Understanding female migrant child labor within a cumulative risk framework: The case for combined interventions in Ghana

Laura Gauer Bermudez  
Columbia University, USA

Ozge Sensoy Bahar  
Washington University in St. Louis, USA

Mavis Dako-Gyeke  
University of Ghana, Ghana

Alice Boateng  
University of Ghana, Ghana

Abdallah Ibrahim  
University of Ghana, Ghana

Fred M Ssewamala  
Washington University in St. Louis, USA

Mary McKay  
Washington University in St. Louis, USA

Abstract  
North-to-south migration has been a persistent trend in Ghana. Yet the migrating population has recently shifted to become predominantly female and younger, with a significant increase in rural adolescent girls seeking employment in urban and peri-urban areas. For adolescents without strong networks of social and financial support, this practice can jeopardize their physical and mental health, putting them at risk of sexual victimization and economic exploitation. Building

Corresponding author:  
Laura Gauer Bermudez, International Center for Child Health and Asset Development, School of Social Work, Columbia University, 1255 Amsterdam Ave, New York, NY 10027, USA.  
Email: lgb2123@columbia.edu
upon the work of cumulative risk and ecological systems theorists, this article examines the case of female adolescent load bearers (Kayayei) in Ghana, highlighting the need to develop and evaluate multi-component prevention efforts.

**Keywords**
Adolescents, child labor, Ghana, Kayayei, migration

**Introduction**

Approximately 168 million children between the ages of 5 and 17 are child laborers worldwide, predominantly working in agriculture, services (including domestic work), and, to a lesser extent, industry (Diallo et al., 2013; International Labour Organization [ILO], 2013). In addition to its negative impact on obtaining an education (Guarcello et al., 2008; Heady, 2003), child labor has been associated with serious health, developmental, and psychological threats (Al-Gamal et al., 2013; Beegle et al., 2009), with half of all child laborers engaged in some form of hazardous work (Diallo et al., 2013).

The ILO (2013) has recently drawn attention to unaccompanied migrant child laborers as an underreported but highly vulnerable group. An unaccompanied child migrant is defined as ‘an individual below the age of 18, who has changed (permanently or temporarily) their place of residence without a parent or customary adult guardian also migrating to their current residence (usually in a different locality)’ (Edmonds and Shrestha, 2009: 1). The majority of independent child migration, especially among younger children, occurs in the form of internal migration within low- and middle-income countries (LMICs) for the purposes of employment (Van de Glind, 2010). Independent child migrants who are engaged in child labor are significantly more vulnerable to adverse health, psychological, and social outcomes relative to children working locally due to harsher working conditions, less visibility, lack of parental and community protection, heightened disenfranchisement, and lack of identity documentation, making them highly vulnerable to exploitation (Van de Glind and Kou, 2013). Thus, independent migratory child labor is a concern relevant to practitioners in the fields of public health, child protection, education, and fair labor/decent work. Yet understanding the drivers behind the practice can be complex as they are often composed of a variety of factors that are layered, interconnected, and fluid (United Nations Children’s Fund [UNICEF], n.d.).

While north-to-south migration has always been a persistent trend in Ghana, the migrating population has recently shifted from being predominantly male to predominantly female (Awumbila et al., 2008; Kwankye et al., 2009), including an increasing number of adolescents (Awumbila and Ardayfio-Schandorf, 2008; Yeboah and Appiah-Yeboah, 2009). Research has documented that lack of education, poverty, limited employment opportunities, and sociocultural and family factors are associated with adolescent female migration in Ghana (Awumbila and Ardayfio-Schandorf, 2008; Boateng and Korang-Okrah, 2013; Yeboah and Appiah-Yeboah, 2009). These young female north-to-south migrants predominantly work as head-load carriers, referred to as ‘Kayayei’, in the markets and on the main roads in and around big cities, including Accra (Kwankye, 2012; Kwankye et al., 2007). In some cases, parents or caregivers send their children to the urban south to economically support family members remaining in the north (Opare, 2003). In other cases, girls are lured by the autonomy and financial benefit they hear of from girls who have gone before them (Shamsu-Deen, 2015). Head-load carrying (Kaya) is an attractive economic activity for girls in low-resource contexts as it requires no capital investment,
other than the cost of transportation to the urban center, and can immediately yield small amounts of money (Boateng and Korang-Okrah, 2013). However, Kaya work comes with specific risks (Kwankye et al., 2007) and is a pressing child labor issue for girls under the age of 18 years in Ghana (Boateng and Korang-Okrah, 2013; Yeboah et al., 2015).

Kaya work as a form of child labor has a negative impact on girls’ education, health, and mental health, in addition to safety concerns such as sexual victimization (Shamsu-Deen, 2013). Separated from school and living outside of family care, Kayayei face a multitude of risks, including musculoskeletal injury (Geere et al., 2010), sexual abuse, HIV and other sexually transmitted infections, and early pregnancy (Boateng and Korang-Okrah, 2013). Exploitation by customers and older men, harassment by the police, poor nutrition, and homelessness also afflict this population (Apt and Grieco, 2005; Baah-Ennumh et al., 2012; Buske, 2014; Opare, 2003; Shamsu-Deen, 2013). While Kayayei are identified as at risk, prevention programs are extremely limited, with efforts for the elimination of the worst forms of child labor predominantly focused on formal sectors such as mining and cocoa (Mohammed, 2014). Existing programs, primarily offered by non-governmental organizations (NGOs), target girls who have already migrated to the city. Those that offer vocational training and/or some form of microfinance opportunity to returnees typically do not address critical family and psychosocial components within the household or prevailing gender norms within the community that may perpetuate the practice (Buske, 2014).

Thus, there is a need to understand how interventions can be combined for greatest preventive impact and allow for the crafting of intervention models that demonstrate synergy across the ecosystem. This article uses a cumulative risk framework to conceptualize the factors contributing to independent, migratory child labor from across the ecological spectrum with a specific focus on the experience of female adolescent load bearers (ages 10–17) in Ghana, and makes the case for combination interventions to address the risk factors associated with migrant child labor and reduce its prevalence.

Methods

The article includes a desk review of peer-reviewed literature on Kayayei in Ghana obtained from social science and development journals. Legal documents, national strategies, and international conventions were also reviewed to examine the regulatory and policy framework in Ghana. Given the paucity of quantitative studies on this group of interest, we also included evidence on child labor globally, with an emphasis on studies from sub-Saharan Africa, to provide context to the existing literature on Kayayei, which was primarily limited to qualitative and case study designs.

Cumulative risk models

Cumulative risk models propose that adverse social outcomes are rarely the result of a single risk factor, but rather the product of an accumulation of multiple risk factors over time. These models are proposed to more accurately reflect an individual’s simultaneous exposure to environmental risk than those that focus on single markers of risk exposure (Appleyard et al., 2005; Linder and Sexton, 2011). The advantage of taking a cumulative risk approach to migrant child labor is that it allows for the simultaneous consideration of structural factors, such as poverty and societal norms, as well as micro-level factors, including household economic security and family cohesion. Thus, it is possible to take a more contextual view of individual, family, community, and structural risk factors simultaneously in relation to child labor. Cumulative risk models have been successfully applied to the prediction of IQ in children raised in low-income neighborhoods (Seifer et al., 1996), child adaptation outcomes in Sri Lanka (Catani et al., 2010), and post-traumatic stress among Palestinian and
Understanding migrant child labor

Globally, child labor has been associated with negative developmental outcomes for children across the realms of physical health, psychosocial well-being, and education. In relation to physical health, studies across the world have reported associations between child labor and malnutrition, impaired growth, adolescent mortality, work accidents, exposure to toxic materials, and other harm or injury as a result of poor working conditions (Caglayan et al., 2010; Gharaibeh and Hoeman, 2003; Roggero et al., 2007). To a lesser extent, research has also explored the relationship between child labor and mental health or psychosocial outcomes. Cross-sectional studies from multiple countries provide evidence that child labor is associated with higher rates of internalizing problems such as depression and anxiety (Bordin et al., 2013; Fekadu et al., 2006; Sturrock and Hodes, 2016). Studies have also found that working children were at higher risk for verbal, physical, and sexual abuse (Audu et al., 2009; Gharaibeh and Hoeman, 2003; Shamsu-Deen, 2013). Other studies have documented negative associations between child labor and school attendance (Guarcello et al., 2008), educational attainment (Beegle et al., 2009), and academic performance (Heady, 2003; Orazem and Gunnarsson, 2004).

While scientific evidence repeatedly points to the risks of child labor, powerful incentives exist for children to work. At the structural level, widespread poverty and cultural norms have distinct influence on how children’s work is perceived and assigned. At the household level, economic insecurity and family-level influences (including family structure, parenting practices, and intrafamilial social networks) can impact parental decisions to engage their sons and daughters in child labor. Household-level factors can also affect the decision-making processes of children, particularly adolescents, as they weigh costs and benefits of staying within a family or migrating alone in search of economic opportunity.

In Ghana, national legislation, including the Children’s Act of Ghana (1998), affirms child protection principles and provides minimum age requirements for general employment, light work, and hazardous work. The Children’s Act (1998) defines hazardous work as that which poses a danger to the health, safety, and morals of a child, providing a list of jobs categorized as hazardous, including porterage or carrying of heavy loads. Further affirmations are embedded within Ghana’s 1992 Constitution, Article 28(2), which states that every child has the right to be protected from engaging in work that constitutes a threat to his or her health, education, or development (Boateng and Korang-Okrah, 2013; Ghana Review, 1994). As evidenced by ratifications of United Nations (UN) Conventions 138 on Minimum Age for Work and 182 on the Worst Forms of Child Labor, the Ghanaian government uniformly supports international standards to regulate child labor. Yet child labor in Ghana, including the independent migratory child labor of adolescent girls for load-bearing work, continues to be commonplace, with approximately one-quarter of children between the ages of 5 and 14 working (United States Department of Labor [USDOL], 2016). In rural West Africa, customary practices, family socialization, and agricultural support systems influence conceptualizations of child labor, with national-level laws perceived to lack relevance for rural communities (Krueger et al., 2014). Such divergence between national-level commitments and regional practices suggest a need for a more comprehensive understanding of how risks associated with independent migratory child labor both intersect and compound in order to better design multidimensional interventions germane to sending communities.
Macro-/exo-level factors

Macro-economic conditions. Economic insecurity has often been cited as the fundamental driver of child labor (Basu and Van, 1998; Edmonds, 2005; Edmonds and Pavcnik, 2005). At the same time, variations in poverty between urban and rural areas incentivize the out-migration of children compelled to seek opportunity in rapidly growing urban centers and their peripheries (Amuzu et al., 2010; Van der Geest, 2011; Yeboah, 2010). Indeed, the perception of greater availability of socioeconomic opportunities in urban areas has, over time, sustained a continuous stream of migration in sub-Saharan Africa, including children traveling alone (Erulkar et al., 2006; Kwankye et al., 2009; Yeboah, 2010).

Macro-economic conditions can considerably undermine family income and affect household decision making on children’s work. For instance, the dependence upon agricultural outputs, characteristic of rural communities, creates vulnerabilities to unpredictable weather patterns and subsequent economic shocks (Amuzu et al., 2010). Studies in Tanzania illustrate this relationship. Bandara et al. (2015) examined the effect of agricultural shocks on Tanzanian families and found that such hardships increased working hours for children, while also adversely affecting school attendance. Beegle et al. (2006) observed a significant increase in child labor among Tanzanian households reporting poor harvest. The prevalence of these and other unanticipated events disproportionately impact low-income households and can push families to take measures to cope with the financial consequences, including child labor and child independent migration for work, with caregivers perceiving the potential returns to outweigh the risks (Edmonds and Shrestha, 2009, 2012). Other households foresee this instability in earnings and adjust the labor practices of household members accordingly. Anticipating income variation associated with agricultural livelihoods, children’s work can be viewed as social insurance, providing a diversification of labor to buffer against potential economic shocks (Hilson, 2012).

In Ghana, the above macro-economic risk factors for independent migratory child labor are resonant as economic inequality and poverty vulnerability within the country differ by geographic region. While Ghana has experienced steady economic growth, averaging 7% per year since 2005, this growth has not been equally distributed (Cooke, 2016). Rather, the gap between rural and urban poverty has doubled since the 1990s, with those living in rural areas now four times more likely to be living in poverty than their urban counterparts (Cooke, 2016). The distinct disparity in poverty levels and economic resources between the northern and southern regions of the country is perceived to be fueling the north–south migration of children (Awumbila and Ardayfio-Schandorf, 2008; Kwankye et al., 2009; Yeboah, 2010). The imbalances in development between origin and destination areas are compounded by the increasing rural–urban drift due to rural reliance on erratic rainfall for agricultural activities (Amuzu et al., 2010). The rising poverty levels in the north remain a significant barrier to a number of public goods, including education for children and economic opportunities for those in late adolescence, as compared to the southern region which has a more diversified economy, serving as a draw for children in search of employment (Afriyie et al., 2015; Amuzu et al., 2010; Van der Geest, 2011).

Societal and cultural norms. The origin of Ghana’s north–south migration is traced to the British colonial policy of using northern Ghana as a labor reserve for the southern part of the country, with those residing in northern territories required to contribute their labor resources to colonial interests in the mines, cocoa farms, construction industries, and other sectors of the economy mainly in southern Ghana (Abdul-Korah, 2008; Opare, 2003). In effect, the north received very little investment in basic social infrastructure, educational facilities, and manufacturing. In addition, as policies pursued by subsequent governments focused their efforts on developing the forest and coastal areas of the south, the north still functions as a reservoir of unskilled labor (Anarfi et al, 2003;
Boateng and Korang-Okrah, 2013). Thus, the problem of uneven development and distribution of basic social amenities between urban and rural areas that has been used to explain north–south migration can, in large part, be traced to the historical influences of colonialism (Abdul-Korah, 2008; Twumasi-Ankrah, 1995).

In addition, cultural norms surrounding children’s roles also serve to reinforce the practice of independent migrant child labor. The meanings attached to childhood and child labor are based on societal norms and understandings (Lyons et al., 2006), and thus vary across cultures. For instance, societal perceptions in Ghana suggest that engaging in work is essential for children’s socialization, demonstrated by a long history of children engaged in domestic work as part of household production (Clerk, 2011). Particularly in rural areas, Ghanaian girls often start working as early as age 5, gaining responsibility for tasks, such as child care, cooking, and fetching water or firewood, which can be time-consuming and sometimes dangerous (Bass, 2004; Kielland and Tovo, 2006).

Traditional gender norms also have a distinct influence on child labor and independent child migration. Social norms that encourage the stratification of gender roles are passed down from one generation to the next, to the detriment of adolescent girls (UNICEF, 2007). Gender ideologies are often responsible for the triple burden assigned to girls, namely that of housework, schoolwork, and paid or unpaid labor outside the home, the cumulative effect of which often denies adolescent girls their right to an education (De Lange, 2009). Relatedly, for families with limited economic resources, the period of adolescence for girls is more likely to end early and abruptly with early marriage and childbearing, while male children are prioritized to complete their education (United Nations Population Fund [UNFPA], 2012). In Ghana, lack of economic opportunities coupled with cultural and social factors, such as unequal and overburdened gender roles in household chores, parents’ apathy toward girls’ education, and anticipation of early marriage (especially betrothal to older men), are perceived to cumulatively account for the rise in girls’ migration to southern Ghanaian cities to carry loads for money (Boateng and Korang-Okrah, 2013), illustrating the multifaceted risks that drive children to migrate for labor.

Community norms on children’s work and migration also evolve as urbanization and globalization influence the perceptions of both adolescents and adults. Compounded by a declining interest among older adolescents to participate in rural economies (White, 2012), out-migration from rural areas is perceived to improve household socioeconomic status and allow children to acquire new skills, affording them a sense of pride, and the opportunity to be hailed as a success story within their family and the broader community (Ungruhe, 2010). Financial remittances or gifts sent by migrant children to their family members reinforce this perception and attract other children to embark on similar paths.

Furthermore, given that migration is more likely to initiate from communities that have a history of migration, the role of community-level influences on the decision to migrate cannot be overemphasized (Kwankye et al., 2009). In some communities in northern Ghana, a tradition exists where girls plan to migrate to the south at least once in their youth, in order to acquire household necessities in preparation for their future marriage (Kwankye et al., 2009). This traditional custom may be intersecting with economic stressors to push female adolescents into migration, with load bearing an increasingly common endpoint.

**Micro-level influences**

**Household economic security.** Influenced by macro-level economic factors, the economic stability and security of an individual household can be predictive of child labor. Parental health shocks and death can increase child labor as a result of loss in household income and disruptions in the household environment (Edmonds and Shrestha, 2009). Such temporary or routine experiences of
economic insecurity have been shown to affect rates of child labor. A multi-country examination of 18 developing nations found that children were less likely to work if the household had greater economic resources and if the father had a non-farming occupation (Webbink et al., 2013). Other studies in South Asia and the Middle East have supported these findings, demonstrating declines in child labor to be associated with increases in parental wages (Dayıoğlu and Assaad, 2003; Kambhampati and Rajan, 2006). The economic shock of caregiver unemployment has also been shown to increase the probability of a child entering the labor force by as much as 60% in urban Brazil, particularly among households where males were the primary source of income (Duryea et al., 2007).

In addition to income levels, studies have also shown assets, in the form of financial savings or tangible household resources such as livestock, to be correlated with child labor. In Tanzania, access to a bank account was found to have a buffering effect on child labor, with the presence of an account reducing working hours for both male and female children. The same study found tangible household assets to also have a reductive effect on the working hours of girls, but not of boys (Bandara et al., 2015). A prior study by Dayıoğlu (2006) in Turkey found child labor to be higher among families who were both asset poor and income poor, with assets having a protective and buffering effect against children’s entry into the labor market. With regard to child migration, recent research in Benin has found household perceptions of anticipated economic insecurity to have a greater correlation with child migration than poverty or economic shocks alone (Kielland, 2016). These findings underscore the nuance inherent in understanding migratory child labor, as well as the potential benefits of economic interventions that offer greater predictability, such as insurance or reliable social safety nets.

Household composition and cohesion. In environments where poverty is widespread, and regional norms together with a lack of reproductive health care keep household sizes large, children can feel compelled to contribute to household income or meet their own basic needs (Apt et al., 2011). As children reach older adolescence, school retention can be financially problematic, particularly in households with many children. Even where school tuition is without cost, fees associated with books, uniforms, and other supplies combined with transportation can be an impediment to education for many children. For families living in poverty, work becomes a better alternative for children when school costs are high (Hazarika and Bedi, 2003). Indeed, in Ghana’s artisanal and small-scale mining sector, 55% of children reported that they left their homes due to extreme poverty. In addition, children from the upper east side of northern Ghana were from homes where 43% of fathers and 25% of mothers were no longer alive (United Nations Development Programme [UNDP] Ghana, 2016). Parental loss has been shown to be a driving factor in migratory child labor in other parts of sub-Saharan Africa (Olsson et al., 2016; Sorsa and Abera, 2016), in addition to being a risk factor for sexual violence. A multi-country study in the region found both paternal and double orphaning to be associated with greater risk of sexual violence for adolescent girls (Kidman and Palermo, 2016), while child maltreatment broadly has been identified as a driver of child migration in other low-resource areas (Olsson et al., 2016; Sorsa and Abera, 2016). Therefore, it is plausible that the experience of physical or sexual violence may compound existing economic pressures and push children to leave home and migrate to other places in search of work, though more data are needed from northern Ghana to support this assumption.

Familial social networks. Social ties are also essential determinants of migration plans and influence decisions on destination areas (Dako-Gyeke, 2016; Haug, 2008). These social connections increase the likelihood of migration as they lessen the costs and risks of movement, improve the potential
for future income, and increase the expected net returns to migration (Edmonds and Shrestha, 2012; Palloni et al., 2001). The familial social networks can take the form of joining a family member who has already migrated (Kwankye et al., 2009). Alternatively, families can take advantage of their existing networks (e.g. distant relatives, friends, or acquaintances from home village) in migration destinations (Hashim, 2007). Many children, especially girls who migrate to urban areas in order to engage in economic activities, are noted to have followed their siblings, which indicates the extent to which family members are involved in children’s decision to migrate (Kwankye et al., 2009). In other cases where girls migrate independently from their family members, an immediate or extended family member (e.g. older sister, cousin, distant relative) is involved in arranging accommodation and work, and sometimes in overseeing saving activities (Agarwal et al., 1997; Awumbila and Ardayfio-Schandorf, 2008; Whitehead et al., 2007). These social ties also serve as ‘couriers’ when they travel between the places of origin and destination areas, allowing youth to send back remittances to their families at their homes of origin and families to send goods and clothing to their children (Kwankye, 2012; Kwankye et al., 2009). Both families and youth send in-kind or cash remittances through trusted acquaintances, extended kin, or family members. Social networks can thus be regarded as both push and pull factors (Haug, 2008) influencing migration decisions.

Children’s agency. Finally, independent child migration is often associated with the concept of vulnerability, including abuse, coercion, deception, and exploitation that child migrants may experience in transit or at destination (Capaldi, n.d.). On arrival in urban areas, they may be faced with inadequate social support systems as well as weak enforcement of children’s rights and protection laws. Children who find themselves in such situations can be compelled to explore opportunities for survival, such as engaging in hazardous economic activities. Furthermore, based on evidence found elsewhere in SSA, it is plausible that some independent child migrants, especially females, chose to migrate from rural areas in order to escape from vulnerabilities such as poverty, abuse, gender inequality, and harmful cultural practices.

Considering these protection concerns, the concepts of children’s agency and proactive engagement with migration have received little attention because they are typically viewed as being in conflict with idealized constructions of childhood (Mizen and Ofosu-Kusi, 2013). In this regard, information on children’s motivations, aspirations, benefits, rights, and decision to migrate is scarce in the extant literature (Capaldi, n.d.; Thompson et al., 2017).

Yet when examining protection risk in the context of child migration, it is also important to recognize children’s resiliencies and competencies, self-determination, and ability to take action (Bluebond-Langner and Korbin, 2007; Mizen and Ofosu-Kusi, 2013), as this understanding of child agency is a key component of the microsystem.

Implications for prevention efforts

This review of the literature on Kayayei and broader child labor determinants in the region has demonstrated the interconnected nature of risk factors influencing the independent migration of children for employment, and suggests the need for a more comprehensive approach to prevention efforts, including combination or multi-component interventions. Combination interventions can be defined as the simultaneous use of evidence-informed behavioral, structural, and (where relevant) biomedical interventions, implemented in a way that is synergistic and adaptable (Brown et al., 2014). Research on combination interventions has been led by public health scholars who, in the initial stages of research, have found such strategies to multiply preventive effects for those at risk of HIV, including adolescents (Cluver et al., 2016b; Khademi et al.,
Other scholars have articulated the concept that no single intervention will be sufficient to address complex health challenges, and reiterated growing consensus that combination interventions are necessary to achieve greater impact, issuing a call for research to address the scarcity of studies on the effect of multi-component prevention efforts (Hankins and De Zalduondo, 2010; Marshall et al., 2012).

Drawing upon the work of academics in the field of public health and considering the cumulative risk framework for understanding independent migratory child labor, it can be speculated that coordinated interventions that span the ecosystem and mutually reinforce one another would, as compared with singular interventions, have greater preventive impact as they address multiple risks simultaneously. To provide context to this argument, it is necessary to look at the existing literature on child labor prevention. For instance, while research has largely demonstrated the benefits of cash transfers to cushion the effect of household economic shocks (De Hoop and Rosati, 2014) and reduce the likelihood of child migration (Djebbari and Mayrand, 2011), results have not always been positive. Implemented in isolation, such interventions can reinforce harmful norms. In Burkina Faso, families that received cash transfers, in absence of conditions or efforts to address discriminatory social norms, excluded their most marginalized children from accessing educational opportunities, including females and children with disabilities (Akresh et al., 2013).

Similarly, microcredit, a popular intervention aimed at providing adult household members with financial capital to pursue the initiation or expansion of a business in low-resource settings, has had even more mixed results related to child labor. Researchers in Tanzania found that families with access to credit were less likely to respond to transitory income shocks by increasing child labor (Beegle et al., 2003), a finding supported in Zimbabwe (Ersado, 2005). In contrast, research from Bangladesh on the effect of microcredit on children found that household participation in such programs was associated with an increase in child labor and reduction in school enrollment, with effects most pronounced among girls, and in poorer and less educated households (Islam and Choe, 2013). Similarly, Hazarika and Sarangi (2008) found that household access to microcredit increased the likelihood of child labor during periods of high labor demand in Malawi. The cases of cash transfers and microcredit offer examples of the pitfalls of single intervention programming. When delivered in isolation, such strategies may fail to address other ecological risk factors and thus negate or diminish their effectiveness.

This assumption is supported by cumulative risk theory, which speculates that the likelihood of an adverse event is not predicted by a single risk factor, but rather the summation of multiple risks over time. Reflecting upon the work of Bronfenbrenner (1992; Figure 1), it can be argued that this multiplicity of risks exists within an interconnected, ecological system. As such, when considering prevention strategies to reduce independent migratory child labor, it is vital to address risk in a multi-dimensional fashion, embedding program components in varying levels of a child’s ecosystem – from distal influences, such as societal and gender norms, to proximal influences, including household economic security and family cohesion (Table 1).

Such comprehensive programming for adolescents may include some form of predictable social safety net or asset development at the household level, complementing broader efforts to boost economic investment in the rural north. Combined with infrastructure development – including enhanced access to electricity and pipe-borne water, which has been shown effective in reducing rates of out-migration from northern Ghana (Abdulai, 2016) – the potential exists to disrupt key drivers of the practice. However, the case of the Kayayei brings to light the importance of integrating gender transformative program components when aiming to affect change for adolescent girls. Interventions that incorporate community dialogue have shown measurable results in changing gender-based practices, such as female genital mutilation/cutting (Berg and Denison, 2013),
potentially reducing such drivers of migration. Relatedly, parenting programs in SSA have shown promise in reducing violence against children (Cluver et al., 2016b; Knerr et al., 2013), another potential rationale for motivating adolescent migration. Strategically designed, combination interventions enable a comprehensive and holistic investment in rural adolescent girls.

In addition to designing multi-sectoral approaches, there remains a pressing need to examine the phenomenon of adolescent load bearers in Ghana through quantitative methods, as a means to establish population-wide trends. Within a cumulative risk model, research can determine the threshold of risk at which girls will be most likely to migrate, and which combination of risks has the most power to predict migration and engagement in head-load carrying. Child labor research would benefit from such efforts to undertake quantitative modeling and cumulative risk analysis to more accurately predict the risk and protective factors of independent migratory child labor across multiple system levels, enabling policy makers and practitioners to better tailor multi-component intervention design. In addition to rigorous evaluation of multi-component interventions, such quantitative analyses will serve to validate the multi-dimensional systems approach under which child protection experts already operate.

Conclusion

When considering the independent migratory child labor of female adolescents in Ghana, in particular the case of the Kayayei, the existing scientific evidence substantiates the notion that risks associated with this hazardous form of child labor are multi-dimensional and exist across a child’s ecosystem, supporting the need for interventions that are equally comprehensive in nature. However, more research is needed to quantify these trends and evaluate multi-component prevention efforts in order to design effective interventions.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

References


Table 1. System-level risks and areas for intervention to reduce independent migratory child labor.

<table>
<thead>
<tr>
<th>System level</th>
<th>Risk factors</th>
<th>Areas for intervention</th>
</tr>
</thead>
</table>
| Microsystem  | Household economic insecurity  
Lack of assets  
Physical or sexual violence in household  
Lack of family cohesion  
Large family size | Household economic strengthening  
Asset development  
Violence prevention  
Family strengthening  
Reproductive health |
| Exosystem    | Economic disparity between urban and rural regions  
Lack of infrastructure in rural communities  
Lack of decent work opportunities for adults and youth in local labor market  
Dependence upon agriculture  
Erratic rainfall patterns | Economic investments and infrastructure development in rural regions  
Sustainable livelihoods development for rural households  
Skills training and livelihoods development for rural youth  
Income diversification initiatives  
Agricultural index insurance |
| Macrosystem  | Gender norms that support school leaving for females  
Gender norms that support FGM/C or early marriage for females | Community-owned initiatives for school retention and completion  
Community-owned initiatives to reduce early marriage and FGM/C |

FGM/C: Female genital mutilation/cutting.


Author biographies

Laura Gauer Bermudez is a doctoral candidate at Columbia University’s School of Social Work where she studies the impacts of economic asset development on health and well-being outcomes for adolescents in low- and middle-income countries, with a particular focus on adolescent girls. Ms. Bermudez has nearly 15 years of experience working globally with governments, non-governmental organizations, and multilateral institutions on issues of child protection, gender, migration, and economic strengthening.

Ozge Sensoy Bahar, PhD, is a Research Assistant Professor at the Brown School at Washington University in St. Louis. Her research focuses on child and family well-being in global contexts characterized by poverty and associated stressors. Her current research program focuses on youth experiences of child work and labor, as well as the individual, family, and contextual factors leading to child labor in two country contexts, Turkey and Ghana. The goal of her work is to develop culturally and contextually-relevant interventions to reduce risk factors associated with child labor.

Dr. Mavis Dako-Gyeke is an Associate Professor and Head of the Department of Social Work, University of Ghana, Legon, Accra, Ghana. Her research interests include child development, gender, social protection, migration, mental health, as well as HIV and AIDS.

Dr. Alice Boateng is a Senior Lecturer at the Department of Social Work, University of Ghana, Legon, Accra. Her research interests include: aging, women and children’s issues, and international experiential learning. Her teaching areas include: women and children’s rights, protection, aging and the life cycle, school social work, and social service delivery systems in Ghana.
Abdallah Ibrahim, DrPH is a research and faculty member in Health Policy, Planning and Management at the University of Ghana School of Public Health. His teaching and research interest include health policy and health system issues, especially in behavioral health. His research has mainly focused on underserved populations in Northern Ghana. He has researched and published numerous articles on the health and policy impact on healthcare access for women, children and other groups in Ghana’s health system.

Fred M Ssewamala is a William E. Gordon Distinguished Professor at the Brown School at Washington University in St. Louis. Dr. Ssewamala leads innovative, interdisciplinary research that informs, develops, and tests family-based economic empowerment and social protection interventions. This work aims to improve life chances and long-term developmental impacts — including health, mental health and educational outcomes — for children and adolescent youth, particularly those impacted by poverty and HIV/AIDS in sub-Saharan Africa.

Mary M McKay joined the Brown School at Washington University in St. Louis as dean in 2016, continuing the School’s legacy of creating vital knowledge, initiating social change, and preparing leaders to address social and health challenges both locally and globally. Dean McKay brings a wealth of critical scholarship and leadership in the areas of poverty, mental health and the health-prevention needs of poverty-impacted youth and families, both locally and globally.