access to a family car) is highly contextual and can also have a positive effect on children as it increases their level of physical activity (Fyhri, Hjorthol, Mackett, Fotel & Kyttä, 2011). In either case, children’s mobility in a safe environment is a part of the children’s rights agenda as it supports child navigation skills and provides the opportunity to access community resources without always relying on their parents. In addition, the lack of access to transportation can be observed in the societies where personal cars are the dominant mode of transportation, such as the U.S. From the children’s rights perspective, if a child’s family does not have access to a car in the areas where the access to resources without a personal vehicle is not feasible can be a violation of children’s rights. It is especially important for children with disabilities, children living in remote rural areas and those with medical needs requiring regular assistance.

**High Deprivation Class: Digital Deprivation in Africa**

Children living in African countries were more likely to belong to the High Deprivation and the Extreme Deprivation class. In addition to housing and transportation deprivations, both of these classes of children lack three possessions – computer, access to the Internet and mobile phone. The combination of these three items signifies what literature defines as digital deprivation. UNICEF (2017) sees digital technology as a necessary resource in fulfilling rights
for access to information and communication as well as technological potential in overcoming life’s disadvantages (ex. poverty, disability, access to education) and therefore a source of the agency for the children as well. Children develop socialization skills and are able to find and maintain relationships online, and lack of this opportunity strips away new age socializing resources from them (Kardetelf-Winther, 2017). However, it also recognizes the potential risks of access to the digital world including online sexual abuse, cyberbullying and stalking (UNICEF, 2017).

Despite the potential negative outcomes for children, digital world is still seen as a powerful developmental resource for children. Lack of access to this resource led to the formation of a new type of inequality among children – the digital divide. The gap in access to digital spaces between regions is dramatic with children living in African countries being most digitally disadvantaged (Igun, 2011; UNICEF, 2017) which is also supported by the findings. Two main reasons for this divide should be mentioned including lack of material resources to buy digital devices in African families and poor Internet penetration in African countries (Igun, 2011). Internet availability is estimated at 18% on the African continent (compared with a 78% reach in Western Europe) (Aljazeera, n.d) which is in part due to infrastructure shortage, especially outside of urban centers. In addition, devices for Internet access require constant access to sources of electricity that might be problematic in some African regions (Stork, Calandro & Gillwald, 2013).

**Implications**

Taking into account that certain regions have their distinct profile of child material deprivation, it is fair to suggest that implementation of programs/policies that match regional needs is advisable in order to fulfill children’s rights otherwise violated by the deprivation facet
of poverty. Transportation deprivation can be addressed by policies that would provide children with free tickets for public transportation, especially in Eastern Europe. In addition, development of bike programs for children in Eastern Europe can be implemented where that would provide them with a mean of transportation without needing access to a car. It is clear that creating safe spaces for children to move freely outside of their home is necessary before the development of free transportation programs for the children.

Housing deprivation is being addressed by the distribution of housing vouchers or access to social housing. However, it is clear based on the example of children in the MENA region that this deprivation is contextual and in conjunction with mobile deprivation. If a program, for example, provides new housing for the families with children that would require to access to transportation to go to school, it can lead to another type of deprivation such as a transportation one. In addition, possession of mobile phones might be something that goes against the culturally acceptable practice and is seen as undermining parental authority. In that case, culturally sensitive anti-poverty measures that align with children’s rights for access to the information should be preferred.

African children would benefit greatly from bridging the digital divide that is currently observable in addition to other forms of deprivation prominent for the children living in this area (housing and transportation). Multiple digital literacy programs have been implemented in Africa already. This study suggests that the focus on children in the welfare systems should be made as their likelihood to suffer from the higher level of deprivation is significant. It can be argued that among transportation, mobile only (mobile deprivation but not other forms) and total digital deprivation, the latter can bring the most harmful outcomes to the children and their communities. Digital deprivation does not only limit access of children to the information in
African countries but also hinder their opportunity to develop digital skills needed in 21st-century job market that can be potentially harmful to their country’s economic growth and development. To summarize, it is important to note that any intervention addressing child material deprivation should be designed within a context of a country. Otherwise, those services might be either underutilized due to a mismatch between the services\goods provides and societal expectations from the children and what they are allowed to own and use.

**Limitations**

This study provides new insights into the patterns of material deprivation pertinent to several regions of the world. An important limitation is that the regions are represented by a few countries. These groupings were merely heuristic. This author acknowledges that a large variation in the countries within the regions might interfere with the interpretation of the results. Further research might be needed to explore the regional dimension of material deprivation patterns further.

In addition, certain types of material deprivation should be analyzed within a context. This dataset is scarce in terms of contextual factors of material deprivation. In certain circumstances, sharing a room with a sibling, for example, can be a positive bonding experience and not a sign of housing deprivation. Lack of access to a family car can positively influence a child’s skills in the independent navigation of public transportation and not seen as deprivation. A methodological challenge arises when a child has not been asked whether they see the items in material resources scale as important for them and whether they feel negative outcomes of not having access to certain items. Unfortunately, without this information, it is hard to contextualize whether lack of certain items is a true deprivation.
Finally, the data is based on the responses collected from the children in mainstream schools. The results might vary for those who are not attending them due to disability, attending schools in an orphanage home, being homeschooled or not being in school at all.

**Conclusion**

This study suggests that the distribution of resources to eliminate poverty should be grounded not only in income-based indicators but include assessment based on perceived deprivation scales, especially for children. The findings are based on the international data collected from 12-year-olds which suggest that children experience different patterns of material deprivation across the world. Social policy and programs should design interventions that can provide goods/services in addition to liquid money based on the patterns of child material deprivation. The material deprivation approach to resolving issues of child poverty has shown to be reflective of the premises of children’s rights. It focuses on a child as one who experienced the issue and offers the list of child-centric items that reflect children’s needs in certain developmental periods. In addition, it allows us to design solutions that benefit children directly. Further research might focus on developing culturally sensitive sets of material items that can be used for measuring child material deprivation in a given context.
BIBLIOGRAPHY


CHAPTER 3.
MEASURING CHILDREN'S RIGHTS IMPLEMENTATION:
A VALIDATION STUDY BASED ON THE CHILDREN’S WORLDS DATA

Abstract

Current literature does not provide a holistic way to measure the outcomes of children’s rights implementation. Therefore, it is difficult to assess the effect of children’s rights approaches. The measurement limitations prevent this framework from fully contributing to academic discourse, policy development, and social work practice. A conceptual framework that shapes children’s rights in three domains – protection, provision, and participation – was applied to the second wave of International Child Well-Being Survey (ICWBS; Rees & Maine, 2015). This dataset allowed a new measure of children’s rights implementation to be validated, based on data collected from children and not generated by adults. This dataset was collected from children in 16 countries. A subsample of 12-year-olds (n=18,212) was utilized. Twenty-one items were pulled from the ICWBS in order to represent the articles of the UN Convention on the Rights of the Child. Exploratory and confirmatory factor analysis in MPlus were conducted to validate the measure. Convergent validity was established as a part of construct validity. As a result, the model with 14 items yielded the best model fit and was proposed as a pilot version of the Provision and Participation Rights Implementation Scale. Validation of the Children’s Rights Implementation scale not only provides a tool for measuring the collective impact of multiple helping professions on the Convention implementation, but it also supports the interdisciplinary nature of the children’s rights framework.
Introduction

All human rights, including children’s rights, are a vital balancing mechanism of unequal societal power distribution. Children’s rights allow the redistribution of resources among children based on the premise of human equality. While social work education began to embrace the human rights agenda in their educational standards (Council on Social Work Education, 2015), the main social work institutions (ex. NASW) in the U.S have been reluctant to incorporate children’s rights discourse into their agenda on child welfare and social work with children, in general (Scherrer, 2012). Children’s rights are human rights, and, therefore, should be taken into account as a moral imperative, regardless of the status of their ratification. If social work claims its status as a human rights profession (Healy, 2008), then the integration of a human rights (including children’s rights) lens should be accompanied by providing social workers with rights-based tools for evaluating their work (McPherson, Siebert & Siebert, 2017). The instruments measuring “rights-based” social work are particularly important as they are the tools for construction of our knowledge used to make decisions in regards to the children.

Overall, the value of using a children’s rights framework and its mechanism (ex. local rights-based policies) has been supported by evidence. Children have a better chance to survive and thrive today than before 1989 when the United Nation Convention on the Right of the Child (UNCRC) was adopted (UNICEF, 2014; Simmons, 2009). Children’s mortality rates have decreased by half worldwide since the adoption of the Convention 27 years ago (UNICEF, 2014). In the least developed countries, due to the Convention implementation, the rate of primary school enrollment increased by 30% since the UNCRC ratification (UNICEF, 2014). However, half of the world’s children still live in poverty, and only 56% have access to safe drinking water, 65% have a birth certificate that entitles them to their rights, 15% engaged in
child labor, and 20% of girls in the world became mothers before they turned 18 in 2010 (UNICEF, 2014). While the Convention indicators of success can be used as a way to measure the progress of children’s rights implementation, they limit the scope of the data we receive by virtue of being objective adult-reported information. For example, the rates of school enrollment do not necessarily show the implementation of the rights to quality education as school experiences can vary widely even within one school. Therefore, in addition to objective measures of children’s rights implementation, it is important to assess subjective experiences that would provide better insight into “quality” of the Convention implementation. Moreover, the introduction of subjective views allows for children’s voices to be heard and empower them to have more agency via participation in research.

Children’s rights would be merely an aspirational framework if we know nothing about the change it brings to the children (Watchirs, 2002). Measuring children’s rights implementation is a global challenge, especially taking into account that the final users of the data vary from the state government to local social workers. Even though there is great attention paid to the rhetoric of children’s rights, there is insufficient attention given to the mechanism of their implementation and approaches to measurement of outcomes (Kilkelly, 2006). This paper will discuss the development of a validated scale of subjective children’s rights implementation, an instrument that is almost non-existent. This study goes beyond the widespread use of the legal audit of the UNCRC and provides an opportunity to estimate the outcomes of the children’s rights implementation based on children’s subjective perceptions. This approach is not designed to substitute the legal audit of the children’s rights implementation but rather expand our understanding of the impact of children’s rights fulfillment. This approach to the measurement of the children’s rights implementation outcomes will allow for identifying the gaps in rights
implementation. It can be further used for social policy development and program design on international, national and local levels.

This paper will start with the literature review that provides background on the children’s rights framework as a derivative of the U.N. Convention on the Rights of the Child (UNCRC) and discuss approaches to measurement of human and children’s rights highlighting shortcomings of these approaches. I will then proceed by proposing and validating the measure of children’s rights implementation in the method and results sections. Finally, I will explore possible utilization of the scale in practice and further research needed at the end of the manuscript.

**Literature Review**

**Children’ Rights Framework and Its Connections with Ecological Framework**

On November 20, 1989, the UNCRC was signed and became the most comprehensive legal treaty for children to have ever existed (Arts, 2014). Forty-one substantive articles focus on civil, economic, political, cultural, and humanitarian rights. Thirteen procedural articles aim at prescribing a way for the states to implement the Convention (UNCRC, 1989; Brooks & Wrightsmans, 1999). UNCRC declares that all signatory states must provide all possible resources for child development, protect children from neglect, abuse, discrimination, and exploitation and be given an opportunity to contribute to the decisions that affect them - including education, law enforcement, healthcare, and family life settings (Alderson, 2008).

Children’s rights claim to be universal, inherent, inalienable, indivisible, and interrelated (UNICEF, 2014). This paradigm implies that every right is a part of the system of rights where if one right is violated it can lead to a violation of another right. In addition, every right has equal weight in this system. However, the discourse on children’s rights has earned the reputation of
being quite controversial, especially because it is an under-theorized field (Tobin, 2013; Arce, 2015). This validation study uses the 3P framework where all articles of the UNCRC are grouped into three major blocks: protection, provision, and participation (UNICEF, 2014). Rights to protection, provision, and participation, as defined in more detail below, are the core values of children’s rights agenda (Peterson-Badali & Ruck, 2008). Protection rights are designed to help children survive, prevent child maltreatment, and establish the responsibility of the state and caregivers to organize effective prevention. Provision rights focus on development and include the rights to affirmative assistance in welfare, health, schooling and social services. Participation rights provide children an opportunity to be a stakeholder in decision-making and exercise the freedom of expression, thought, conscience and religion, the right to be heard in all matters affecting children (voice), and the freedom of association and peaceful assembly (agency) (Bartholet, 2011, Freeman, 2013). Participation is often opposed to protection. Participation assumes granting some liberties to the children while protection is seen as a way of giving them the responsibilities of decision-making as a competent stakeholder. As a result, participation is the least implementable block in children’s rights agenda (Peterson-Badali & Ruck, 2008; KidsRights, 2015).

Due to limited theoretical development in children’s rights discourse, researchers more often create eclectic theoretical frameworks to ground their right-based inquiry. The children’s rights framework has often been integrated with Ecological Model (Ben-Arieh & Attar-Schwartz, 2013; Gal, 2017; International Institute for Child’s Rights and Development, n.d.) as the implementation of children’s rights naturally happens on multiple ecological layers - family, school, and community. The combination of these two approaches will guide the development and validation of the scale developed in the study.
How Human Rights Have Been Defined and Measured

Objective State Compliance vs. Subjective Enjoyment of the Rights Fulfillment

Children’s rights as a part of human rights discourse manifest themselves in a legal document (ex. UNCRC, African Charter of the Right of the Child) as well as moral values (ex. child-friendly cultures). Landman and Carvalho (2009) propose that human rights including children’s rights are comprised of three dimensions – rights in principle, rights in policy and rights in practice. Rights in principle can be defined as a codification of human rights in the international treaties; rights in policy involve a process of implementation of codified rights at state and local levels; rights in practice is an approach that focuses on fulfillment and enjoyment of rights by the rights holders - in our case, children (Landman & Carvalho, 2009).

In most cases, children’s rights implementation operationalized through the legal fulfillment of the signatory states’ commitments to the UNCRC, so-called de jure state legal compliance or “rights in principle” (Carvalho, 2008). Every state is subject to a periodic review of its current children’s rights situation after two years from the ratification date and then every five years after that (UN Committee on the Right of the Child, 1991). As legally driven reporting, this operationalization is limited to the information provided by the states which are very often impacted by political climate and data manipulation in the country. Therefore, Kilkelly (2006) argues that this operationalization of children’s rights implementation suffers from biases and formalities integrated into legal procedures of reporting and does not provide insights into the impact of the realization of the UNCRC for the children themselves (“rights in practice”). This legal approach to operationalizing children’s rights allows us to measure what rights have been fulfilled but not how well they were fulfilled.
KidsRights Index, launched in 2013, attends to both quantitative indicators of the World State of the Children report produced by UNICEF and the qualitative reporting of the States as well as observational reports of the Commission on the Right of the Child. The KidsRights Index (2016) is one of the examples of a “rights in principle and rights in policy” to the measurement of children’s rights implementation as it utilizes the official reporting materials such as the data from the states’ periodic reviews. It includes 23 indicators in 5 domains: life, education, health, protection and children’s rights environment. Protection and provision domains of the children’s rights implementation are measured far more than participation domain of indicators, though. (KidsRights Index, 2016). While the Kids Rights Index provides a framework for measuring children’s rights in principle and in policy, it is still limited by the utilization of adult-generated data only.

Depending on the angle one employs to analyze children’s rights implementation, there are multiple ways to measure it (Landman & Carvalho, 2009):

*Event-based measures* are based on counting violations and events in the area of human rights (ex. instances of torture, protests, etc.) (Landman & Carvalho, 2009).

*Standard-based measurement* focuses on the degree of human rights protection against a certain benchmark (ex. Freedom House scale of civil and political liberties). This can be both de facto (rights in practice) as well as de jure (rights in principle). A de jure form of standard based measurement takes into account only the state of ratification of international treaties (ex. signed/not signed). A de facto form of standard-based measurement often resembles a scale completed by a panel of experts in the field (Landman & Carvalho, 2009).
Official statistics have been increasingly seen as a way to collect data of human rights implementation. Aggregated sets of indicators have been used to rank the country based on human rights related benchmarks (ex. Human Development Index, UNDP, Watchirs, 2002). While this approach provides unique comparative opportunities across contexts, it has been widely criticized for the potential of data manipulation on the country level and issues with disaggregation based on vulnerable groups of individuals (Landman & Carvalho, 2009).

Survey-based instruments are emerging as a tool for measuring human rights implementation. They differ from the three previously discussed measures. Survey-based instruments are designed to collect data from the sample of the population in order to elicit their subjective experiences of human rights implementation and/or attitudes toward them (“rights in practice”). Empirically, it has been established that perception of human rights implementation tends to be related to the actual status of human rights (Richards, 2006).

The approaches to human rights measurement have been widely used in evaluating the progress of the UNCRC as well. Event-based measurement can be found in the World Report (Human Rights Watch, 2018) and partially in the State of the World’s Children (UNICEF, 2017) where every country is evaluated on the state of human rights, including children’s rights based on the description of events that showcase the violation or fulfillment of the rights. The main issue with this approach for evaluating children’s rights is the selection of the events highlighted in the reports. It is unclear who selects those stories, how they select them and to what extent the events described can be a typical experience of certain groups of children in a country (Barsh, 1993).

Standard-based measurement of children’s rights is implemented by the Committee on the Rights of the Child which consists of 18 experts who provide the evaluation of the signatory
state compliance with the UNCRC (Office of High Commissioner on Human Rights, n.d). It provides a different angle on the state of children’s rights in a country. It focuses on the state wide evidence (ex. state social policies) that have been provided by the government in order to prove their accountability for the implementation of the UNCRC. It is complemented by the independent nonprofit reporting on the state of the children’s rights as well as by the observations of the expert committee. This type of measurement serves the purpose of holding the states responsible for the policy they implement and compliance with children’s rights agenda. The data utilized in this type of measurement is adult-generated and highly aggregated. Therefore, it does not provide insights into child-based lived experiences of their rights fulfillment.

Official statistics have been used to measure children’s rights in the UNICEF annual State of the Worlds Children report (UNICEF, 2017). It includes basic numbers on the set of indicators agreed to by the signatory countries and includes mostly indicators of child protection (ex. child mortality rates) and child provision (ex. school enrollment rates) (Raworth, 2001). The problem with this way of measurement is that though universal objective indicators can be useful in one context, they do not highlight the spaces for improvement in another. Though most indicators of child protection are fulfilled at high rates among developed countries, they still have to be improved in developing countries. Again, these indicators are adult-generated social constructions of how children’s rights implementation can look like. The voice of children is not accounted for in this type of measurement. Another issue is that there is not one indicator of children’s participation included in the UNICEF report. It once again underlines the challenge of measuring the participation rights and commitment to this block of rights across countries.
Relationship between Children’s Rights Implementation and Child Well-Being

Further analysis will include convergent validity testing of the scale against existing validated measures of child well-being. Child well-being as a concept was chosen due to the existing evidence of its connection with some children’s rights outcomes. In their international survey, Bradshaw, Martorano, Natali and de Neubourg (2013) found that children’s satisfaction with their health care was consistently related to their subjective well-being in the form of life satisfaction across OECD5 countries. Previous studies on the Children’s Worlds data showed that subjective child well-being is associated with educational and neighborhood quality in both developing and developed countries (Kim & Main, 2017; Lawler, Newland, Giger, Roh & Brockevelt, 2017; Strozik, Strozik & Szwarc, 2015). Researchers utilizing qualitative focus groups with Spanish 12-year-olds found that being healthy and having quality school experience is what the children identified as important for their subjective well-being (Navarro, Malo, Gonzalez, Casas & Crous, 2017). Fulfillment of children’s participation rights was found to be universally related to children’s subjective well-being in the cognitive domain (Kosher & Ben-Arieh, 2016). Also, the participation of children in the home and school setting has been shown to be related to adolescent psychological and physical well-being in the context of developed countries (Rees, Bradshaw, Goswami & Keumg, 2010; To, Helwig & Yang, 2017).

Current Study

Measurement of children’s rights implementation has been largely overlooked as a necessary mechanism of the UNCRC globally (Carvalho, 2008). The goal of this study is to develop a measure of children’s rights implementation using the International Survey of Child Well-Being dataset. This scale is designed to include children’s opinions into the children’s

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5 The Organization for Economic Co-Operation and Development
rights discourse and provide comparative indicators. This instrument will complement adult-generated official and expert reporting on children’s rights with children’s perspectives on the Convention implementation. The items in the dataset will be aligned with the standard list of articles from the UNCRC (Table 10). Previously, the majority of the effort in measuring children’s rights implementation was based on the sets of indicators which were not validated as scales. (Carvalho, 2008).

Table 10.

*Representation of the Items in the Scale by Domain of Rights and Specific UNCRC Articles*

<table>
<thead>
<tr>
<th>Domain of Rights</th>
<th>Article in the UNCRC</th>
<th>Item in Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection</td>
<td>Art. 18 (Parental Responsibilities)</td>
<td>I feel safe at home</td>
</tr>
<tr>
<td></td>
<td>Art 19 (Protection from violence)</td>
<td>I feel safe when I walk in the area I live</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I feel safe at school</td>
</tr>
<tr>
<td>Participation</td>
<td>Art. 12 (Respect for the views)</td>
<td>My parents listen to me and take what I say into account</td>
</tr>
<tr>
<td></td>
<td></td>
<td>My teachers listen to me and take what I say into account</td>
</tr>
<tr>
<td></td>
<td>Art. 13-14 (Freedom of expression, thought, consciousness)</td>
<td>My parents treat me fairly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>My teachers treat me fairly</td>
</tr>
<tr>
<td>Provision</td>
<td>Art. 27 (Adequate standard of living)</td>
<td>Are you satisfied with the house of flat you live in?</td>
</tr>
<tr>
<td></td>
<td>Art. 5 (Parental Guidance)</td>
<td>People you live with?</td>
</tr>
<tr>
<td></td>
<td>Art. 24 (Health and health services)</td>
<td>Your family life in general?</td>
</tr>
<tr>
<td></td>
<td>Art. 28-29 (Quality Education)</td>
<td>Dealt with when you go to the doctors?</td>
</tr>
<tr>
<td></td>
<td>Art. 31 (Leisure, play, and culture)</td>
<td>With your health in general?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Your school marks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Your school experiences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Things you have learned</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Your life as a student</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Your relationship with a teacher</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The outdoor areas children can use in your area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The amount of opportunities you have in life</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Doing things away from home</td>
</tr>
</tbody>
</table>
It is important to note that none of the approaches described in the previous section take into account subjective de facto implementation of the children’s rights as perceived by the children (“rights in practice”). It is not surprising as validated scales of subjective children’s rights implementation are almost non-existent. This paper will conceptualize children’s rights implementation from a “rights in practice” perspective and will focus on de facto subjective fulfillment of children’s rights as reported by the children themselves (Carvalho, 2008). Moral discourse attends to the humanistic nature of children’s rights, and adults’ responsibility to protect those rights as a matter of value-based choice and not a decision made solely based on the existence of the legal document. De facto compliance with the UNCRC is also often referred to as outcome indicators of children’s right implementation (Häusermann, 2002 cited in Landman and Häusermann, 2003).

Method

The Data

A secondary analysis of the data from the International Survey of Child Well-Being (ISCBW; Children’s Worlds, n.d.) is conducted to develop the measure. ISCBW is a multinational and multilingual survey that provides the data from a sample of 54 000 children in three age groups – 8,10 and 12 years old – from 16 countries including Algeria, Nepal, Estonia, Spain, Colombia, Turkey, Ethiopia, South Korea, Germany, England, Romania, Poland, Israel, Norway, South Africa and Malta. This analysis included 17269 children who were 12 years old. Table 11 presents the distribution of sample by countries.
Data Collection Procedures

Data were collected in 2013-2014 exclusively from children to elicit their perspective and provide an alternative to other datasets that utilize adults’ opinions about child well-being. Children in the sample attend mainstream schools. The questionnaires have been translated into

Table 11.

Sample of Children by Country

<table>
<thead>
<tr>
<th>Country</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>1283</td>
<td>7.1</td>
</tr>
<tr>
<td>Nepal</td>
<td>995</td>
<td>5.5</td>
</tr>
<tr>
<td>Estonia</td>
<td>1029</td>
<td>5.7</td>
</tr>
<tr>
<td>Spain</td>
<td>1667</td>
<td>9.2</td>
</tr>
<tr>
<td>Colombia</td>
<td>975</td>
<td>5.4</td>
</tr>
<tr>
<td>Turkey</td>
<td>1018</td>
<td>5.6</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>980</td>
<td>5.4</td>
</tr>
<tr>
<td>South Korea</td>
<td>2597</td>
<td>14.3</td>
</tr>
<tr>
<td>Germany</td>
<td>852</td>
<td>4.7</td>
</tr>
<tr>
<td>England</td>
<td>1319</td>
<td>7.2</td>
</tr>
<tr>
<td>Romania</td>
<td>1507</td>
<td>8.3</td>
</tr>
<tr>
<td>Norway</td>
<td>974</td>
<td>5.4</td>
</tr>
<tr>
<td>South Africa</td>
<td>1131</td>
<td>6.2</td>
</tr>
<tr>
<td>Malta</td>
<td>942</td>
<td>5.2</td>
</tr>
<tr>
<td>Total</td>
<td>17269</td>
<td>100</td>
</tr>
</tbody>
</table>

children’s native languages from English by each country team. Back-translation by another independent translator was then used to ensure accuracy. Original and back-translated copies of the questionnaires were compared to prevent mistranslations (Rees & Main, 2015). It is important to be aware that the modes of data collection varied across the countries. Most of the countries were instructed to use face-to-face paper and pencil data collection with researchers
traveling to the schools. However, there were a few exceptions. Spain opted out of this method to conduct this study via the internet. Children in England were surveyed by a mixed-mode method using internet and paper and pencil surveys but were conducted by school staff rather than researchers (Rees & Main, 2015). While the ICWBS is not the only cross-national project that allows different modes of data collection across countries (ex. World Value Survey), Martin (2011) and Eva and Jowell (2009) highlight the possibility of measurement invariance caused by the mode of data collection.

Data Management

Several levels of data quality checks were performed at national and international levels. Cleaning of the data included removing cases in which the respondents were two years older or younger than the children target age group, more than one-quarter of the variables are missing, in which there is evidence of systematic responding to frequency-based questions (Rees & Main, 2015). This led to the removal of about 3% of cases in the data of 12 years old.

Constructing a Scale for Children’s Rights implementation: Content Validity

In this study, the implémentation will be measured by using proxy items related to fulfillment of the UNCRC articles. For example, children’s right to quality healthcare will be assessed through two items – “How are you dealt with when you go to the doctor?” and “How satisfied are you with your health? To reiterate, I will not evaluate the implementation of the Convention as a legal document, but I will discuss the subjective de facto implementation of the moral premises it implies. In addition, there is no standard on how to judge whether a right is implemented or not in children’s moral rights discourse (Carvalho, 2008). I will measure the extent to which children’s rights outcomes are achieved and not the presence or absence of such. Children’s rights implementation items will not refer to specific articles of the Convention as
research shows more than a half of the children are not aware of the Convention at all (Kosher & Ben-Arieh, 2016).

Measurement of the implementation of children’s rights is tested by combining 21 items presented in the dataset. Queries in the survey are aligned with the perceived implementation of standards within the three domains (protections, provision, and participation) (Table 10.). In the first line of Table 10, the way protection rights will be measured is described by focusing on the feeling of safety at home, school, and in the community. The response option offered to the children is a 5-item Likert scale from “Totally disagree” (1) to “Totally agree” (5).

Children are also entitled to the participation in all matters that affect them (Article, 12). The implementation of participation rights will be constructed using the following items: (1) My parents listen and take into account what I say; (2) My parents treat me fairly; (3) My teachers listen and take into account what I say; and (4) My teachers treat me fairly. This set of items has been used previously in children’s participation scale (Kosher & Ben-Arieh, 2016). Participation items were asked on the 5 points Likert scale from “I don’t agree” to “Totally agree.” Each item was matched with the appropriate article in the Convention (see Table 10).

Whether children’s rights to provision is implemented will be assessed by using three subdomains of rights including health (Article 24 of the UNCRC), education (Article 28-29 of the UNCRC), and community resources (ex. Article 32 of the UNCRC) (Casas, Bello, Gonzales & Aligue, 2013). These three subdomains were proposed as appropriate subscales of General Index of Subjective Child Well-Being on the first wave of ICWBS (Casas et al., 2015). Examples of the items included the following:

How satisfied are you with:
• “How you are dealt with when you go to the doctors?” (Health domain);
• “Your school experience” (School domain);
• “The outdoor areas children can use in your area.” (Community domain).

Children were asked to respond to the provision items on the scale from 0-10 ranging from “Totally disagree” (0), and “Totally agree” (10).

Data Analysis

Preliminary data analysis included exploratory data analysis (ex. frequencies, percentages, histograms, skewness and kurtosis), descriptive analysis (ex. means, frequencies, percentages), missing data analysis and reliability analysis which were run in IBM SPSS (Version 25). All items tested as a part of the scale were treated as continuous variables.

Internal consistency of the initial 21 items pool and the final set of items were assessed by using Cronbach alpha coefficient (DeVilles, 2015). Reliability analysis using Cronbach alpha coefficient were performed for the subscales where appropriate. Due to the differences in item scaling (5 point and 10 point Likert Scale), standardized Cronbach alpha coefficient will be taken into account (Falk & Savalei, 2011).

Following the reliability analysis, the data were entered into Mplus (Version 8) to complete exploratory and confirmatory factor analysis (EFA and CFA). Then, eigenvalues were used to determine the number of factors in the exploratory model (Brown, 2015). The Kaiser-Guttman rule of eigenvalues being higher than 1 to determine the number of factors applied (Brown, 2015). The theoretical model assumed the intercorrelation between items and factors and therefore oblique rotation method (Geomin) has been used (Brown, 2015). The threshold for determining whether an item belongs to a factor was set at the level of .55 which signifies “good
fit” (Comrey & Lee, 1992). The fit indices for the final EFA model has been evaluated based on the following criteria: the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI), where values greater than 0.95 will represent adequate fit (Hu & Bentler, 1999); and the Root Mean Square Error of Approximation (RMSEA) with using 0.08 benchmark as adequate fit, and 0.05 excellent fit (Browne & Cudeck, 1992).

EFA produced a preliminary model to be tested by using CFA in order to determine the factorial validity of children’s rights implementation as a theoretical concept for the whole sample. All items from EFA with loadings higher than .55 were included and grouped as suggested in the previous step. All factors in the model were freely estimated. Some items represented continuous non-normally distributed variables, therefore, robust maximum likelihood estimator has been used (Brown, 2015; Byrne, 2012; Muthen & Muthen, 2012). The goodness of fit was assessed using similar benchmarks as described above EFA for. Modification indices were used to specify the solution (Brown, 2015). Both EFA and CFA were based on the weighted and stratified data.

The convergent validity test was performed by correlating the designed scale with three additional scales available in the dataset including Student Life Satisfaction Scale (SLSS 4; Huebner, 1991), Affective Well-Being Scale (Russell’s Core Affect Scale, Russell, 2003), and Eudemonic Well-Being (Ryff’s Scale of Well-Being, 1989). These scales were expected to be significantly positively correlated with the Children’s Rights Implementation Scale based on existing empirical findings.

**Sampling Strategy and Sampling Characteristics**

The ISCBW utilized complex sample design to ensure the representativeness of each country’s sample, incorporating a variety of stratification variables such as economic prosperity,
type of school, and population density (Kosher & Ben-Arieh, 2016). Sampling strategy depends on the country but based on the complex stratified design principles where regions within a country have been selected and then schools within the regions, then children within the schools. (Reed & Main, 2015). Due to resource limitation, the sampling strategies in some countries were applied to a region of the country and not to the whole territory. Those countries include Algeria, Columbia, South Africa, Turkey and Spain (Rees & Main, 2015). Other countries are represented by a complex stratified sample of the children, with attention to diverse contexts (Rees & Main, 2015).

About 50% of the children in the sample were girls. The majority of the children (96%, n = 17346) were born in the country where the survey took place. About 2% of the children responded came from the child welfare system. About 66% of the children consistently sleep in the same home. Over 29% of children said they sleep in the same home most of the time but sometimes sleep in other places. About 95% of the children live with their mothers at home, and 82% live with their fathers. The majority (80%) had their siblings living with them in their first or only home.

**Results**

**Descriptive Analysis**

No more than 3% of the data was missing per variables. No particular pattern was identified by using SPSS missing pattern analysis. Country-level analysis was used to focus on potential socio-cultural response biases in regards to the items asked. The gendered analysis was aimed at highlighting the potential differences in responses between boys and girls. The percent of missing values were not significantly different across countries and gender. The results of the
item level missing data analysis by country and gender are presented in Table 12 and 13. It shows that no distinct pattern has been identified. Therefore, it was deemed appropriate to use
Table 12.

*Pattern Analysis of Missing Values by Country*

<table>
<thead>
<tr>
<th>Items</th>
<th>ALG</th>
<th>NEP</th>
<th>EST</th>
<th>SPN</th>
<th>COL</th>
<th>TUR</th>
<th>ETH</th>
<th>SK</th>
<th>GER</th>
<th>ENG</th>
<th>ROM</th>
<th>NOR</th>
<th>SA</th>
<th>MLT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel safe at home</td>
<td>1.9</td>
<td>2.1</td>
<td>1.3</td>
<td>1.7</td>
<td>1.9</td>
<td>.8</td>
<td>.3</td>
<td>.5</td>
<td>1.3</td>
<td>1.1</td>
<td>2.5</td>
<td>.6</td>
<td>.4</td>
<td>1.2</td>
</tr>
<tr>
<td>2. My parents/carers listen to me and take what I say into account</td>
<td>3.4</td>
<td>6.2</td>
<td>1.3</td>
<td>1.1</td>
<td>2.3</td>
<td>1.7</td>
<td>.6</td>
<td>1.2</td>
<td>.9</td>
<td>2.4</td>
<td>3.8</td>
<td>.7</td>
<td>1.0</td>
<td>3.0</td>
</tr>
<tr>
<td>3. My parents/carers treat me fairly</td>
<td>3.0</td>
<td>4.2</td>
<td>2.1</td>
<td>1.4</td>
<td>2.2</td>
<td>2.8</td>
<td>.3</td>
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<td>1.6</td>
<td>1.8</td>
<td>3.4</td>
<td>1.2</td>
<td>1.3</td>
<td>3.2</td>
</tr>
<tr>
<td>4. Satisfaction with: The house or flat where you live</td>
<td>1.0</td>
<td>1.5</td>
<td>.8</td>
<td>.4</td>
<td>1.5</td>
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<td>.3</td>
<td>.5</td>
<td>.6</td>
<td>.7</td>
<td>.4</td>
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<td>.6</td>
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<tr>
<td>5. Satisfaction with: The people you live with</td>
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<td>1.2</td>
<td>.2</td>
<td>1.0</td>
<td>.9</td>
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<td>.8</td>
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<td>.9</td>
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<td>.3</td>
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<tr>
<td>6. Satisfaction with: Your family life</td>
<td>2.0</td>
<td>3.0</td>
<td>1.3</td>
<td>.5</td>
<td>1.2</td>
<td>.5</td>
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<td>3</td>
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<tr>
<td>7. In my area there are enough places to play or to have a good time</td>
<td>2.2</td>
<td>1.0</td>
<td>2.1</td>
<td>1.5</td>
<td>1.4</td>
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<tr>
<td>8. I feel safe when I walk in the area I live in</td>
<td>2.8</td>
<td>2.0</td>
<td>2.9</td>
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<tr>
<td>9. Satisfaction with: How you are dealt with at the doctors</td>
<td>1.5</td>
<td>1.4</td>
<td>1.9</td>
<td>.9</td>
<td>1.7</td>
<td>.9</td>
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<tr>
<td>10. Satisfaction with: The area you live in general</td>
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<td>.7</td>
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<td>11. My teachers listen to me and take what I say into account</td>
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<td>1.6</td>
<td>2.7</td>
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<td>12. My teachers treat me fairly</td>
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<td>13. I feel safe at school</td>
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<td>2.6</td>
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<td>Your school marks</td>
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<td>15. Satisfaction with:</td>
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<td>16. Satisfaction with:</td>
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<tr>
<td>Your life as a student</td>
<td>.9</td>
<td>1.8</td>
<td>1.3</td>
<td>1.6</td>
<td>3.0</td>
<td>1.2</td>
<td>.2</td>
<td>.4</td>
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<td>1.6</td>
<td>1.6</td>
<td>0</td>
<td>1.5</td>
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<tr>
<td>17. Satisfaction with:</td>
<td>2.0</td>
<td>1.8</td>
<td>1.3</td>
<td>1.6</td>
<td>3.0</td>
<td>1.2</td>
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<td>.4</td>
<td>.5</td>
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<td>1.6</td>
<td>1.6</td>
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<td>1.5</td>
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<tr>
<td>Things you have learned</td>
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<td>.9</td>
<td>.7</td>
<td>1.0</td>
<td>1.2</td>
<td>.4</td>
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<td>.3</td>
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<td>1.3</td>
<td>.8</td>
<td>0</td>
<td>.7</td>
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<tr>
<td>18. Satisfaction with:</td>
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</tr>
<tr>
<td>Your relationship with teachers</td>
<td>.7</td>
<td>.9</td>
<td>.7</td>
<td>1.0</td>
<td>1.2</td>
<td>.4</td>
<td>0</td>
<td>.3</td>
<td>.7</td>
<td>.7</td>
<td>1.3</td>
<td>.8</td>
<td>0</td>
<td>.7</td>
</tr>
<tr>
<td>19. Satisfaction with:</td>
<td>4.9</td>
<td>1.2</td>
<td>4.1</td>
<td>2.2</td>
<td>2.7</td>
<td>1.4</td>
<td>.1</td>
<td>.8</td>
<td>1.2</td>
<td>.8</td>
<td>2.3</td>
<td>2.6</td>
<td>0</td>
<td>2.0</td>
</tr>
<tr>
<td>The amount of opportunities you have</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>20. Satisfaction with:</td>
<td>1.2</td>
<td>1.9</td>
<td>.5</td>
<td>1.2</td>
<td>1.8</td>
<td>1.3</td>
<td>.1</td>
<td>.7</td>
<td>.7</td>
<td>.7</td>
<td>1.2</td>
<td>1.7</td>
<td>0</td>
<td>.8</td>
</tr>
<tr>
<td>Your health</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Satisfaction with:</td>
<td>1.9</td>
<td>3.2</td>
<td>.2</td>
<td>1.1</td>
<td>2.3</td>
<td>1.0</td>
<td>.1</td>
<td>.4</td>
<td>1.5</td>
<td>2.4</td>
<td>1.1</td>
<td>1.2</td>
<td>0</td>
<td>2.8</td>
</tr>
<tr>
<td>Doing things away from your home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
default where the missing data is addressed by MPlus through applying full-information maximum likelihood technique concurrently with the analysis (Shafer & Graham, 2002).

Table 14 shows the descriptive and exploratory results per each item. It is evident that the items are not normally distributed based on their value of skewness and kurtosis. This issue of negatively skewed distribution is widely known in well-being and happiness studies (Casas, 2011). Due to non-normality of the distribution of the pooled items (negatively skewed data), the robust maximum likelihood (MLR) estimator has been used (Brown, 2015; Byrne, 2012;
Muthen & Muthen, 2012). Standardized Cronbach’s alpha for all 21 items was \( \alpha = .903 \).

Standardized Cronbach’s alpha for the set of 14 final items was \( \alpha = .859 \).

Table 14.

**Descriptive Statistics**

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel safe at home</td>
<td>3.52</td>
<td>.912</td>
<td>-2.22</td>
<td>4.74</td>
</tr>
<tr>
<td>My parents/carers listen to me and take what I say into account</td>
<td>3.18</td>
<td>1.068</td>
<td>-1.25</td>
<td>.791</td>
</tr>
<tr>
<td>My parents/carers treat me fairly</td>
<td>3.38</td>
<td>.999</td>
<td>-1.75</td>
<td>2.52</td>
</tr>
<tr>
<td>Satisfaction with: The house or flat where you live</td>
<td>8.84</td>
<td>1.923</td>
<td>-2.08</td>
<td>4.50</td>
</tr>
<tr>
<td>Satisfaction with: The people you live with</td>
<td>9.07</td>
<td>1.803</td>
<td>-2.55</td>
<td>6.48</td>
</tr>
<tr>
<td>Satisfaction with: Your family life</td>
<td>9.06</td>
<td>1.764</td>
<td>-2.55</td>
<td>7.12</td>
</tr>
<tr>
<td>In my area there are enough places to play or to have a good time</td>
<td>7.34</td>
<td>3.018</td>
<td>-1.13</td>
<td>.26</td>
</tr>
<tr>
<td>I feel safe when I walk in the area I live in</td>
<td>2.73</td>
<td>1.325</td>
<td>-.69</td>
<td>-.73</td>
</tr>
<tr>
<td>Satisfaction with: How you are dealt with at the doctors</td>
<td>8.56</td>
<td>2.161</td>
<td>-1.94</td>
<td>3.77</td>
</tr>
<tr>
<td>Satisfaction with: The area you live in general</td>
<td>8.27</td>
<td>2.385</td>
<td>-1.67</td>
<td>2.42</td>
</tr>
<tr>
<td>My teachers listen to me and take what I say into account</td>
<td>2.97</td>
<td>1.103</td>
<td>-.95</td>
<td>.15</td>
</tr>
<tr>
<td>My teachers treat me fairly</td>
<td>3.02</td>
<td>1.131</td>
<td>-1.06</td>
<td>.28</td>
</tr>
<tr>
<td>I feel safe at school</td>
<td>3.12</td>
<td>1.136</td>
<td>-.125</td>
<td>.69</td>
</tr>
<tr>
<td>Satisfaction with: Your school marks</td>
<td>7.74</td>
<td>2.456</td>
<td>-1.27</td>
<td>1.17</td>
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<tr>
<td>Satisfaction with: Your school experience</td>
<td>8.28</td>
<td>2.163</td>
<td>-1.60</td>
<td>2.54</td>
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<tr>
<td>Satisfaction with: Your life as a student</td>
<td>8.38</td>
<td>2.196</td>
<td>-1.69</td>
<td>2.76</td>
</tr>
<tr>
<td>Satisfaction with: Things you have learned</td>
<td>8.63</td>
<td>1.923</td>
<td>-1.85</td>
<td>3.75</td>
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<td>Satisfaction with: Your relationship with teachers</td>
<td>8.29</td>
<td>2.292</td>
<td>-1.71</td>
<td>2.73</td>
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<tr>
<td>Satisfaction with: The amount of opportunities you have</td>
<td>8.40</td>
<td>2.176</td>
<td>-1.69</td>
<td>2.69</td>
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<tr>
<td>Satisfaction with: Your health</td>
<td>8.84</td>
<td>1.905</td>
<td>-2.16</td>
<td>4.97</td>
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<tr>
<td>Satisfaction with: Doing things away from your home</td>
<td>8.24</td>
<td>2.367</td>
<td>-1.78</td>
<td>2.94</td>
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</table>
Exploratory Factor Analysis

Inspection of the item-item correlation matrix indicates low correlation among proposed items with no items meeting the threshold for the strong correlations (see Table 15). Factor analysis began with exploring a total of 21 items. Data was deemed appropriate for the analysis (KMO = .93; Barlett’s test = 110396; df = 210; p < .001). An examination of the eigenvalues (MPlus) suggested the better fit for the model with 5 factors (χ² = 1068.014; df = 115; p < .001; RMSEA = .022; CFI = .979; TLI = .962, SRMR = .015). However, it is fair to note that the model with four factors was also deemed as acceptable as well based on eigenvalues and model fit (χ² = 2429.766; df = 132; p < .001; RMSEA = .032; CFI = .950; TLI = .921, SRMR = .023). Two notes should be made here: first, significant Chi-Square usually signified a poor fit,
Table 15. *Item-to-Item Correlation Matrix*

| Items                                                                 | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  |
|----------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. I feel safe at home                                              | .416|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2. My parents/carers listen to me and take what I say into account  | .423| .563|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 3. My parents/carers treat me fairly                               | .286| .369| .380|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 4. Satisfaction with: The house or flat where you live             | .291| .289| .286| 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 5. Satisfaction with: The people you live with                     | .309| .353| .369| .452| 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 6. Satisfaction with: Your family life                             | .316| .363| .380| .469| .535| 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 7. In my area there are enough places to play or to have a good time | .258| .252| .256| .237| .192| .227| 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

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Table 15 (Cont’d)

| 9. Satisfaction with: How you are dealt with at the doctors | .162 | .199 | .217 | .264 | .223 | .249 | .384 | .354 | 1   | .538 | .183 | .188 | .239 | .234 | .285 | .271 | .266 | .237 | .343 | .272 | .329 |
| 12. My teachers treat me fairly | .164 | .235 | .286 | .179 | .183 | .228 | .211 | .253 | .188 | .226 | .645 | 1   | .476 | .286 | .365 | .376 | .374 | .536 | .244 | .214 | .181 |
|---|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|
|   | .185 | .241 | .259 | .294 | .269 | .314 | .231 | .344 | .285 | .351 | .345 | .365 | .402 | .482 | 1   | .645 | .565 | .505 | .413 | .359 | .329 |
|   | .135 | .211 | .227 | .234 | .245 | .294 | .188 | .304 | .237 | .301 | .509 | .536 | .396 | .414 | .505 | .547 | .555 | 1   | .348 | .298 | .242 |
|   | .247 | .312 | .329 | .350 | .352 | .406 | .278 | .343 | .343 | .373 | .244 | .244 | .301 | .351 | .413 | .440 | .432 | .348 | 1   | .472 | .439 |

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however, in the case of large sample sizes it has been established to be a known issue which can be neglected if other fit indices perform well (Schlermelleh-Engel, Moosbrugger & Müller, 2003; Vandenberg 2006). Second, the exact number of factors were unclear, and theory-driven decisions were made. The result suggested between 4-5 factors would be acceptable. Consequently, I started with the highest number of factors as this grouping made more sense based on the theoretical framework used. Table 16 shows 14 items substantially loaded on 5 factors that can be theoretically grouped into – “Participation in Family” (2 items); “Provision within Family” (3 items), “Provision in Community” (3 items), “Provision in School” (4 items) and “Participation in School” (2 items).
Table 16.

**EFA Results: Geomin Loadings**

<table>
<thead>
<tr>
<th>Items</th>
<th>Participation in Family</th>
<th>Provision in Family</th>
<th>Provision in Comm.</th>
<th>Provision in School</th>
<th>Participation in School</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel safe at home</td>
<td>0.502**</td>
<td>0.104*</td>
<td>0.040*</td>
<td>0.034*</td>
<td>0.000</td>
</tr>
<tr>
<td>My parents/carers listen to me and take what I say into account</td>
<td>0.712*</td>
<td>0.023</td>
<td>0.006</td>
<td>0.018*</td>
<td>0.020*</td>
</tr>
<tr>
<td>My parents/carers treat me fairly</td>
<td>0.722*</td>
<td>0.016</td>
<td>-0.004</td>
<td>0.052*</td>
<td>0.017*</td>
</tr>
<tr>
<td>Satisfaction with: The house or flat where you live</td>
<td>0.027*</td>
<td>0.562*</td>
<td>0.137*</td>
<td>0.023*</td>
<td>0.012</td>
</tr>
<tr>
<td>Satisfaction with: The people you live with</td>
<td>0.045*</td>
<td>0.722*</td>
<td>-0.018</td>
<td>-0.038*</td>
<td>0.034*</td>
</tr>
<tr>
<td>Satisfaction with: Your family life</td>
<td>0.042*</td>
<td>0.666*</td>
<td>0.005</td>
<td>0.058*</td>
<td>0.033*</td>
</tr>
<tr>
<td>In my area there are enough places to play or to have a good time</td>
<td>0.156*</td>
<td>-0.086*</td>
<td>0.553*</td>
<td>-0.039*</td>
<td>0.059*</td>
</tr>
<tr>
<td>I feel safe when I walk in the area I live in</td>
<td>-0.007</td>
<td>0.086*</td>
<td>0.346*</td>
<td>0.184*</td>
<td>0.076*</td>
</tr>
<tr>
<td>Satisfaction with: How you are dealt with at the doctors</td>
<td>-0.020</td>
<td>-0.019</td>
<td>0.713*</td>
<td>-0.011</td>
<td>0.007</td>
</tr>
<tr>
<td>Satisfaction with: The area you live in general</td>
<td>-0.044*</td>
<td>0.071*</td>
<td>0.709*</td>
<td>0.036*</td>
<td>0.021*</td>
</tr>
<tr>
<td>My teachers listen to me and take what I say into account</td>
<td>0.024*</td>
<td>-0.005</td>
<td>0.017</td>
<td>0.018</td>
<td>0.736*</td>
</tr>
<tr>
<td>My teachers treat me fairly</td>
<td>0.034*</td>
<td>0.017</td>
<td>-0.002</td>
<td>-0.009</td>
<td>0.825*</td>
</tr>
<tr>
<td>I feel safe at school</td>
<td>0.058*</td>
<td>-0.018</td>
<td>0.150*</td>
<td>0.155*</td>
<td>0.405*</td>
</tr>
<tr>
<td>Satisfaction with: Your school marks</td>
<td>0.050*</td>
<td>-0.056*</td>
<td>0.040*</td>
<td>0.603*</td>
<td>0.013</td>
</tr>
<tr>
<td>Satisfaction with: Your school experience</td>
<td>0.019</td>
<td>-0.043*</td>
<td>0.044*</td>
<td>0.720*</td>
<td>0.052*</td>
</tr>
<tr>
<td>Satisfaction with: Your life as a student</td>
<td>-0.009</td>
<td>0.000</td>
<td>-0.056*</td>
<td>0.842*</td>
<td>0.023*</td>
</tr>
<tr>
<td>Satisfaction with: Things you have learned</td>
<td>-0.007</td>
<td>0.023</td>
<td>-0.002</td>
<td>0.732*</td>
<td>0.050*</td>
</tr>
<tr>
<td>Satisfaction with: Your relationship with teachers</td>
<td>-0.087*</td>
<td>0.053*</td>
<td>-0.011</td>
<td>0.467*</td>
<td>0.396*</td>
</tr>
<tr>
<td>Satisfaction with: The amount of opportunities you have</td>
<td>0.081*</td>
<td>0.191*</td>
<td>0.211*</td>
<td>0.365*</td>
<td>-0.065*</td>
</tr>
<tr>
<td>Satisfaction with: Your health</td>
<td>0.050*</td>
<td>0.154*</td>
<td>0.194*</td>
<td>0.328*</td>
<td>-0.066*</td>
</tr>
<tr>
<td>Satisfaction with: Doing things away from your home</td>
<td>0.046*</td>
<td>0.127*</td>
<td>0.320*</td>
<td>0.188*</td>
<td>-0.066*</td>
</tr>
</tbody>
</table>
While 2-item factors are acceptable in EFA, CFA requires factors to include at least three items (Muthen & Muthen, 2009). Based on the theoretical framework, the number of factors was decreased to 4 factors by grouping Participation in Family and School together for further testing. This grouping was created despite not being confirmed by the item loading. Two participation items in School and two Family items were each loaded separately. It can be speculated that the ecological separation of the items is probably stronger than separation by the type of children’s rights. Protection items did not form their factor, nor were they loaded strongly on other factors. Therefore, further analysis will be done for two blocks of rights only – provision and participation.

**Confirmatory Factor Analysis**

CFA was conducted using a three-step process. First, a baseline model with single factors including all 14 items has been established as a comparison point for the EFA modified models (Thompson, 2004). Second, CFA was run for four-factor model established in EFA. Third, the model was specified using modification indices. The baseline model yielded a poor model fit (Table 17).

<table>
<thead>
<tr>
<th>Model</th>
<th>Chi-Square</th>
<th>RMSEA</th>
<th>CFI</th>
<th>TLI</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Model (all 14 items in 1 factor)</td>
<td>$\chi^2=8475; \text{df}=77; p&lt;.001$</td>
<td>.079</td>
<td>.695</td>
<td>.639</td>
<td>.083</td>
</tr>
<tr>
<td>4 factor model based on EFA</td>
<td>$\chi^2=1077.71; \text{df}=71; p&lt;.001$</td>
<td>.031</td>
<td>.957</td>
<td>.945</td>
<td>.041</td>
</tr>
<tr>
<td>Specified 4 factor model</td>
<td>$\chi^2=392.77; \text{df}=66; p&lt;.001$</td>
<td>.021</td>
<td>.982</td>
<td>.975</td>
<td>.025</td>
</tr>
</tbody>
</table>

A EFA-based model has been fitted well with $\chi^2=1077.71; \text{df}=71; p<.001$; RMSEA = .031; CFI = .957; TLI = .945, SRMR = .041. However, this model yielded high modification indices, especially for the relationship between two subscales, for example, “Participation in Family” and “Provision in Family”; “Participation in School” and “Provision in School”; and
between item and a subscale - “Satisfaction with House” and “Provision in Community.” These correlations have substantial support in the literature, and therefore I specify that relationship in the model (Coley, Leventhal, Lynch & Kull, 2013; Dwairy, 2008; Hood, 2005; Zhou, 2012). The specified model showed a better fit for the sample with $\chi^2=392; \text{df}=66; p<.001; \text{RMSEA} = .021; \text{CFI}=.982; \text{TLI} = .975, \text{SRMR} = .025$. The results show that the model includes four factors that might serve as subscales. Due to the absence of protection items in the scale, the Children’s Rights Implementation Scale (CRIS) was renamed into Provision and Participation Rights Scale (PPRIS). Reliability analysis of four factors as subscales show the acceptable level: Provision in the Family $\alpha = .734$, Provision in School $\alpha = .828$, Provision in Community $\alpha = .693$; and Participation in Family and School $\alpha = .695$.

**Convergent Validity**

Three validated scales were used to test the convergent validity of PPRIS including Students Life Satisfaction Scale (Huebner, 1991), Russell’s Core Affect Scale (Russell, 2003) and Ryff’s Scale of Well-Being (Ryff, 1989). As expected, all scales had an acceptable level of reliability for the given sample. All scales were positively correlated to PPRIS scale – SLSS ($r=.688, n=15243, p<.001$), Russell’s Core Affect Scale ($r=.646, n=14965, p<.001$) and Ryff’s Scale of Well-Being ($r=.691, n=14490, p<.001$).

**Discussion**

The Provision and Participation Rights Implementation Scale (PPRIS) provides a tool to measure subjective rights fulfillment with the hope of starting the conversation about children and their well-being from a more rights-informed perspective. This tool has the potential to transform discourse on children as right holders by giving them voices in the implementation of the UNCRC through allowing them to be a part of the data collection. This validation study
provides a ground to claim the children as reliable reporters along with the adults. The process of scale development and validation reduced 21 items of CRIS to 14 items in PPRIS. A total of four factors was identified in Provision and Participation Rights Implementation Scale: Provision within family, Provision within school, Provision within community, and Participation in family and school.

The difference between these four factors is supported by the combined children’s rights and ecological framework discussed before. These theoretical approaches suggest that the two blocks of rights represented – provision and participation – intersect with three layers of the ecological model including family, school, and community, echoing the research done by Ben-Arieh & Attar-Schwartz (2013) and Gal (2017). The analysis of the factor loadings shows that “Participation in Family and School” has the strongest association with the latent construct of Provision and Participation Rights Implementation (.807) followed by fairly similar loadings for Provision within Community (.784), Provision within School (.763) and Provision within Family (.714) (see Figure 2).
Figure 2. CFA Model for Provision and Participation Rights Implementation Construct
Table 18.

Provision and Participation Rights Implementation Scale

<table>
<thead>
<tr>
<th>Items</th>
<th>Question in Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor #1: Provision within Family</strong> – How satisfied are you with:</td>
<td>How satisfied are you with each of the following things in life?</td>
</tr>
<tr>
<td>House or flat you live in?</td>
<td>0= Not at all satisfied; 10 = Totally satisfied</td>
</tr>
<tr>
<td>People you live with?</td>
<td></td>
</tr>
<tr>
<td>Your family life in general?</td>
<td></td>
</tr>
<tr>
<td><strong>Factor #2: Provision within Community</strong> - How satisfied are you with:</td>
<td></td>
</tr>
<tr>
<td>The outdoor areas children can use in your area</td>
<td></td>
</tr>
<tr>
<td>The area where you live in general</td>
<td></td>
</tr>
<tr>
<td>How you have been dealt at the doctor</td>
<td></td>
</tr>
<tr>
<td><strong>Factor #3: Provision within School</strong> - How satisfied are you with:</td>
<td></td>
</tr>
<tr>
<td>Your school marks</td>
<td></td>
</tr>
<tr>
<td>You school experience</td>
<td></td>
</tr>
<tr>
<td>The things you have learnt</td>
<td></td>
</tr>
<tr>
<td>Your life as a student</td>
<td></td>
</tr>
<tr>
<td><strong>Factor #4: Participation within Family and School</strong></td>
<td></td>
</tr>
<tr>
<td>My parents listen to me and take what I say into account</td>
<td></td>
</tr>
<tr>
<td>My parents treat me fairly</td>
<td></td>
</tr>
<tr>
<td>My teacher listens to me and take what I say into account</td>
<td></td>
</tr>
<tr>
<td>My teacher treats me fairly</td>
<td></td>
</tr>
</tbody>
</table>

The Implication for Further Scale Development and Research

*Participation Rights*

PPRIS supports the argument for the importance of measuring children’s participatory rights implementation in order to fully assess the implementation of children’s rights as a whole. The measurement of participatory rights implementation, however, has not yet been developed that can encapsulate the complexity of the operationalization of children’s voices and agency in tangible indicators (Charles & Haines, 2014). The State of the Worlds’ Children, an annual UNICEF produced report, does not cover the state of the children’s participation. KidsIndex
reflects on the state of children’s participation based on the expert observation provided by the Commission on the Rights of the Child and does not propose specific indicators for its measurement. However, there are some localized exceptions. For example, The National Children’s Office in Ireland proposed the National Set of Child Well-Being Indicators where the set of eight indicators that address children’s participation as a part of their well-being including the facts of children’s participation in school life as well as adults’s opinions about children’s participation (Brooks & Hanafin, 2005). This example was followed by Belgium that created their set of participatory indicators as well (National Commission on the Rights of the Child, 2017). The trend in creating nationally specific sets of child well-being indicators, reflects the call for contextualizing children’s rights based on the country situation and social construction of children as a group.

As can be expected, our understanding of child participation, as well as the emphasis on indication of how participatory rights can be implemented, differ. This poses a methodological challenge for cross-national comparative studies. In academic literature, Emerson and Lloyd (2017) developed and validated the scale of measurement of children’s participation in school and community based on the sample of over 3700 10-11 years old children in the UK. Their set of eight “participation in the school” items covers two items used in PPRIS. The set of six “participation in the community” items provided in Emerson and Lloyd’s work were not covered in the dataset and present and an interest for further testing in diverse cultural contexts.

Protection Rights

The use of this set of protection items as its own factor was not supported by the analysis. This lack of evidence requires further development of the item pool. Probably, considering that children’s rights should be seen on multiple ecological levels, additional items representing
protection should be included in further testing of the scale on each level. Based on the UNCRC list of articles, “Protection in family” items can include questions regarding neglect, abuse, deprivation from care, drug abuse in the family. “Protection in school” can be enhanced by adding items regarding bullying. “Protection in the community” items might include questions regarding child labor, gun violence, interaction with police, gang violence.

Implications for Policy and Practice

In practice, PPRIS (Table 18) can be used by community organizations to measure the state of the children’s rights on the local level as well as monitor and benchmark its progress. On the national level, children’s rights measurement should aim to coincide with the sets of child well-being indicators proposed for national monitoring as it provides an opportunity for ongoing data collection and systematic efforts for tracking the status of children’s rights. For example, in the U.S., the Federal Interagency Forum on Child and Family Statistics (2015) collects and publishes America’s Children: Key National Indicators of Well-Being annually. This set of objective indicators reflect the protection and provision domains of children’s rights without attending to the importance of children’s participation. The integration of a children’s rights based measure would allow for policy makers to stay in accordance with the Convention and streamline their reporting.

From the practice perspective, the PPRIS provides a new lens that child and youth social workers can apply by measuring the results of their work from the provision and participation rights perspectives. Involving children in the assessment of their rights implementation can potentially have an empowering effect and help them recognize their place in broader society (Shamrova & Cummings, 2017). In addition, the introduction of children’s rights discourse in the
U.S., where the Convention has not been adopted as of yet, can complement existing child welfare (protectionist) approaches to addressing children’s issues. A number of U.S. organizations committed to children’s rights implementation (ex. Child Defense Fund) can utilize this measure to assess the state of children’s rights despite the lack of ratification.

**Limitations**

Despite the strength of the study coming from a large sample size and diversity of the children involved, there are several limitations that need to be noted. First, the coverage of the UNCRC articles depends upon pre-existing instruments used in the dataset. Therefore, some articles of the Convention (ex. Protection from all types of violence) were not covered by the questions children were asked in International Survey of Child Well-Being. Second, we should take into account that the sample from which the scale was validated is based on children of about 12 years old which has implications regarding the level of cognitive understanding and extent to which certain rights can be fulfilled (ex. participation). The same validation study for younger children might look different due to the fact that their participation is different due to their developmental capacity. Third, this study looked at the whole sample of children from 15 countries. It is highly likely that the factorial structure of the scale might look different in different national contexts. Further testing of the scale needed to analyze cross-cultural features of the scale as well as to establish measurement equivalence to allow for comparison of the children’s rights implementation across countries.

**Conclusion**

This study is one of the first attempts to develop and validate a scale of children’s rights implementation using an international sample of children. While the scale for Provision and Participation Rights Implementation has been validated, it is a starting point for the development
of an instrument that can assist in assessing how provision and participation rights of a certain child are being fulfilled. The utilized dataset is one of the rare instances in which the data on children’s rights implementation is collected from the children themselves. This scale can help practitioners to see the outcome of their work informed by a rights-based perspective. It can enhance the governmental efforts in reporting on children’s rights implementation by giving them a tool to include children’s voices in that reporting and, thereby, enabling those voices to be heard.
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UNICEF. (2014). *25 years of the Convention on the Rights of the Child: is the world a better place for children?*


CHAPTER 4.

DOES MATERIAL DEPRIVATION MAKE A DIFFERENCE IN CHILDREN’S WELL-BEING: ROLE OF PROVISION AND PARTICIPATION RIGHTS

Abstract

In this study, I will address the effect of material deprivation, one of the facets of child poverty, on child subjective well-being. In order to understand the most appropriate way to intervene on the issues of child material deprivation and well-being, it is important to explore the mechanism of this relationship. This association does not exist in a vacuum. Therefore, attention should be paid to differential function of this mechanism across contexts. This study utilizes the Children’s Worlds dataset and, specifically, the subset of 3,273 children who are 12 years old. This study examined the mediation role of children’s rights implementation in the relationship between child material deprivation and well-being in three countries – Ethiopia, Norway and the UK. This study employs mediation path analysis based on SEM technique. This manuscript provides implications for international social work and development practice and discusses the role of contexts in shaping the mediation relationship.

Introduction

Child poverty deprives children of resources for healthy development and well-being (Pemberton, Gordon & Nandy, 2012). About 385 million children around the world live in extreme poverty, surviving on less than $1.90 per day (UNICEF & World Bank, 2016) with an even higher number of children facing material deprivation which is not considered extreme (Gordon et al, 2005; Sumner, 2010; UNICEF & World Bank, 2016). Researchers around the world agree on the detrimental effect of poverty on child outcomes.

A universal assumption is that material deprivation is directly related to the decreased level of child well-being (Bradshaw, 2015). However, it can be suggested that it is not the lack of
money or material possessions alone that lead to children feeling unhappy (Lee & Yoo, 2017) but the effect that the shortage of financial resources can have on fulfillment of children’s rights which in turn serves as an impact mechanism for child subjective perception of well-being. In this study, I will address the effect of material deprivation, one of the facets of child poverty, on child subjective well-being. In order to understand the most appropriate way to intervene on the issues of child material deprivation and well-being, it is important to explore the mechanism of this relationship. This association does not exist in a vacuum. Therefore, attention should be paid to the differential function of this mechanism across contexts. This study will examine the mediation role of children’s rights implementation on the relationship between child material deprivation and well-being in three countries – Ethiopia, Norway and the UK.

The application of a children’s rights approach on the issue of child poverty, surprisingly, has received very limited attention in academic discourse. O’Brien and Salonen (2011) report that their review of major children’s rights and childhood peer-review journals resulted in only a few articles that applied the concept of children’s rights to the issue of children’s poverty. Often, child poverty is connected to child well-being through psychological outcomes of their parents (Chaudry & Wimer, 2016). This approach provides solutions for micro-level interventions, but it takes away from considering more macro rights-based perspective and obligation of the states to commit to the fulfillment of children’s rights (Pemberton, Gordon & Nandy, 2012).

**Literature Review**

**How Is Material Deprivation Related to Child Well-Being?**

Research evidence tends to be rather controversial in regards to the relationship between material deprivation and subjective child well-being (Main, 2014). On the one hand, researchers observe the association between these variables across contexts. Child material deprivation and
subjective child well-being were found to be associated in multiple developed (Bradshaw, 2015; Casas et al., 2013; Main, 2014) and some developing countries (Gross-Manos, 2013; Sarriera et al., 2015). A lack of research on this relationship in non-Western countries is rarer (Shams, 2014). On the other hand, there are multiple intervening methodological and conceptual factors impacting this relationship.

Most of the studies that focused on establishing a connection between these two variables utilized an income approach to poverty (Yoshikawa, Aber & Beardslee, 2012). It highlights the need to examine poverty through the eyes of children and give them a voice by using the relative poverty framework described in the Introduction and previous chapters. Recent studies done in the UK show minimal to no association between family income and child subjective well-being (Diener & Biswas-Diener, 2002; Knies, 2011; Rees, Pople & Goswami, 2011). Sarriers et al. (2015) report that children in South Korea, while having more material resources, when compared with other countries, still tend to score low on subjective well-being, which partially can be attributed to so-called Asian bias in survey research. Korean children might socialize in a culture of modest emotional expression that makes them more likely to report their well-being in non-extreme forms. In other studies, income-based poverty does play a significant predictive role in the relationship. For example, poverty, conceptualized as living in the lowest quartile of average household income, was found to be related to negative child well-being in the form of quality of life among 1725 elementary school children in China (Ho, 2015).

A study utilizing the first wave of the International Survey of Child Well-Being established a relationship between material deprivation and the cognitive aspect of subjective child well-being across 11 countries (Sarriera et al., 2015). However, the mechanism of this relationship was not detailed in this study. Goswami (2014) reported that only 33.5% of this
mechanism could be explained by a child’s demographic and personality. Therefore, 66.5% of the variance in this relationship is due to societal factors that need to be determined. However, it is still not clear what those societal factors are nor the relationship of the mechanism (Main, 2014). Main (2014) proposes that more work needs to be done to explain the paths in which material deprivation impact subjective child well-being as we still do not know the mechanism of its effect, taking into account that the literature on this relationship is quite mixed. Therefore, this study focuses on the exploration of this mechanism utilizing a children’s rights approach.

**How Is Children’s Rights Implementation Related to Child Well-Being?**

Current literature supports the claim that fulfillment of children’s rights is connected to subjective well-being. This is not surprising, taking into account that children’s rights and child well-being have been used interchangeably for decades. However, recent research advancement showed that they are two distinct concepts while being very close to one another (Casas et al., 2011). UNICEF claims that the main goal of children’s right implementation is child well-being (2016). This leading children’s rights organization proposes that if we want to achieve child well-being, children’s rights implementation should be a focal point of the intervention. However, despite the strong moral rhetoric, the role of children’s rights implementation has not been tested holistically, but rather separate kind of rights was examined. For the purpose of systemizing the children’s rights approach, I will use two components of the 3P framework where all articles of the United Nations Convention on the Rights of the Child (UNCRC) are grouped in three major blocks: protection, provision, and participation (UNICEF, 2014).7

Current evidence suggests that provision, and participation rights implementation are related to child subjective well-being. However, some discrepancies exist in the relationship

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7 More about the types of rights and their content is in the previous chapters and Introduction.
across countries and types of rights. Overall, the effect of the implementation of provision rights is consistently related to child subjective well-being, with some variations across countries in education and community domains. For example, Bradshaw, Martorano, Natali and de Neubourg (2013) found that children’s satisfaction with their health care was found to be consistently related to their subjective well-being in the form of life satisfaction across OECD\textsuperscript{8} countries. However, the relationship between school experience and child well-being was not deemed significant.

Previous studies on the Children’s Worlds data showed that subjective child well-being is associated with educational and neighborhood quality in both developing and developed countries (Kim & Main, 2017; Lawler, Newland, Giger, Roh & Brockevelt, 2017; Strozik, Strozik & Szwarc, 2015). Using the Children’s Worlds (1st wave), Kim and Main (2017) compared predictors of subjective child well-being in South Korea and UK, children’s satisfaction with the quality of schooling was related to higher subjective well-being for children in both the UK and South Korea. However, satisfaction with community resources was not significant for either country. Our knowledge of what impacts the well-being of children in developing countries is more scarce (Ranjan & George, 2016).

Fulfillment of children’s participation rights was found to be universally related to children’s subjective well-being (Kosher & Ben-Arieh, 2016). However, the impact of participation on child subjective well-being has received less attention than provision rights. Also, the participation of children in the home and school setting has been proven to be related to adolescent psychological and physical well-being in the context of developed countries (Rees, Bradshaw, Goswami & Keumg, 2010; To, Helwig & Yang, 2017). Norwegian researchers report

\textsuperscript{8} Organization for Economic Cooperation and Development
that children’s participation in making decisions about the activities in which they want to engage (Sandseter & Hansen, 2016) impacts children’s subjective well-being as early as 4-6 years old. Using the Children’s Worlds dataset (2nd wave), Kosher and Ben-Arieh (2016) established that 20% of the variance in subjective child well-being was explained by participatory rights fulfillment in family and schools in the total sample of 16 developed and developing countries. The contribution of this block of rights varies though from country to country, explaining about 34% of the variance in Poland and South Korea to only 10-12% of the variance in South Africa, Nepal, and Romania. The data on participatory rights implementation is very limited. To my knowledge, the International Child Well-Being Survey (ICSWS) is the only cross-national dataset available that includes variables on children’s participation.

**How Is Material Deprivation Related to Children’s Rights Implementation?**

This study utilized a new Provision and Participation Rights Scale (Shamrova, in press) that allows testing the status of children’s rights implementation based on subjective children’s reporting. It specifically addresses the rights for provision (including health, education, community resources) as well as the participation block of rights. Child poverty⁹ is often reported to be related to negative social outcomes for children including limited access to quality education and healthcare, living in deprived communities with limited resources and challenges for being included into decision-making process (Morrow & Pells, 2012; Sandbek, 2017).

Poor children’s health has been found to be one of the mediators in the relationship between poverty and subjective child well-being (Cummins, 2009 in Main, 2014). Children living in families with lower SES are more likely to suffer from cardiovascular diseases, metabolic issues, asthma, and other irregular responses of the immune system, abnormal

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⁹ This section is based on studies on child poverty as the research on child material deprivation in relation to child outcomes is still pretty scarce.
allostatic load, an index showing how fast one’s body deteriorates as well as they test higher on cortisol level (acute stress) than their well-off peers (Evans, Chen, Miller & Seeman, 2012).

Education is traditionally seen as a strategic tool for addressing poverty (McKinney, 2014). In their experimental study, Duncan, Morris, and Rodrigues (2011) reported that for every increase of $1000 in parental income, children’s school achievement improves 5-6% of standard deviation. In addition to inequality driven by school-related factors, parental poverty variables are important as well. For example, one study suggests that poor families struggle to provide children with goods such as toys, books, and day-care that would stimulate their cognitive development (Aber et al., 1997). Children experiencing material deprivation tend to be poorly served by their schools (Ridge, 2011). The current international research compares indicators of completion and enrollment across countries, and less is known about how children’s school experiences are compared across nations. I would argue that a children’s rights agenda goes beyond enrollment in and completion of school.

In developed countries, this negative relationship between material deprivation and quality schooling shows consistency as well. Bradshaw (2015) found that in 28 European countries, children who lacked necessary items scored lower on their access to education and healthcare as well as on subjective well-being. Using income-based poverty, Chaudry and Wimer (2016) found that children who live in low-income families in European countries tend to have lower school achievement, experience more health issues including asthma and obesity. Also, access to quality education shows its mediation role between material deprivation and cognitive and affective child well-being. Utilizing the first wave of the International Survey of Child Well-Being (ISCWeB) Yoo and Choi (2016) found that in a sample of Korean 12-year-old children,
peer relatedness and academic competence mediated the relationship between material deprivation and subjective child well-being.

Community resources for children’s development is also a part of the children’s rights agenda including, for example, Article 31 – Right to leisure, play, and culture (UNCRC, 1989). Ridge (2011) noted that children living in poverty experience smaller housing, which in turn is a factor for them to spend more time outside of their houses in their neighborhoods. Disadvantaged children tend to live in the communities with lower standards of safety and higher risks for engagement in antisocial activities (WHO, n.d). Therefore, their rights for adequate community resources for leisure and play are violated. Participatory research completed in Canada shows that children perceive their neighborhood as a space for free play only when they feel safe there. Having a place for free play is crucial for children’s cognitive, physical, social, and emotional well-being. Unfortunately, children living in low-income areas tend to be deprived of such space because their parents and caregivers deem it as unsafe (Castonguay & Jutras, 2009).

Children’s rights for participation is undermined when a child experiences material deprivation and poverty (Ridge, 2002). It deprives children from voice and agency and prevents them from fully engaging in the space where decisions are made. In order for children to fit in and feel included, they need to be listened to, treated fairly, and taken seriously (all participatory rights Article 12-15; children voice). Participatory rights are often seen as an activation key for other blocks of rights. However, children experiencing material deprivation are more likely to live in stressful environments where adults living in survival mode create space for children to be left out, with their opinions not taken into account (Ridge, 2002). For example, to be a leader in the school parliament you need to have clean clothes and confidently engage with others. For the child coming from an impoverished family, it takes more to overcome material barriers to
participate. A child whose parents do not have a car, might not be as active on student boards in decision-making activities because he or she cannot get there on time (Ridge, 2002).

**Theoretical Background**

This study employs an overarching children’s rights approach that states that children’s rights need to be implemented systematically in order to be effective (Minow, 1990). I will utilize 3-D Child Well-Being Model (Figure 3) that connects the material dimension, the first dimension of well-being, to the second one, the relational dimension, which includes children’s interaction with social institutions (family, school, community, state) that are responsible for the fulfillment of their rights. The third dimension is subjective well-being and is devoted to the ways children feel about their well-being (Sumner, 2010). Sumner’s translation of this model to

![Figure 3. 3-Dimensional Human Well-Being Approach (Adapted from Sumner, 2010)](image)

the language of the Convention on the rights of the child shows that all types of rights, including provision and participation, are conceptually interrelated with both material well-being and subjective child well-being. This theoretical framework is supported by the literature presented
above and, therefore, is deemed to be appropriate for testing the mechanism of the relationship between material deprivation and child well-being via provision and participation rights implementation.

The research questions this study aims to explore are:

1) Do provision and participation rights serve as a mechanism that transmits the effect of material deprivation on child subjective well-being?

2) Does this mechanism work the same way in three countries – Ethiopia, Norway and the UK?

To answer the research questions, the following model has been proposed:

Figure 4. Visual Representation of Mediation Model with Observed and Latent Variables
This is a mediation model that suggest that children’s material deprivation impacts the extent to which children’s rights including provision and participation, are implemented. In turn, children’s rights implementation influences children’s well-being.

Method

Dataset

This paper utilized the data from the International Survey of Child Well-Being (ISCBW; Children’s Worlds, n.d.). ISCBW is a multinational and multilingual survey that provides the data from the sample of 54 000 children in three age groups – 8,10 and 12 years old – from 16 countries including Algeria, Nepal, Estonia, Spain, Colombia, Turkey, Ethiopia, South Korea, Germany, England, Romania, Poland, Israel, Norway, South Africa and Malta. This study focuses on the sample of 12-year-olds from three countries - Norway, England, and Ethiopia (N=3273). The choice of the countries for the exploratory stages of this analysis is determined by types of the welfare state that each country exemplifies (Esping-Andersen, 1990).

Sample Description

The sample consists of 3 subsamples of children from England (n=1319), Ethiopia (n=980) and Norway (n=974) (Table 19). It has a fairly equal number of boys and girls in the sample with Norway having more female respondents. The majority of the samples were born in the country where the survey took place with England having 10% of children with immigrant background and Norway having about 8% of respondents who were not born in the country. The vast majority of the children surveyed live with their biological parents. The highest percent of children – 6% - in Ethiopia live in either orphanage or foster homes. Also, the structure of family life varies across countries with Ethiopia representing a more traditional family where the
majority of the children (83%) live in one home, and a majority have both mother (92%) and father (82%) living with them. In the UK, only about a half of the children have one stable home where they sleep. They tend to live in the household with mothers (96%), but only 67% of them live with their biological fathers. A majority of children in Norway have a family structure that includes life in multiple households with only a quarter of the children sleeping in one home. However, they still tend to have both mothers (97%) and fathers (77%) in the primary dwelling. These differences in family structure can be connected with the availability of extended family members within one household or one community. About one-fifth of all children in Ethiopia live with their grandmothers and 12% with their grandfathers which is different compared with the low proportion of children in England and Norway living with their grandparents.

Table 19.

Sample Characteristics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Total sample (n=3273)</th>
<th>England (n=1319)</th>
<th>Ethiopia (n=980)</th>
<th>Norway (n=974)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>47%</td>
<td>51%</td>
<td>50%</td>
<td>43%</td>
</tr>
<tr>
<td>Girls</td>
<td>52%</td>
<td>49%</td>
<td>50%</td>
<td>57%</td>
</tr>
<tr>
<td>Born in the country</td>
<td>93%</td>
<td>90%</td>
<td>100%</td>
<td>92%</td>
</tr>
<tr>
<td>Household set-up:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sleep in one home</td>
<td>54%</td>
<td>53%</td>
<td>83%</td>
<td>25%</td>
</tr>
<tr>
<td>Sleep in the same home but sometimes in other places</td>
<td>36%</td>
<td>35%</td>
<td>17%</td>
<td>58%</td>
</tr>
<tr>
<td>Regularly sleep in two homes</td>
<td>10%</td>
<td>12%</td>
<td>0%</td>
<td>17%</td>
</tr>
<tr>
<td>Living in foster care home or orphanage</td>
<td>2.5%</td>
<td>1%</td>
<td>6%</td>
<td>1%</td>
</tr>
</tbody>
</table>

| Family Structure                                |                       |                  |                 |                |
| Biological mother at primary home              | 95%                   | 96%              | 92%             | 97%            |
| Biological father at primary home              | 74%                   | 67%              | 82%             | 77%            |
| Mother’s partner living at home                | 9%                    | 12%              | 2%              | 10%            |
| Father’s partner living at home                | 2.5%                  | 2%               | 3%              | 2%             |
| Grandmother living at home                     | 9%                    | 4%               | 19%             | 4%             |
| Grandfather living at home                     | 6%                    | 3%               | 12%             | 3%             |
| Siblings living in the primary home            | 84%                   | 82%              | 87%             | 85%            |
Measures

Material Resources Index

Material Resource Index (MRI, Main, Montserrat, Andersen, Bradshaw & Lee, 2017, 2017; variations in Material Resource Scale in Main & Bradshaw, 2012; and Material Deprivation Index in Gross-Manos, 2015) have been used in the survey to assess whether children have possessions, including “books to read for fun, access to transportation, access to the internet, mobile phone, your bedroom, clothes in good conditions, a family car for transportation, your stuff to listen to music”. Items were scored using a dichotomous response format (0 = no; 1 = yes). In the descriptive analysis, the sum of the items was used to represent the Material Resources Index (Main et al., 2017) that is ranging from 0 to 8. This variable was used as a latent for the purpose of mediation analysis. At the stage of original development, Cronbach Alpha was reported as 0.72 for the sample of UK children (Main & Bradshaw, 2012). However, as was reported in some studies, the index fails to meet the reliability requirement if tested by country (Main et al., 2017; Gross-Manos & Ben-Arieh, 2017). Cronbach’s alpha was established on the level of .555 in Ethiopia, .463 in England and .259 in Norway. Cronbach alpha for the total sample was estimated as .938. Gross-Manos and Ben-Arieh (2017) argue that it is incorrect to use reliability measure for the indices as the items within them are not meant to hang together in a sense expected with the testing of scale reliability (Steiner, 2003). Concurrent validity of the MRI was established by correlating its value with Gross Domestic Product and Gini coefficients (inequality index) (Main et al., 2017).

Provision and Participation Rights Implementation Scale

Provision and Participation Rights Implementation Scale (PPRIS) is used to measure the extent to which (1) children’s rights to affirmative assistance including care, welfare, health,
schooling and community resources are being implemented as well as (2) children’s participation rights are fulfilled in terms of perceived openness of adults to children’s participation in family and school life. The scale was developed and validated in the manuscript #2. Total of 14 items from the Children’s Worlds dataset was grouped to represent the construct from the Table 2. Factorial validity and reliability of the Scale were established with a four-factor model with the following subfactors: provision right within family $\alpha = .734$; provision in school $\alpha = .828$; provision in community $\alpha = .693$; and participation in family and school $\alpha = .695$

The total alpha coefficient for the set of 14 items was established on the level of $\alpha = .859$ in the validation study. Concurrent validity of the scale were established by correlating the total scale score with Students Life Satisfaction Scale (Huebner, 1991), Russell’s Core Affect Scale (Russell, 2003) and Ryff’s Scale of Well-Being (Ryff, 1989). Reliability of PPRIS for the sample of three countries were estimated on the level of $\alpha = .877$. For the purpose of descriptive analysis, the total score is calculated as a sum of the standardized score for each item due to differences in the scales used for each subscale. Provision subscales were estimated by using 10 point Likert Scale and Participation subscales were measured by 5 point Likert Scale.

The scale can be found in Table 20. For the purpose of mediation analysis this variable was used as latent one.

Table 20.

<table>
<thead>
<tr>
<th>Provision and Participation Rights Implementation Scale</th>
<th>Question in Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Items</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Factor #1: Provision within Family</strong></td>
<td>How satisfied are</td>
</tr>
<tr>
<td></td>
<td>you with:</td>
</tr>
<tr>
<td></td>
<td>House or flat you</td>
</tr>
<tr>
<td></td>
<td>live in?</td>
</tr>
<tr>
<td></td>
<td>People, you live</td>
</tr>
<tr>
<td></td>
<td>with?</td>
</tr>
<tr>
<td></td>
<td>Your family life</td>
</tr>
<tr>
<td></td>
<td>in general?</td>
</tr>
<tr>
<td><strong>Factor #2: Provision within Community</strong></td>
<td>How satisfied are</td>
</tr>
<tr>
<td></td>
<td>you with:</td>
</tr>
<tr>
<td></td>
<td>The outdoor areas</td>
</tr>
<tr>
<td></td>
<td>children can use in</td>
</tr>
<tr>
<td></td>
<td>your area</td>
</tr>
<tr>
<td></td>
<td>The area where you</td>
</tr>
<tr>
<td></td>
<td>live in general</td>
</tr>
<tr>
<td></td>
<td>How you have been</td>
</tr>
<tr>
<td></td>
<td>dealt with the</td>
</tr>
<tr>
<td></td>
<td>doctor</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>How satisfied are</td>
</tr>
<tr>
<td></td>
<td>you with each</td>
</tr>
<tr>
<td></td>
<td>of the following</td>
</tr>
<tr>
<td></td>
<td>things in life?</td>
</tr>
<tr>
<td></td>
<td>0= Not at all</td>
</tr>
<tr>
<td></td>
<td>satisfied; 10 =</td>
</tr>
<tr>
<td></td>
<td>Totally satisfied</td>
</tr>
</tbody>
</table>
Table 20 (cont’d)

- **Factor #3: Provision within School**
  - Your school marks
  - Your school experience
  - The things you have learned
  - Your life as a student

- **Factor #4: Participation in Family and School**
  - My parents listen to me and take what I say into account
  - My parents treat me fairly
  - My teacher listens to me and takes what I say into account
  - My teacher treats me fairly

<table>
<thead>
<tr>
<th>How satisfied are you with:</th>
<th>How much do you agree with each of these sentences? (1= I don’t agree; 2 = Agree a little bit; 3 = Agree somewhat; 4= Agree a lot; 5= Totally agree)</th>
</tr>
</thead>
</table>

**Subjective Child Well-being**

Subjective child well-being was measured by Huebner’s Student Life Satisfaction Scale (SLSS, Huebner, 1991). The SLSS is a validated (Huebner and Alderman, 1993) brief 5-item self-report measure to assess satisfaction with life, specifically designed for children from 8 to 18 (Casas, Bello, Gonzalez & Aligue, 2013). Children were asked to respond to 5 items including “My life is going well,” “My life is right” “I have a good life,” “I have what I want in life,” “The things in my life are excellent.” Responses included a scale from 0 to 10 from “Totally disagree” to “Totally agree.” The total score is calculated by adding the items’ scores. Later, the survey team transformed the score to a 100-point scale. The questions were asked in general; no time frames were presented. The scale has been shown to display a good criterion (Huebner et al., 2003), discriminant (Huebner and Alderman, 1993), and predictive validity (Suldo and Huebner, 2004). The measurement equivalence of this scale across countries was validated by using CFA (Confirmatory Factor Analysis) of this scale on the first wave of ICWBS. It showed that the scale performs adequately on the children sampled from 12 countries (Casas & Rees, 2015; Rees & Main, 2015). Further testing on the second wave of ICWBS with the sample of UK and South Korean children supported its cross-cultural validity (Kim & Main, 2017). However, it should be noted that Multi-group CFA for this scale showed that this scale is cross-culturally valid for
comparing correlations and regressions across countries. Comparing the mean scores of SLSS should be done with caution (Casas, 2015). This scale was found to be sensitive to samples with a different level of income in a developing context (Savahl, Adams, Isaacs, September, Hendricks & Noordien, 2015). Cronbach’s alpha in the previous wave of the ICWBS was reported as .823 (Casas & Rees, 2015). In this study, the internal consistency was established on the level of .930. For the purpose of mediation analysis, this variable was used as observed. The previous manuscript described the data collection process and data management. (See manuscript #2).

**Data Analysis Plan**

Before the mediation analysis, the data was inspected by using descriptive and bivariate statistics analysis techniques in SPSS (IBM, Version 25). Main variables were analyzed for the presence of missing data, normality and outliers. Missingness and non-normality of the data were handled by MPlus using WLSMV estimator (Muthen & Muthen, 2016; Newson, 2017). Using WLSMV estimator allowed to use a maximum number of cases. The scale was also analyzed for internal consistency at the preliminary stage. All scales were deemed reliable with an alpha coefficient for the current study reported in the scale descriptions. The Children’s Worlds data is based on a complex sample design (Rees & Main, 2015) which was accounted for by stratification and clustering command in MPlus (Muthen & Muthen, 2016). Weight variable was used to make data generalizable by country.

The mediation analysis consisted of two steps including establishing the measurement models for a total sample of 3 countries as well as by country (Byrne, 2012). In these models, two latent variables (material resources, provision and participation rights implementation) and one
observed (subjective child well-being) were tested. Modification indices were used to specify the model (Byrne, 2012; Muthen & Muthen, 2016).

In the second step, a structural path model based on the result of the measurement model was fitted into data again in the total sample as well as by country. The model is to be read from left to right including the effect of material resources (independent variable) directly on subjective child well-being (dependent variable) as well as indirectly through provision and participation rights implementation. The path modeling with latent variables using SEM techniques was employed.

Path models will be evaluated using several model fit indices: Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI), where values greater than 0.95 will represent adequate fit (Hu & Bentler, 1999); and the Root Mean Square Error of Approximation (RMSEA) using 0.08 benchmark as adequate fit, and 0.05 – excellent fit (Browne & Cudeck, 1992). In addition, Mplus provides WRMR (Weighted Root Mean Square Residual) index developed by Muthen and Muthen specifically with modeling using categorical and non-normally distributed data (Muthen & Muthen, 2012; Yu, 2002). These indices will be taken into account with the threshold <=1. However, it will be treated as additional information about the fit due to the experimental status of the index at this point (Muthen, 2014; Yu, 2002).

Results

Descriptive Analysis

Missing values are present in small proportions across all variables ranging from .4-2.8%. Normality was accessed by using values for kurtosis and skewness (threshold +/-2; Field, 2000; George & Mallery, 2010; Gravetter & Wallnau, 2014; Trochim & Donnelly, 2006) presented in
Table 21. The distribution of main variables in the total sample is normal for Material Resources Index and Provision and Participation Rights Implementation Scale and not normal for Subjective Child Well-Being. Normality of the distribution is not universal across countries as well. Only the sample of the children from Ethiopia has yielded normal distribution on all three main variables. Material Resources and Subjective Child Well-Being are negatively skewed in the UK and Norway. Norway also has negatively skewed distribution of the “Provision and Participation Rights” Implementation variable. Again, missingness and non-normality were addressed by using WLSMV estimator (Byrne, 2012).

Table 21.

Descriptives of the Main Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total sample</th>
<th>England</th>
<th>Ethiopia</th>
<th>Norway</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M (min/max)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRI</td>
<td>5.6 [0; 8]</td>
<td>7.52***</td>
<td>1.69***</td>
<td>7.86***</td>
</tr>
<tr>
<td>SD</td>
<td>3</td>
<td>2.93/14.58</td>
<td>1.29/1.69</td>
<td>42/15.74</td>
</tr>
<tr>
<td>Skew. /Kurt.</td>
<td>-.75/1.2</td>
<td>.85/14.8</td>
<td>.92/7.3</td>
<td>-.72/15.74</td>
</tr>
<tr>
<td>PPRIS</td>
<td>.41 [-45;10]</td>
<td>9.15/1.67</td>
<td>-1.32/1.7</td>
<td>8.48/3.04***</td>
</tr>
<tr>
<td>SD</td>
<td>8.4</td>
<td>-1.24/1.7</td>
<td>1.85/1.85</td>
<td>7.09/1.61/3.18</td>
</tr>
<tr>
<td>Skew. /Kurt.</td>
<td>-1.25/1.65</td>
<td>-1.32/1.7</td>
<td>-1/3.04***</td>
<td>14.5/6.34</td>
</tr>
<tr>
<td>SLSS5</td>
<td>84.4 19.2</td>
<td>84/2.92</td>
<td>20.1/2.55</td>
<td>20.4/1.89</td>
</tr>
<tr>
<td>SD</td>
<td>19.2</td>
<td>2.92/2.55</td>
<td>1.89/1.89</td>
<td>14.5/6.34</td>
</tr>
<tr>
<td>Skew. /Kurt.</td>
<td>-1.71/2.92</td>
<td>-1.67/2.55</td>
<td>-1.41/1.89</td>
<td>-2.31/6.34</td>
</tr>
</tbody>
</table>

Descriptive analysis showed that possession of material resources varies from 0 to 8 (maximum available) items mentioned in the index with an average 5.6 items available for the children in the sample. Children in Ethiopia have the least amount of material resources with a mean score of 1.69. Also, it is important to note that there is not one child in Ethiopia who possesses all eight resources. There is a significant effect of country on Provision and Participation Rights Implementation Scale at the level of the p<.001 for all 3 countries [F (2;
2943) = 71.713, p<.001], on possession of Material Resources [F (2; 3080) = 13907.495, p<.001] and on subjective child well-being (SLSS5) [F (2; 3176) = 48.379, p<.001]. Discrepancies in material deprivation are evident between Ethiopia and Norway. For example, all Norwegian children reported having at least five resources listed. At the same time, the number of possessions is far lower than a number of resources that children in England and Norway have. On average, children in Norway reported their Provision and Participation rights to be the highest out of the three countries, and the Ethiopian children reported the lowest score on this scale. In addition, children in Norway scored higher on subjective well-being score than their counterparts in England and Ethiopia.

Correlation analysis shows that all main variables are significantly correlated in the total sample and by country. Provision and Participation Rights Implementation is strongly positively correlated with children’s subjective well-being across countries (r=.700; p<.001). Having material resources is weakly positively associated with both Provision and Participation Rights Implementation (r=.229; p<.001) as well as with children’s well-being (r=.244; p<.001). (see Table 22).

Table 22.

Relationships between Main Variables

<table>
<thead>
<tr>
<th></th>
<th>Total Sample</th>
<th>Ethiopia</th>
<th>England</th>
<th>Norway</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRI</td>
<td>.244***</td>
<td>.357***</td>
<td>.169**</td>
<td>.156***</td>
</tr>
<tr>
<td>SLSS5</td>
<td>.700***</td>
<td>.350***</td>
<td>.258***</td>
<td>.712**</td>
</tr>
<tr>
<td>PPRIS</td>
<td>.229***</td>
<td>.655***</td>
<td>.161***</td>
<td>.708***</td>
</tr>
</tbody>
</table>


**Measurement Model**

Confirmatory Factor Analysis (CFA) was used to establish factorial validity of the measurement models for each country and the total sample (Byrne, 2012). The model testing indicated an acceptable fit for all four models (Table 23). However, the chi-square test did not indicate a good fit in any country. A non-significant p-value of chi-square test is a known issue for sample sizes (Schermelleh-Engel, Moosbrugger & Müller. 2003, Vandenberg 2006). Other indices including CFI, TLI, and RMSEA indicated excellent fit. Indices for Ethiopia are slightly lower indicating the need for more culturally sensitive measurement. Modification indices suggested the link between two pairs of observed variables in a participation rights latent variable. Items “Parents treat me fairly” and “Parents listen to me and take what I say into account” were linked as well as “Teachers treat me fairly” and “Teachers listen to me and take what I say into account.” These connections between observed variables were theoretically meaningful as both items represent the adults’ openness to children’s rights to be heard.

Estimated relations between observed and latent variables are presented in Table 24. Each item loaded on the factors significantly with the range in coefficient from .32 to 1. Standard errors and residuals of the models were evaluated as well. Standard errors ranged from .01 to .11., which were deemed to be acceptable for the measurement model and the path analysis was performed next.

Table 23.

*Fit Indices for Measurement Model*

<table>
<thead>
<tr>
<th></th>
<th>Chi-Square</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>WRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total model</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modified</td>
<td>1901.05; df=203; p&lt;.001;</td>
<td>.963</td>
<td>.958</td>
<td>.051</td>
<td>2.869</td>
</tr>
<tr>
<td>Base</td>
<td>2026.19; df=204; p&lt;.001;</td>
<td>.960</td>
<td>.955</td>
<td>.052</td>
<td>2.968</td>
</tr>
<tr>
<td><strong>Norway</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modified</td>
<td>296.73; df=203; p&lt;.001;</td>
<td>.962</td>
<td>.956</td>
<td>.022</td>
<td>1.233</td>
</tr>
<tr>
<td>Base</td>
<td>326.99; df=204; p&lt;.001;</td>
<td>.950</td>
<td>.943</td>
<td>.025</td>
<td>1.359</td>
</tr>
</tbody>
</table>
Table 23 (cont’d)

<table>
<thead>
<tr>
<th>Country</th>
<th>Modified</th>
<th>Base</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>320.690; df=203; p&lt;.001;</td>
<td>.950 .943 .021 1.187</td>
<td>.935 .926 .024 1.311</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>298.695; df=203; p&lt;.001;</td>
<td>.924 .913 .022 .996</td>
<td>.700 .664 .050 2.663</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 24.

Standardized Loadings and Standard Errors for Items in the Main Variables in the Total Sample and by Country

<table>
<thead>
<tr>
<th>Material Resources on:</th>
<th>Total</th>
<th>England</th>
<th>Norway</th>
<th>Ethiopia</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRI 1: Having good clothes to wear to school</td>
<td>.86 (.02)</td>
<td>.74 (.10)</td>
<td>Ho .91 (.09)</td>
<td></td>
</tr>
<tr>
<td>MRI 2: Having computer at home</td>
<td>.99 (.00)</td>
<td>.72 (.11)</td>
<td>.45 (.09) .57 (.10)</td>
<td></td>
</tr>
<tr>
<td>MRI 3: Having access to the internet</td>
<td>1 (.00)</td>
<td>.70 (.10)</td>
<td>.57 (.12) .64 (.07)</td>
<td></td>
</tr>
<tr>
<td>MRI 4: Having a cell phone</td>
<td>.96 (.00)</td>
<td>.39 (.08)</td>
<td>.45 (.08) .53 (.07)</td>
<td></td>
</tr>
<tr>
<td>MRI 5: Having your own room</td>
<td>.92 (.01)</td>
<td>.50 (.07)</td>
<td>.51 (.08) .31 (.05)</td>
<td></td>
</tr>
<tr>
<td>MRI 6: Having books to read for fun</td>
<td>.84 (.02)</td>
<td>.66 (.09)</td>
<td>.69 (.07) .52 (.09)</td>
<td></td>
</tr>
<tr>
<td>MRI 7: Family car for transportation</td>
<td>.98 (.00)</td>
<td>.44 (.08)</td>
<td>.32 (.10) .38 (.09)</td>
<td></td>
</tr>
<tr>
<td>MRI 8: Having a stuff to listen to music</td>
<td>.97 (.00)</td>
<td>.57 (.11)</td>
<td>.61 (.09) .68 (.10)</td>
<td></td>
</tr>
</tbody>
</table>

Provision and Participation Rights Implementation

| Provision in School (PPRIS) | .66 (.02) | .76 (.02) | .87 (.03) .86 (.02) |
| Provision in Family (PPRIS) | .84 (.01) | .77 (.02) | .79 (.02) .83 (.02) |
Table 24 (cont’d)

| Provision in Community (PPRIS) | .89 (.01) | .87 (.02) | .80 (.04) | .81 (.02) |
| Participation (PPRIS)           | 1 (.03)   | 1 (.04)   | .90 (.05) | 1 (.03)   |

Path Model

For the purpose of the mediation analysis, the relationship between two latent and one observed variable was specified and tested. This model is designed to unpack the mechanism by which level of material resources is related to child subjective well-being through the implementation of provision and participation rights that includes a provision in the family, in school, in the community as well as participation within family and school. Again, the chi-square test did not indicate significant fit in the total sample as well as in all countries. Other indices indicated an acceptable fit between the models and the data (Table 25 and Figure 4).

Table 25.

Fit Indices for Structural Model

<table>
<thead>
<tr>
<th></th>
<th>Chi-Square</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>WRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total model</td>
<td>1986.207; df=221; p&lt;.001;</td>
<td>.960</td>
<td>.954</td>
<td>.049</td>
<td>2.768</td>
</tr>
<tr>
<td>Norway</td>
<td>317.350; df=220; p&lt;.001;</td>
<td>.964</td>
<td>.959</td>
<td>.021</td>
<td>1.197</td>
</tr>
<tr>
<td>England</td>
<td>344.914; df=220; p&lt;.001;</td>
<td>.952</td>
<td>.945</td>
<td>.020</td>
<td>1.155</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>321.792; df=220; p&lt;.001;</td>
<td>.930</td>
<td>.921</td>
<td>.021</td>
<td>.972</td>
</tr>
</tbody>
</table>

The mediation analysis was done by disaggregating the total effect of possession of Material Resources on Subjective Child Well-Being into a set of direct and indirect effects. As expected, the total effect of material resources and the strength of direct and indirect effects vary between countries (Figure 5). Indirect effect, the extent to which the implementation of provision and participation rights mediates the relationship, varies across countries with Norway being at the level of .349 (p<.001), Ethiopia .370 (p<.001), and England .435 (p<.001). Indirect effect was larger than direct effect across countries. The total effect of material resources on child subjective well-being varied between countries but remains substantial. The largest total effect was estimated for Ethiopia (.50), then for Norway (.31) and UK (.31).
To analyze the estimates of the relationship between variables across countries, it is important to go back to the initial model. Based on the hypothesized model, the following relationships have been expected (Figure 5):

1) The direct effect of material resources on subjective child well-being varied across countries from being non-significant in Norway ($\beta=-.035; p>.05$), having a negative, weak relationship in England ($\beta=-.129; p<.05$) and having positive weak effect in Ethiopia ($\beta=-.125; p<.05$).

2) The extent to which material resources are related to the fulfillment of children’s rights for provision and participation also varied but indicated significant positive relationships across contexts. The strength of this relationships varied from $\beta=.424 (p<.001)$ in Norway to $\beta=.484$ in England ($p<.001$) to $\beta=.584$ in Ethiopia ($p<.001$).

Figure 5. Mediation model for all three countries and for each country separately
3) The effect of the implementation of provision and participation rights on subjective child well-being indicated similar patterns to the previously discussed relationship. It was significantly positively related in each country with the strongest relationship being in England (β=.897; p<.001), then in Norway (β=.823; p<.001) and then in Ethiopia (β=.633; p<.001).

**Discussion**

This study emphasizes a rights-based perspective on the issues of child well-being and child poverty. It highlights the role of provision and participation rights in explaining the connection between child material possessions and child subjective well-being and serves as evidence for right-based social solutions. Systemic nature of children’s rights approach where the violation of one right is likely to lead to the violation of others provides a conceptual ground for the design of the solutions for complex problems such as child poverty.

This study provides the estimation of the relationship between material resources, subjective well-being and provision and participation rights implementation within the three contexts. The findings highlight that the context of children’s lives matter in how children experience material deprivation and assess their well-being depending on a multitude of social, economic, and cultural factors. In addition, the findings are based on the data collected from the children themselves. Giving children a voice (UNCRC, Article 12) in reporting on their material resources, subjective well-being and rights implementation allow for new insights on the effect of poverty on child well-being to emerge. As a result, policy development efforts can be informed with data collected from the children themselves.
Overview of the Findings

The relationship paths connecting possession of material resources to provision and participation rights implementation and linking the latest to subjective child well-being has been consistently statistically significant across countries. These findings suggest that the more material resources children have, the more likely their rights to provision and participation are being fulfilled which in turn leads to their increased well-being. Conversely, non-implementation of provision and participation rights transmit the negative effect of child material deprivation on their well-being. This finding might imply that by addressing provision and participation across contexts, it can be possible to address issues of child poverty and increase their well-being.

The results provide some basis to suggest that children who experience material deprivation will be less likely to be satisfied with their family environment, schooling, resources in the community as well as less likely to be treated fairly and taken into account by their parents and teachers. If we treat the Material Resources Index as a proxy to subjective child poverty, this finding is not surprising. From a family perspective, living in economic stress decreases quality of parenting (provision in family) (Aber et al., 1997). In schools, poverty limits opportunities for children to access high-quality schooling putting a strain on their school experiences and performance (provision in school) (Bradshaw, 2015; Chaudry & Wimer, 2016; Farah & Hackman, 2012; Ridge, 2011). From a community perspective, children living in low-income communities have less access to resources including access to medical care, play areas and enjoyment of community infrastructure (Castonguay & Jutras, 2009). As for participation rights implementation, some research suggests that children are living in poverty experience less access to the right to be heard (Ridge, 2002). Often their interaction with adults is based on unhealthy power differences and authoritarian styles (Ridge, 2002).
However, it is important to note that this relationship does not exist outside of the context. It can be argued that the type of welfare state is an important contextual factor that needs to be taken into account in the discussion of the findings. All three countries in the study represent different forms of welfare regimes which imply that redistribution of social goods for the children might be guided by various political and cultural principles (Esping-Andersen, 1989). In our case, England represents the liberal type of welfare, Ethiopia – insecure regime, and Norway – social democratic welfare.

**Direct and Indirect Effects in the Three Countries**

**Case of Ethiopia**

The material resources and the implementation of provision and participation rights are significantly positively related across countries with this relationship being stronger in Ethiopia. It can be suggested that the context of Ethiopia might play a role in this difference. Ethiopia has the UN designation as a developing economy with a very low human development index, low public spending and high level of international aid (Wood & Gough, 2006). Ethiopia’s welfare regime has been described as an insecure regime with most of the political power coming from outside of the country as a result of its colonized history and present neo-colonized relationships. An insecure regime can be characterized by the lack of a systemic nature of welfare – both formal and informal help – caused by an acute form of social, political, economic or natural crisis (Wood & Gough, 2006). In recent years, Ethiopia made significant progress in alleviating child poverty due to a set of social policies and increased spending on social protection of the poor by 12% which decreased family poverty rates from 44% to about 30% (World Bank Group, 2016). Social welfare solution in this regime is mostly short-term and rather reactive to instability within the country (Wood & Gough, 2006). Ethiopia is ranked 137th on children’s
rights implementation with provision block of rights including education and child health as the least implemented (ranked 155th and 135th respectively). (Kids Rights Index, 2017).

This strong relationship between material resources and rights implementation in Ethiopia might also be a result of the lack of equalizing social policies that would address economic discrepancies and allow all children’s rights for provision and participation to be fulfilled (UNICEF, 2015). Analysis of the status of provision and participation rights showed vivid discrepancies. Over 32% of children in Ethiopia live in poverty (Central Statistical Agency, UNICEF & Oxfam Policy Management, 2015). While children have access to free education, the level of school attendance varies based on the level of income. Children living with families with the income in the top quartile are twice as likely to finish secondary education than those from low-income families in Ethiopia (Central Statistical Agency et al., 2015). A provision within the family is influenced by limited access to clean water (only 52% of the children in low-income families) and home infrastructure such as toilet (Central Statistical Agency et al., 2015). Ethiopian children living in poverty are less likely to live in the adequate housing (with roof, walls, and doors) and have access to cooking fuel. Existing policies addressing child poverty in Ethiopia such as Sustainable Development and Poverty Reduction Program (SDPRP) and Plan for Accelerated and Sustained Development to End Poverty (PASDEP) have not produced expected outcomes for equalizing children’s opportunities for their access to provision rights (Adem, 2009). Adem’s policy analysis is supported by the mixed method data collected with 973 Ethiopian children (Tafere, 2012). Children reported that they feel the Ethiopian government has not done enough to bridge the economic gap between children, especially regarding their schooling and access to employment opportunities (Tafere, 2012). In addition, children shared that they would like to be a part of the solution to poverty and feel that their resources as
stakeholder have been underutilized. They proposed that this kind of participation would improve their self-confidence and well-being. It highlights again the importance of children’s participation in feeling well.

The effect of decreased/increased fulfillment of children’s rights significantly impacts subjective child well-being across the countries with this relationship being very strong in England and Norway. This link is still prominent in Ethiopia but has lower loadings. It might be the case that the relationship between provision and participation rights and subjective well-being for the Ethiopian children can be explained by other factors not accounted in the study. Possibly, even having provision and participation rights fulfilled, protection rights of children might be violated preventing them from scoring highly on child subjective well-being scale. UNICEF (n.d) highlights high prevalence rates of child marriages, FGM (female genital mutilation) practice and child labor practice among Ethiopian children. This is supported by the model fit indices for the sample of Ethiopia which were lower than in other countries. The lower level of fit might indicate that the latent variables used in the study might be constructed differently across cultures. It brings our attention to the issue of cultural sensitivity in measurement as well as social work practice.

Cases of England and Norway

The direct effect of material resources on subjective child well-being was found to be inconsistent across three countries. It was not significant in Norway when accounting for provision and participation rights implementation, was negative weak significant in England and positive weak significant in Ethiopia. The unique features of welfare distribution to citizens in each country is an embedded social context and it is important to note the differences in welfare states. Norway, as a socio-democratic state, scored significantly higher than the other countries
on the provision and participation rights implementation scale. The equalizing method of distribution of resources might play a role in diminishing the effect of child material deprivation on their well-being. In addition, Norway, as an oil-based economy in combination with socio-democratic values, allows for large social transfers for family and children (about 17% of GDP per capita) and works to improve and equalize opportunities for children in poverty (Baran, Diehnelt & Jones, 2014; Sandbæk, 2012). This approach to addressing child poverty is based on universal welfare available in this high-income low unemployment country where only 5% of children are below the poverty line (Sandbæk, 2012). Norway ranked 2nd on overall children’s rights implementation (Kids Rights Index, 2017). It is among the 20 best countries in fulfilling children’s rights for health, 62nd in the ranking of children’s rights to quality education and 1st on creating a children’s rights environment (Kids Rights Index, 2017).

In the case of Norway and England, controlling for the implementation of provision and participation rights, the direct relationship between material resources and well-being is either non-existent (in Norway) or negatively weak (in England). In other words, the effect on child well-being of having (or not having) more material resources can be eliminated/decreased in such countries as Norway and the UK by fulfilling the provision and participation rights.

In comparison with Norway, the UK faces more challenges in addressing the issue of child poverty and deprivation but is still able to redistribute resources in a way that fulfills provision rights for children. In the UK, more than 15 % of children live in poverty after tax redistribution, and about 33% before social transfers are made (Gornick & Jantti, 2012). The UK as a part of a liberal welfare regime founded on the idea that the government should not interfere with redistribution of social goods and allows free markets to create and distribute social services (Espring-Andersen, 1990). Provision rights for education and health are being implemented
fairly well with the UK ranked 3rd on education and 34th on children’s health among 165 countries (Kids Rights Index, 2017).

This lack of a direct relationship between material deprivation and child well-being was found to be present in the samples of UK children (Knies, 2011, Rees et al., 2011). However, Main (2014) suggests that in the UK context child well-being might be indirectly affected by material deprivation via family and school which coincide with the findings of this study. In addition, Cho (2018) found that controlling for the family relationship the association between material resources and subjective child well-being is not significant. This indicates that for the UK context the effect of material deprivation on child well-being can be explained by linking its effect to contextual factors.

Also, one might speculate that the differences in direct effect between Ethiopia and the other two countries might be a part of the Easterlin Paradox (Easterlin, 1974) which explains the relationship between wealth and happiness. It suggests that the relationship between material deprivation and subjective child well-being might work differently for societies with varying levels of development. The more wealthy a nation is, the more likely the impact of material deprivation on people’s happiness will weaken. Sarriera et al. (2015) found that in countries with a more extreme form of material deprivation such as Uganda, South Africa, and Algeria, the relationship between the deficit in necessary items experienced by children and subjective child well-being is stronger than in richer countries. Sarriera et al. (2015) also reported the Easterlin Paradox (Easterlin, 1974) in their findings noting that as soon as the median level of material provision is achieved for children, their well-being does not significantly change. This relationship might be different across cultural contexts, due to how children value their material well-being.
Implications for Policy

The policies addressing child material deprivation, one facet of poverty, should not be determined without attention to children’s rights implementation as well as without contextualizing policymaking in the subjective children’s experiences. In the cases of UK and Norway, policies formed to reduce child poverty and increase well-being should take into account the state of children’s rights for provision and participation in the country. Depending on the welfare structure, either government or social service providers should focus their anti-child poverty efforts on fulfilling children’s rights. By investing social effort in building quality family environments, equalizing access to quality schooling for all children, providing community resources (health care, infrastructure, play areas) and allows children participation, it is possible to mitigate some of the negative effects of child material deprivation on well-being as these four elements were identified as a mechanism of this relationship.

In the case of Ethiopia, the relationship found in its context demands for more exploration and probably the development of indigenous solutions for the question of child poverty. Especially, considering their traditional family structure, the solution for the issues might be found in leveraging the resources of extended family structure and attending to basic children’s rights such as rights of protection from violence and provision of nutrition.

These findings provide the support for the implementation of social policies that address the effect of material deprivation on subjective child well-being by focusing on a provision in the family, quality schooling and community resources as suggested by the Ecological Framework. However, the role of participatory rights in transmitting the effect of material deprivation on child’s well-being needs to be emphasized as well.
This study is particularly important for the U.S. as the last non-ratifying state of the UNCRC in the world. Introduction of the children’s rights agenda to policy and programs design has shown some promising outcomes internationally. The findings suggest that the effect of systemic implementation of provision and participation rights can be a key in addressing issues of child poverty. Despite of the benefits of using human rights-based approaches identified in this and other studies (McPherson, 2018), the profession of social work in the US has been lagging behind on the integration of the children’s rights paradigm into designing social solutions.

For example, the majority of social work with the children in the U.S. evolves around issues of child welfare and utilizes its approaches which are inherently protectionist and have failed on multiple occasions to respect a child as a rights holder. This study shows the effect that systemic implementation of non-protectionist discourse – provision and participation rights – can have on transmitting the effect of child material deprivation on child well-being. This finding highlights the importance of rethinking philosophical assumptions of the way we address child well-being issues in the U.S. by introducing social programs that would address the complexity of children’s rights violation and do not remedy the issue of protection only.

Limitations

There are several limitations of this study that should be noted. First, the sample of children in the ICWBS is represented by the students in mainstream schools (Rees & Main, 2015). It excludes some vulnerable populations like children institutionalized in child welfare, mental health system or criminal justice, as well as those who are home-schooled. The relationship between main variables for those groups might differ from the children attending schools. Therefore, the results of this study can be generalized only to children in mainstream schools. Second, the UNCRC includes over 41 children’s rights which are only partially included
in the analysis due to the limited number of rights-based variables included in the dataset. However, I would argue the rights that are included in the analysis are agreed to be some of the most impactful regarding the relationship between the main variables. Third, the measurement of children’s rights implementation requires further development and validation across multiple cultural groups. To obtain full coverage of children’s rights as a concept, it requires further development of the items, especially in protection and participation domains. Further studies should focus on establishing multigroup measurement invariance for Material Resources Indices and Provision and Participation Rights Implementation Scale, as well as conducting multigroup SEM analysis to distinguish the effect of country context on the mediation model. In addition, measurement invariance analysis will allow for more precise comparison between loadings across countries.

**Directions for Future Research**

Future research directions might include the development of a culturally sensitive tool for measuring material deprivation through Material Resources Scale and children’s rights implementation across countries. In addition, the relationship between material resources and provision and participation rights implementation might not be unidirectional but rather represent a form of reciprocal relationship where non-implementation of the rights can be associated with a lack of material resources and vice versa. Furthermore, future research might focus on the examination of rights implementation as a moderator rather than a mediator in the relationship between material resources and child well-being. In line with resilience research, rights implementation might also have a buffering effect that would decrease the negative impact of material deprivation on child well-being.
Conclusion

This study found that the relationship between material resources and subjective child well-being is mediated by provision and participation rights implementation across three countries and three welfare regimes. However, the indirect effect mostly diminishes the direct relationship between material resources and subjective child well-being in England and Norway. This study is uniquely positioned to construct knowledge about the mechanism of the relationship between child poverty and well-being as is based on the data collected from the children themselves without using adults as a proxy. The findings suggest that policy interventions addressing child poverty and material deprivation might help with managing the negative effects of poverty. However, the policies should be adapted based on the country context and welfare regime.
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CHAPTER 5.
CONCLUSION

From Child Welfare to Child Well-Being

In a broader sense, this dissertation is a contribution to the ongoing shift from child welfare to child well-being by utilizing a children’s rights approach as a theoretical “navigator.” Children’s rights, while not a fully-developed theory or model, rather a mindset that allows for researchers, social work practitioners, and policymakers to resolve complex problems in a systemic, empowering, and humanizing way. Child welfare historically focused on child survival and protection, is a widely utilized approach in social work with children. This protectionist approach shapes what we know about children (ex. the State of the Worlds Children indicator) as well as what we do to help them (ex. Protecting Russian Children from Gay Propaganda Law; U.S. Abstinence Only programs). The shift I am advocating for with this work is about moving beyond children’s survival and protection as the primary indicators of social work outcomes for children. Incorporating provision and participation blocks of children’s rights enhances children’s well-being and empowers them to be active participants in the life around them (agency). One can assume that, from an epistemological standpoint, participatory approaches and qualitative constructivist methodologies are the only solutions to incorporate a children’s rights perspective into the research. This dissertation demonstrates how quantitative, large-scale, secondary data analysis integrates rights-informed elements into its research questions, conceptualizations, methodologies, and implications. This set of studies helps to make this shift toward children’s rights informed research and integrates the concepts of voice and agency into each of three studies by in at least five ways:

- Utilizes data collected from the children themselves (voice);
• Conceptualizes poverty through child-centered material deprivation approach (voice);
• Develops a scale designed for children’s subjective evaluation of the UNCRC outcomes (voice);
• Focuses on child subjective evaluation of well-being (voice);
• Demonstrates the role of provision and participation rights for child well-being (participation rights represented by items describing the characteristics of child’s agency).

The concept of voice was more prominent in the way this dissertation was done. The ISCWB data was collected from the children. The measures utilized in the dataset were focused on child subjective experiences and allowed children to have a voice on the international arena by participating in this large-scale study. When developing the PPRIS (Chapter 3), it has been important for me to include items reflective of children’s voices. The inclusion of children’s voices was possible due to the existing body of literature that operationalizes children’s voice as a concept. Agency, a child’s ability to impact her own situation, has been harder to grasp in secondary data analysis in part due to lack of indicators that would illustrate its presence. Children’s agency was accounted for in Chapter 3 and 4, specifically. The scale development included four items where children were asked about opportunities to impact a situation in school and family. Chapter 4 utilized the scale including “agency” items to test the mediation effect of children’s rights implementation. However, as it was noted in the discussion section of Chapter 3, more research needed in order to create more precise indicators for measuring children’s agency. Qualitative studies will be particularly important to contextualize children’s agency within a cultural environment.
Children’s rights approach provides an opportunity to all children in the world to be entitled to the same set of rights that, in addition to protection, it also covers provision (resources for development) and participation (voice and agency) regardless of where the children live. A rights-based approach to the children’s issues foresees all children achieve well-being as an outcome of the children’s rights implementation. However, as this dissertation shows, there are multiple challenges on the way for all children to be equally happy.

This dissertation responded to several research questions:

1. Does child material deprivation have different patterns across five regions of the world? Are these patterns of material deprivation more likely to affect certain regions and groups of children?

2. Can children’s rights implementation be measured by the set of 21 items theoretically grouped based on the UNCRC?

3. Do provision and participation rights serve as a mechanism that transmits the effect of material deprivation on child subjective well-being? Does this mechanism work the same way in three countries – Ethiopia, Norway and the UK?

**Main findings**

The application of a rights-based approach to studying international children’s issues facilitates the unpacking of several important findings. Chapter 2 describes how children experience poverty differently across the world. Five patterns of material deprivation emerged and highlighted the child poverty gap in the global arena. Children living in the Northern and Western Europe were less likely to be exposed to any type of material deprivation than children from any other region studied. Despite the enormous differences between European vs. Non-European countries, it is fair to note that not all developed countries are doing that well. There is
a material deprivation gap between Eastern European countries and Northern and Western European countries as well. However, the deprivation differences are not as high in comparison with the African countries and MENA countries represented in the sample. In addition, it is important to see the differences in material deprivation in the context of culture, social policy, and economy.

Chapter 3 is devoted to the process of development and validation of the Provision and Participation Rights Implementation Scale (PPRIS). The items meant to represent the Protection domain of rights have not yielded high validity and, therefore, were removed. This scale is a pilot attempt to develop an outcome-based, subjective measure of the children’s rights implementation. The scale includes four subscales – Provision in Family, School, Community, and Participation in Family and School – which aligns with the premise of eclectic nature of children’s rights approach and call for the integration of children’s rights with other theoretical approached such as the Ecological System Theory (Ben-Arie & Attar-Schwartz, 2012; Gal, 2017). Again, the future research with this scale should attempt its contextualization by examining the measurement invariance of the scale across countries.

Chapter 4 applies PPRIS to estimate the children’s rights implementation in Ethiopia, the UK, and Norway and utilizes the scale in order to unpack the mechanism of the relationship between child material deprivation and subjective well-being. It highlights that children’s rights implementation differs from country to country. Children’s rights implementation has shown to be a universal mechanism in the way material deprivation transmits its negative effect on the child subjective well-being by limiting the fulfillment of the provision and participation rights. Therefore, it is fair to propose that the changes impacting children’s rights as a mechanism can help to prevent negative outcomes caused by poverty to affect children’s well-being. However,
the relationship between material deprivation, children’s rights implementation, and child subjective well-being does not exist outside of a context. This relationship has been impacted by the ways children were seen in culture, economic situation in a country and existing social policies and institutions affecting the children. The understanding of these relationships discussed in the studies was informed by the socio-cultural context of the five world regions in Chapter 2 and the three welfare regimes in Chapter 4.

**Overarching Theme: Cultural Context**

Poverty touches the lives of the children around the world. However, the experiences and the extent of child poverty impact can vary in different contexts. Chapter 2 discusses how children in African countries are much more likely to live in extreme deprivation with only one item from the scale – clothing – being available for them. Also, the findings suggest that the second biggest group among children from the sampled African countries are those living with digital deprivation. When the majority within a society might not possess a certain item (ex. access to the internet, a computer at home), then the subjective feeling of deprivation might not be as strong because one’s peers are equally deprived as well. Moreover, on the national scale, one might not even call it a deprivation because a child is not deprived if society has not constructed a certain item as a necessity based on the material deprivation approach. Conversely, if the children’s rights approach is applied it should be assumed that the rights to have access to the resources needed for the development should be equally distributed. Therefore, the comparison point of what to be considered a deprivation should be a symbiosis of indigenous understanding of material deprivation and universal rights-based standards that determine the set of necessities needed to succeed in global comparison.
Building on the importance of cultural context in rights-based research, Chapter 4 highlight the struggles that Ethiopia, one of the African countries sampled, has in achieving child well-being and child material deprivation. It might be the case that the mediation model has such distinguished loadings in Ethiopia comparatively with the UK and Norway because the context of insecure welfare regime in developing world, and the regime impacts on the children’s lives might not be captured by the Material Resource Scale developed in the Western world. It might be the case that the lack of protection rights component in the children’s rights implementation scale does not allow for a stronger relationship between provision and participation rights implementation and child well-being in Ethiopia because protection and safety issues still have not been resolved in the country. It is important to note that despite the universality of mediation relationships described in Chapter 4, the childhood experiences of the respondents in Ethiopia are different than those in the UK and Norway. While this finding is not anything path-breaking by itself, it highlights the importance of discussing what is left out from the model for Ethiopian children that is signified by lower loadings and lower model fit than in the models for Norway and the UK. The honest answer to this discrepancy is that the childhood studies, as well as social studies as a whole, are colonized by Westernized ways of knowing, including conceptualization and measurement of the concepts used in the study. Both the Material Deprivation Resource Scale and the Student Life Satisfaction Scale are developed by Western researchers and were not cross-culturally validated. Unfortunately, we can only speculate whether the list of eight items on the Material Resource scale represents significant indicators for Ethiopian children’s material deprivation status and whether other items would be a better fit.

The success of children’ rights implementation in Norway also should be seen from the perspective of contextual factors, as Norway is a rich country with rights-based socio democratic
ideology that facilitates the implementation of the children’s rights. Norway has been one of the prominent founders of the UNCRC and UNICEF. The oil-rich economy allows Norway to invest in children’s rights implementation and prevent their children from being deprived.

In addition, the critiques on children’s rights described in the Introduction, including Westernized nature and conflict with parental rights, might have contributed to the gap in the UNCRC implementation and material deprivation. Ethiopia, a developing country, in the study represents the example of a traditional collectivistic culture where children’s rights might be at the discretion of tribal leaders (Save the Children, 2003). The social expectation from a 12-year-old child (age of the sampled children in these studies) in Ethiopia might be different compared with her/his counterpart in the UK or Norway. A girl of 12 years old in Ethiopia might already look after a calf, take care of younger siblings, partially do home chores, and be married. (Save the Children, 2003). An Ethiopia boy of this age helps his parents to plow a field and take care of farmed animals. In these circumstances, the access to information via digital devices might not be seen as a priority for resource expenditure even if money is available.

In addition to the social construction of the childhood, the Ethiopian cultural context might also contribute to the high level of digital deprivation that the children experience. If we agree that access to computer, Internet, and mobile phone is important for children’s rights implementation, then in addition to the lack of infrastructure for the digital resources to be available for the children, parenting culture might interfere with digital devices utilization and access to the information to be seen as foreign and not be accepted among adults. Parenting culture and societal definitions of “being well-off” might also interfere with how children’s rights are implemented, as well as how their implementation relates to the concept of well-being and material deprivation. Common Ethiopian sayings about children include "what a parent
decides and orders, a child never contradicts", "does not talk in front of a child though it may be
a joke", "the mind of a child is in the head of his/her father", and "what a child plan is not
achievable” which illustrates parenting is socially constructed in the country (Save the Children,
2003). It can be speculated that the Ethiopian children have grown to define their own well-
being, material deprivation (items they need not feel deprived), and the rights they have in
accordance with their parents’ perspectives on these matters, which creates an additional layer of
complexity in studying the children’s subjective experiences.

In contrast, the children in Norway live in an individualistic culture where their parents
give them more freedom in making decisions. It has been noted that the presence of
individualistic values might be related to a low level of hardship experiences in a society, as
collectivist cultures are often created in response to a need to overcome social struggles by
bounding together (Javo, Ronning & Heyerdahl, 2004). This idea corresponds with the
difference found between Ethiopia and Norway. Due to the fact that the children become a part
of hardship (ex. need to participate in the family economy) much earlier in the developing
context, the focus on them being a child, needing support (ex. provision), and asking for their
opinion are diminishing by the need of survival. Chapter 4 highlights the difference in Provision
and Protection rights implementation among Norway and Ethiopia which might be a result of
cultural, economic, and social contexts. However, it is fair to note that despite the cultural
emphasis on one type of rights or another, children universally benefit from having their
provision and participation rights improved in all three contexts under study. Therefore, this
study addresses the critique of children’s rights as a Western invention by proving the
importance of provision and participation rights regardless of the dominant culture in a society.
For example, children in Ethiopia growing in collectivistic societies where a cultural framework
that places less value on children’s voices still would benefit from the full spectrum of rights to be implemented. This finding calls for a necessary cultural shift to happen in order for the UNCRC to be fully implemented.

In cultures of developing countries, where material deprivation might be constructed differently than in Western societies and parental rights interfere with the implementation of the children’s rights, the relationship between child material deprivation and child well-being can be mediated and/or moderated by a number of cultural factors. This difference underscores the importance of cross-cultural studies of child well-being and its factors in order to develop culturally sensitive solutions for child poverty.

**Implications for Social Work Practice**

Social workers helping children in poverty should understand the ways poverty affects well-being and address this issue on family, school, and community levels, taking into account the cultural construction of poverty. A standard assessment of a household situation should include a list of material possessions important for the children and as well as for all family members. A macro social worker might employ the PPRIS in order to assess the state of provision and participation rights implementation in communities. Empowering children through the implementational of their provision and participation rights can positively impact their subjective well-being. Social workers in international settings should be conscious of their biases and understanding of poverty based on their own framework of references.

**Implications for Further Research**

This dissertation illustrated the potential of rights-informed research in addressing child poverty and well-being. It is without a doubt that future development and testing of the patterns of material deprivation, PPRIS and the mediation model is needed across multiple contexts.
Future research should address the cross-cultural validity of Material Resource Scale, PPRIS, and the mediation model by utilizing the tools of measurement invariance testing. The PPRIS should expand the coverage and include more culturally sensitive items of protection and participation as well as the indicators for other UNCRC articles not included in the current study. Future studies should test the mediation mechanism described in Chapter 4 on the samples of children from non-mainstream school backgrounds (ex. children with disabilities).

**Implications for Policy**

Child poverty policies should take into account a children’s rights framework as it might serve as a systemic solution to the issue. Children need to be involved in the design of a social solution for the social programs to serve them better. In addition, the designs of social programs should account for both income-based and material deprivation indicators in order to fully address the scale of child poverty problem.

So-called “Cash-Plus” programs, a form of income-based and deprivation-based assistance, has recently appeared in the literature showing some promising findings in addressing child poverty in the developing context (UNICEF Office of Research, 2018). However, studies on these kinds of the programs universally underline the importance of safety context in achieving child well-being by implementing Cash-Plus assistance programs. In line with the findings in this dissertation, UNICEF proposes that in developing countries protection rights implementation might intervene with poverty policy implementation and acknowledges that implementation of only provision rights might not be enough (UNICEF Office of Research, 2018).

The integration of a children’s rights approach to social work with the children in the U.S. is of particular importance. The U.S. ranked the worst on child poverty and well-being
among all developed nations (UNICEF Office of Research, 2012; UNICEF Office of Research, 2013). This dissertation shows the power of provision and participation rights implementation in resolving the child poverty issue and increasing well-being.

**Conclusion**

In summary, this dissertation utilized rights-based approaches to research child poverty and well-being. These studies highlighted the importance of children’s rights implementation in social work practice, research, and policy regardless of the context. These three studies contribute to the current discourse on social work with children by helping to shift our focus from purely a protectionist child welfare perspective to utilizing a rights-informed child well-being lens.
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