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Investigating child labour market activities in South  
Africa

By

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## DECLARATION

I declare that “*Investigating child labour market activities in South Africa*” is entirely my own work and has not been presented for any academic degree or examination in any other institution, and that all the references consulted or cited have been properly acknowledged, with complete references provided.

Clinton Herwel

Signature:



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13 May 2025

## ABSTRACT

The phenomenon of child labour is renowned around the world. Child labour infiltrates the labour market both knowingly and unknowingly. However, child labour is more prevalent in underdeveloped nations as impoverishment pressures parents/guardians to encourage their children to engage in the labour market to help their respective households meet their basic needs. Although child labour was prevalent throughout history, it is still evident today.

Policymakers and the public have raised concerns over the lasting effects of children being exposed too early to the labour market. Some of the terms under which these children operate pose a threat to their health and well-being. Laws and Policies against child labour are implemented across the world, but the magnitude of children working in the labour market is deeply rooted and gigantic. As researchers tackle the task at hand, to measure the scope of child labour around the world, it becomes clearer that inconsistency in data collection arises as business owners hide crucial information about their employment of youth to protect themselves against legal confrontation to maintain their economic benefits in the labour market.

This study investigated the extent of child labour activities in South Africa, with the aid of the 2010, 2015 and 2019 waves of the Survey of Activities of Young People (SAYP) data. The empirical outcomes showed that most of the child labour were African females with low levels of education. In terms of the age cohort, just below two-thirds of child labourers were within the 7-14 years age category, signalling unlawful employment in the labour market. Also, a major part of child labour resided in regions including KwaZulu-Natal and the Eastern Cape.

Furthermore, the findings revealed that if children came from households with a small proportion of adult members being employed, they were significantly more inclined to be involved in economic activities or work as child labour. On the contrary, the findings showed that for adults coming from households with a high number of children involved in economic activities or work as child labour, these adult members suffered greater unemployment probability.

**Key Words:** Child Labour; Child Work, South Africa

**JEL Codes:** C25, J01, J08

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“I am because we are.”

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## LIST OF ABBREVIATIONS

AME	Average Marginal Effects
BCEA	Basic Conditions of Employment Act
CCT	Conditional Cash Transfer
COMESA	Common Market for Eastern and Southern Africa
CSR	Corporate Social Responsibility
DoL	Department of Labour
EAC	East African Community
EPWP	Expanded Public Works Programme
ILO	International Labour Organisation
LFP	Labour Force Participation
LFPR	Labour Force Participation Rate
LPM	Linear Probability Model
MEM	Marginal Effects at the Mean
MSME	Micro Small Medium Enterprise
NIDS	National Income Dynamic Study
NGO	Non-Government Organization
NPO	Non-Profit Organization
SADC	Southern African Development Community
SAYP	Survey of Activities of Young People
SNA	Systems of National Accounts
StatsSA	Statistics South Africa
USA	United States of America
WTO	World Trade Organisation

## CHAPTER ONE: INTRODUCTION

### 1.1 Background

There are different views on the presence of child labour; as more people become aware of their existence, a negative connotation is attached to it. Some people refer to child labour as child abuse. The reasoning might be that parents want their children to work because of economic reasons to help their family survive and make ends meet. On the other side of the coin, it is argued that parents/guardians would like their children to focus on schooling and at a later point in their children's lives enter the labour market.

The common or first reaction to child labour is to banish those goods which are manufactured by child workers may be signalled in the labelling of products. According to Basu and Van (1998), around the early eighteenth and late nineteenth centuries in England, there was a high number of child employment in the country. The economic and societal conditions were unbearable for many households as they had no alternative but to compel their children to join the workforce.

It is further asserted by Basu and Van (1998) that the incidence of child labour is more prevalent in low-income, less-developed countries because developing nations have higher levels of poverty, and South Africa is no exception. There are numerous reasons why child labour exists (to be explained in greater detail later), such as unemployment of adult members in the households, inferior level of educational attainment and extreme levels of poverty, to name but a few. Within the agricultural industry, the dominant cause of child labour is extreme poverty (Streak et al., 2007). Impoverished families with fewer assets, lack of education status and high parental unemployment are also other instrumental factors which force children to join the workforce.

Sackett (2008) argues that children in developing countries, particularly in the African continent, are more likely to fall victim to child labour because of prevalent poverty levels and other key factors. The most well-known incidence of child labour in Sub-Saharan Africa is that of the cocoa farms in West African nations, including Ghana and Cote d'Ivoire, whereby children are exploited to work in plantations as slaves for minimum wage or no remuneration at all (Sackett, 2008).

It is not easy to capture information on child work activities because the labour surveys usually only include the working-age population of at least 15 years to participate in these surveys (that is, children are excluded and subsequently it is not possible to capture information relating to child labour status and activities). Countries such as India have attempted to officially record the total number of children in the job market, but different figures seem to have emerged, depending on the data sources that are utilized. In 1995, the Bureau of Statistics of the International Labour Organization (ILO) reported that at least 120 million children globally aged 5-14 years were employed in a permanent capacity (Basu, 1999). Recent figures published by the ILO indicate there has been a notable increase in child labour in the past few years. By the end of 2015, there was a total of 151.6 million child labourers globally, before this number significantly increased to 160 million at the conclusion of 2019, that is, an absolute increase of 8.4 million took place (ILO, 2021).

Furthermore, research has found that child labour remains more widespread in nations across the southern part of Africa, where child labour is the highest globally compared to other parts of the world. In South Africa, research has shown that 116 000 children have been engaging in work activities which are forbidden by the Basic Conditions of Employment Act 75 of 1997.

Awareness of child labour has intensified due to the increasing involvement of academics, researchers and activists in addressing the critical issues with this practice. The pressure has mounted on manufacturers who produce goods that involve the employment of children because activists and academics who are against child labour are putting laws in place against these employers. Global governing bodies including the World Trade Organization (WTO) and ILO monitor manufacturers who use child labour as inputs in production to indicate to consumers, if they should opt not to buy or use goods and services that involve child labour (Basu, 1999).

It is not easy to measure the extent of child labour and investigate the activities they are involved in since not all countries record data on child labour in their censuses and household surveys. Although not all the relevant data is recorded and available on child labour, the government and policymakers still need to play their role by drafting policies and laws which protect children from working illegally in the job market. Fortunately, with respect to South Africa, the introduction of the Survey of Activities of Young People (SAYP) in 1999 has made

it possible to examine child labour activities in the country, yet the SAYP datasets have been seriously under-utilised by researchers over the years.

To date, four waves of SAYP took place in 1999, 2010, 2015 and 2019. However, it is noteworthy that few empirical studies thoroughly examined the varied person-level and household-level factors influencing the prevalence of child labour in South Africa. This has led to the emergence of a significant research gap in the South African context. Therefore, this research study utilises the available SAYP waves to investigate the nature and prevalence of child labour in South Africa.

## **1.2 Research Question and Objectives**

The research question of this study is as follows: What has been the extent of child labour levels and trends as well as these children's work activities in South Africa since the advent of democracy?

The general research objective of the study is to investigate the extent of child labour activities that children are exposed to in the labour market in South Africa. The more specific research objectives are as follows:

- Analyse the levels and trends of child labour in South Africa.
- Investigate the personal characteristics and work activities of children in child labour, economic and non-economic activities as well as household chores.
- Examine the relationship (if any) between the labour market status of child members and adult members in the households.

## **1.3 Outline of the study**

The first chapter elaborates on the background of child labour including the research question along with the research objectives of this study. It is followed by Chapter Two that comprises of a comprehensive overview of the literature on child labour, by defining various key concepts, explaining the reasons why children enter the workforce, the main types of work activities they are involved in, core theories relating to child labour, along with reviewing the key findings of past local and international empirical studies. Chapter Three explains the data and methods which will be applied in this research thesis before Chapter Four examines and

interprets the empirical results. In conclusion, Chapter Five summarizes the main findings of the thesis by recommending policy suggestions to better tackle child labour in South Africa.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1 Introduction

This chapter presents a comprehensive review of the literature on child labour, exploring its complexities globally and in South Africa. It first defines child labour and distinguishes acceptable child work from exploitative practices relevant to this study. The review then discusses major theoretical frameworks that explain the persistence of child labour in different socio-economic settings. It also addresses the legislative landscape. The focus is on South Africa's legal approach and its alignment with international conventions. The chapter concludes by synthesising key empirical findings from local and international studies. It identifies trends, challenges, and knowledge gaps in the current discourse. This structure lays the groundwork for future research, especially on policy effectiveness and the lived experiences of children in labour.

### 2.2 Conceptual Framework

#### 2.2.1 Defining Key Concepts

The ILO often differentiates between 'child work' and 'child labour.' *Child work*, according to the ILO (1995, p.1), includes doing light household chores, which could result in gaining some learning values, whereas *child labour* describes the inappropriate child work where children work in the labour market to receive financial compensation. Child labour is also described as children below the age of 15 years involved in the labour market across the world. It is argued that a substantial percentage of the child labour belongs to the age category of 10-14 years old. According to Basu (1999), a child is categorized as a child labourer if he/she is participating in the workforce. International bodies and governments around the world classify a child as a labourer if he/she is actively working on a regular basis for which he/she is paid, or the resulting outputs are used in the market.

Furthermore, the ILO (2013) delineates three distinct categories of working children: those in employment, those engaged in child labour, and those involved in hazardous work. This classification is intended to establish standardized measurement criteria. Firstly, the term "children in employment" or "working children" represents the most inclusive category. It encompasses all economic activities, whether within formal or informal sectors, in family settings or elsewhere, for wages or profits, and includes domestic work in other households.

Secondly, child labour, a subset of child employment, pertains to the most severe forms of child work and those employed below the legal minimum wage. According to ILO Convention No. 182, the worst forms of child labour include activities likely to harm children's health and safety, such as slavery, drug or child trafficking, forced or compulsory recruitment in armed conflicts, pornography, and illegal activities. Child labour excludes two important exceptions, namely those children working in allowed light work and those above the minimum age whose work is not classified as any form of worst child labour.

Locally, the 1998 South African Child Labour Action Programme describes child labour work as something conducted by children prior to the age of 18 years. Such work is dangerous as it impedes their educational attainment, interpersonal relationships, physical development, psychological well-being, spiritual or ethical development. Streak et al. (2007) assert that child work involves work-related activities that may or may not be acceptable. In addition, child work involves nearly all economic activities paid or unpaid, whether it takes place in or outside the home (Visser, 2021).

The term '*work*' was described broadly to incorporate work in the economically defined activities, for example, chores or household activities in the child's household (such as collecting wood or looking after children). Referring to Streak et al. (2007), child labour is described as a work-related activity which involves economic or unlawful non-economic activities, not approved since it involves exploitation or it is improper for the child's development stage, as it damages the child's education, social vitality, physiological traits, mental health, divine or development of character. The type of economic activities child labour is involved in are activities for instance farm work, fetching water, fetching wood, producing goods, catching food, working at heights, working in water, and carrying heavy loads at work to mention a few.

According to StatsSA (2021), *economic activities* refer to tasks that contribute to the production of goods and services. This includes remunerated employment, unpaid work within family enterprises, as well as domestic labour performed in other households. For example, a child engaged in family-based production for market sale or employed as a domestic servant, regardless of remuneration, is classified as economically active. In contrast, a child assisting with routine household chores is not considered economically active.

The System of National Accounts (SNA), as outlined by the European Commission et al. (2009), divides production into two categories: labour market production and domestic production. Labour market production includes economic activities related to the labour market, covering both paid work within the market and unpaid work outside of it. In contrast, domestic production comprises non-economic, unpaid activities carried out within the households such as reproductive tasks and voluntary community contributions.

Nackerdien and Yu (2023) examine how people assign their time across work and non-work commitments as people's time is shared into two general groups, namely *market work* and *non-market work*. The manufacturing of goods and services for markets comprises formal and informal activities, which are part of the SNA remunerated manufacturing. On the other hand, the key activities of non-market production are production (i.e. subsistence), and reproductive and voluntary work (Nackerdien & Yu, 2023). Production comprises of all goods which are created for personal use such (e.g., food and clothing), this is an integral part of outstanding SNA manufacturing (Nackerdien & Yu, 2023).

Furthermore, Maskus (1997) claims that adult labour is versatile between different industries, while child labour is primarily used in the informal economy that provides resources for the export industry. For example, looking at globalisation as an additional opportunity for export sector, then an increase in child labour would be required. Seemingly, the increase in child labour will be coincided with an increase in the working children's wages.

### 2.2.2 Reasons children are involved in work activities

The key reasons for prominent levels of child labour involvement in southern Africa can be attributed to the increased incidence of poverty and increased reproductive rates which caused a notable surge in population growth and low education enrolment of children in Africa. Admassie (2002) argues the significant prevalence of child labour is closely tied to poverty in Africa. For instance, Duryea et al (2007) discovered there exists a significant correlation between family structure and child labour decision-making during market failure. The elevated levels of poverty have enabled children to join the labour force to help their respective families earn additional income for the households (Admassie, 2002). Children may enter the workforce for several reasons such as being born into a poor family and working to earn money to support their respective families. Nonetheless, Khakshour (2015) also attest that some underage

individuals enter the labour force because they are taken against their will, used by, or sold to corrupt people to implement their agendas using the children.

As stated by Visser (2021), the dilemma of child labour is of national significance. Analysing all the important curricular documentation for Grades 1-9, Visser (2021) concluded that the Curriculum and Assessment Policy Statement (CAPS) does not elaborate on some categories of child labour. The romanticised perspective of child labour portrays a picture that children should have a carefree life from work obligations but spend most of their time at school. Bourdillon (2017) goes on to describe how children should live a life which portrays happiness, fantasies, innocence, learning and being free from responsibilities. The romanticised perspective agrees that children should be protected from being exploited at a youthful age by entering the job market too soon (Visser, 2021). Bourdillon (2017) also argues that wealthy people can afford to provide a life where children find it easier to live a carefree life with minimal responsibilities.

Furthermore, children partaking in child labour could be beneficial to themselves and their guardians. Bourdillon (2014: 3) expressed scepticism about child labour discourse since it “primarily focuses only on the harmful aspects of work and ignores the positives that children might get from it.” Alternatively stated, when the privileges of child work are valued, one would not assume that all work is unfair. When children are perceived with glamorised standards in their heads, they are shielded from adulthood, and this causes a fake dichotomy between adults and children as identified by Bourdillon (2017).

### 2.2.3 Activities that child labour are involved in

The type of work activities children could be involved in varied among households. For example, a small share of children are engaged in paid domestic work which could be categorised as among the horrible forms of child labour. The incentive for paid domestic work includes cash, accommodation or rations, or a combination of these two incentives. In addition, there are some disturbing dimensions of child labour, whereby considering certain aspects of child labour requires special physical characteristics of childhood. The sickening rise in child molesters or those with a strange preference for humiliating children seeks to recruit children who are easily manipulated and influenced.

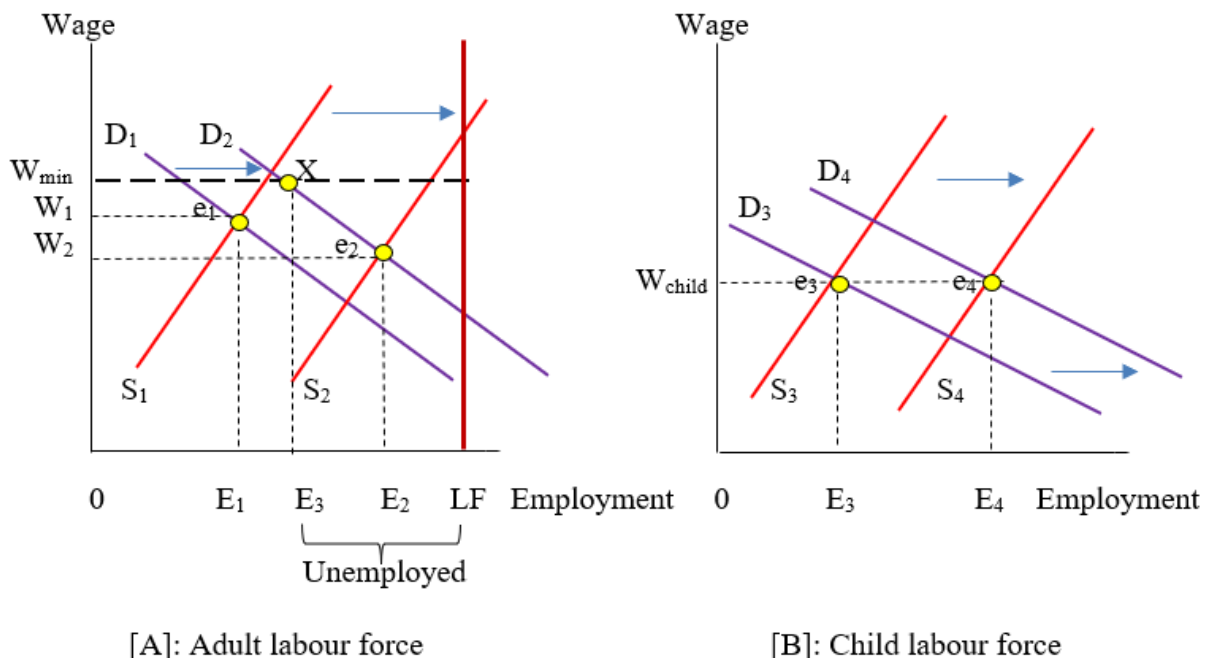
Brown, Deardorff and Stern (2002) state that children are appreciated by dealers in drug smuggling since they are harder to detect by law officers; once they are caught in possession of drugs, the sentence is lighter than an adult offender. Some employers regard children as more compliant, honest, dependable and even disciplined than adult workers (Brown, Deardorff & Stern, 2002). Yet some researchers have claimed it is better to hire all household members to work in a company or organisation so that parents are empowered to correct their children in the process of any misconduct.

## 2.3 Core Theories of Child Labour

### 2.3.1 Simple labour supply and demand framework

Figure 1[A] illustrates the relationship between wage and employment in the adult labour force. Initially, the adult labour force is at equilibrium point  $e_1$ , where  $E_1$  people are employed, and earn a wage of  $W_1$ . Later, there is an increase in labour demand from  $D_1$  to  $D_2$ . However, there is an even greater increase of labour supply (from  $S_1$  to  $S_2$ ) due to the rapid entry of formerly impoverished individuals (i.e. Africans, females and disabled) into the job market. These people feel more optimistic about seeking work in the job market as the previous discriminatory labour regulations have been abolished.

Figure 1: Labour supply and demand framework



Following the increase of both labour supply and labour demand, the new equilibrium point for the adult labour force is at  $e_2$ . At this point,  $E_2$  number of people are supposed to be employed (i.e. employment has increased from  $E_1$  to  $E_2$ ) and earn a lower wage of  $W_2$ . However, due to the imposition of a minimum wage (that is,  $W_{min}$  which is higher than  $W_2$ ), at the end, the actual employment level is  $E_3$  instead of  $E_2$ , but the final employment level of  $E_3$  remains higher than the initial level of  $E_1$  before the increase of labour supply and demand. Consequently, a total of  $(LF - E_3)$  adult work seekers in the labour force are unemployed.

Moving on to Figure 1[B], it illustrates the relationship between wage and employment in the child labour market. Because of the presence of unemployed adult household members, some child members in the households feel the pressure to enter the illegal child labour market to seek work, to provide financial support for household sustenance. For that reason, the supply of child labour increases from  $S_3$  to  $S_4$ . Since child labour wages are usually lower than adult labour wages, it is possible that the demand for (albeit) illegal child labour (albeit) increases, as illustrated by the rightward shift of the child labour demand curve from  $D_3$  to  $D_4$ . Comparing the two equilibrium points (i.e.  $e_3$  and  $e_4$ ), the number of illegally employed children has increased from  $E_3$  to  $E_4$ , while the child wage is equal to  $W_{child}$  which is lower than all three adult wage levels ( $W_{min}$ ,  $W_1$  and  $W_2$ ) discussed previously in relation to Figure 1[A].

### 2.3.2 Theory on Household Decision Making

The theory of decision making within households assumes that households try to maximise utility, which performs as a parameter related to the child population, educational resources per child, downtime per child, parental downtime and a combination of consumer items. Becker's (1981) model of household decision-making further elaborates that the time inputs in the production of composite goods can be provided by the mothers or the children. The rise in mothers' wages thus increases the opportunity cost of every newborn. This results in a reduction of the ideal family size. To some degree, a mother's work at home is substituted by child labour in the form of doing house chores.

The time allocated between the mother, father and child varies in the household. The father assigns time between leisure and market activities. The mother apportions her time amidst market work, parenting and domestic production. Children in the household divide their time among waged work, schooling, entertainment, and household production.

The mother may decide to devote her time to ‘work’ from home (e.g., household maintenance), which might lead to child labour whereby children end up working illegally in the labour market. On the contrary, the mother may rather decide to devote her time to work legally in the labour market whereby children end up ‘working’ at home (legally) to assist with household maintenance chores.

### 2.3.3 The Quality-Quantity Trade Off Theory

This theory focuses on the correlation between the quality and the number of children (Schultz, 1997). It assumes that the rise in the mother’s earnings increases the economic trade-offs involved in labour-intensive initiatives of childrearing. This theory argues that a reduction in family size will open valuable resources to maximise child quality.

A lower child-to-family proportion clears up space for valuable resources which contributes to the well-being of the child. For instance, the assistance children render to their parents may be defined as an outcome associated with the quantity of children in conjunction with their average quality. Thus, quality and quantity are integrally substitutes (Schultz, 1997). In some developing countries where wages are low, some women end up giving birth to too many babies, but since the total household income is too low and the quality of life of children is poor, there is a high likelihood that these children will work in the labour market.

### 2.3.4 Theory on Variation in Child Quality

According to Ejernaes and Portner (2002), the theory of variation in child quality across siblings is associated with birth order. There are three explanations based on this theory. Firstly, the household budget constraints as it assumes that even though parents would love to spend the same amount of capital across all children, it is impossible to do so. The authors state the expenditure level on the first born and last born is expected to be much greater than the family average for two main reasons as explained below.

Cigno and Rosati (2000) state that cash-limited families unfortunately are unable to utilize the financial gains from their investment in their children until they have joined the job market. Thus, following the oldest sibling’s entry into the labour market, the budget limitation is relaxed and more investment in human capital is placed on the younger sibling. Secondly, the time devoted in a smaller family setting is much longer for the firstborn and the lastborn, compared to middle children (Birdsall, 1999).

Furthermore, the biology of children takes a secondary role. Ejrnae and Portner (2002) explain that birth order influences human capital. They further assume that parents make fertility decisions successively. Lastly, the theory on variation in child quality across siblings focuses on the ‘returns to scale in household production.’ It states that the differences in inherited ability are not the only reason why investment in human capital may differ across children in a single family. Therefore, children who belong to a particular age group may be assigned different tasks. Certain children might be involved in household production while the rest focus on getting human resources.

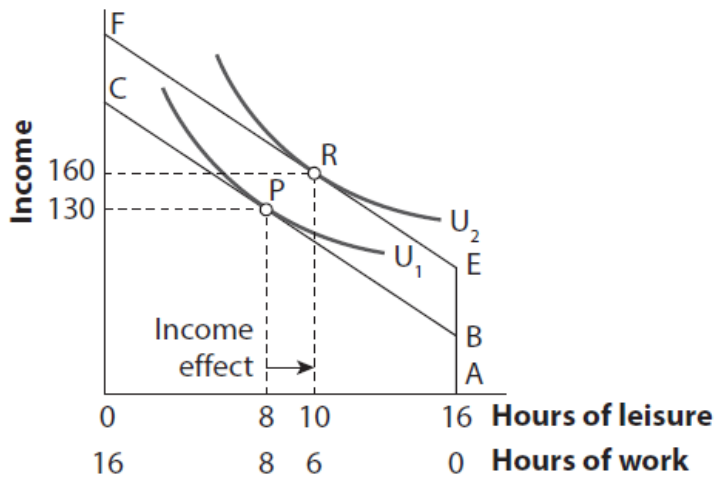
Equivalent, according to Levison (1991), it is argued that parents might differentiate their investment in children. Sending all children to school might cause the family additional harm from income shocks. According to the USA Department of Labour (1997), children who stitched soccer balls in Pakistan earned less per ball compared with the corresponding remuneration received by adult workers. In addition, the labour market demand for children in the 19th century in the cotton mill industry in England required little or no skills at the time.

### 2.3.5 Theory on Trade & Return To Labour

This theory claims that once parents’ wages attain some crucial level, exceeding the family’s longevity budget limitation then parents would remove their children from the job market. Thus, any optimistic income effects that come with trade liberalisation will assist families surpass the crucial wage level at which child labour starts to decrease (Ejrnae & Portner, 2002).

Figure 2 illustrates the relationship between income and hours of leisure and hours of work. Only income effect is considered based on the income and hours (leisure & work) variables. At the initial equilibrium, a child receives non-labour income from grandparents (it could be their old-age grant income) of R130. His initial equilibrium is  $P$  that he works part-time eight hours. The child receives more non-labour income from the grandparents (or even pocket money from parents), hence non-labour income increases to R160. The budget line thus shifts parallel and upwards to  $EF$ . The new equilibrium point, denoted as  $R$ , reflects the child now working part-time for only six hours, i.e. a drop of two work hours due to the increase of non-labour income receipt (or due to the negative income effect). Finally, when comparing the two equilibrium points, we observe an improvement in the person’s utility level from  $U_1$  to  $U_2$ .

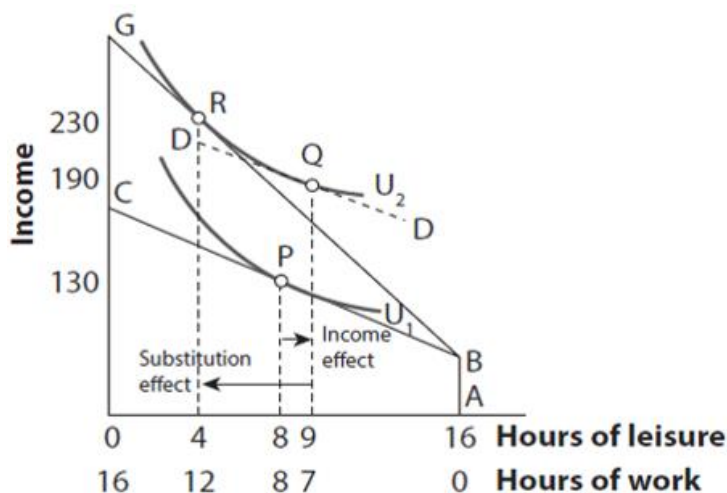
Figure 2: Impact of an increase of non-labour income on work and leisure hours of a child



Source: Adapted from Yu & Roos (2018).

In Figure 3, the wages for child labour increase, causing the budget line to swivel along the y-axis from  $BC$  to  $BG$ . Regardless of whether the work activities are legal or illegal, the child is unable to resist this higher wage. For instance, if the household faces unemployment and the adult members are jobless, the child may be compelled to sacrifice their leisure time to work and help their family. This negatively impacts their (opportunity cost) for leisure. Consequently, the child will need to work longer hours in the labour sector, as the positive substitution effect surpasses the negative income effect, which will be further discussed below.

Figure 3: Impact of an increase of wage on work and leisure hours of a child



Source: Adapted from Yu & Roos (2018).

At the initial equilibrium point  $P$ , we observe that the child spends eight hours on work and eight hours on leisure. The total income is R130, and the utility level is at  $U_1$ . As a result of the

above-mentioned wage increase and the subsequent swivelling of the budget line from *BC* to *BG*, the child's work hours increase from eight to twelve while leisure hours drop from eight to four, at the new equilibrium point *R*. At this latter point, total income rises to R230 whereas utility increases to  $U_2$ .

### 2.3.6 Behavioural change theory

Children involved in child labour activities suffer several negative psychosocial effects. The impact of child labour may not have an instant effect and often it is not easily quantified. However, this will lead to unsolicited social behaviours, poor self-worth, emotional distress, and anxiety, while the children may find it challenging to build relationships with others. It is imperative that children have proper fundamental social integration and healthy emotional growth early on in their childhood development. The 2003 ILO/IPEC teachers' kit states that, children involved in child labour activities undergo negative impacts on their development as a child (ILO, 2003). This study also reports that child labourers have reduced psychological development to the extent of living in fear and acquiring antisocial behaviour.

## **2.4 South Africa's Legal Framework on Child Labour**

The Constitution of South Africa specifies that a minor under 18 years of age should be safeguarded from facing any unethical labour customs and work environments which is destructive to their education, well-being, physical and psychological well-being, along with religious, moral, and social growth. The state and the Department of Labour (DoL) have been implementing steps and actions to stop the illegal employment of children in the labour market.

Assessing key steps that have already been implemented to eradicate child labour, the United Nations (UN) Convention on the Rights of the Child was ratified by South Africa in 1994. This agreement lays out the structure for actions to shield, defend and development children (Bosch & Associates, 2002). In 1996, the DoL signed a Memorandum of Understanding with the ILO. The agreement was geared towards guaranteeing that South Africa will gain from global exposure and support talking about child labour challenges in the country, in accordance with what South Africans view and what should be considered as child labour and how to address issues of children working in the workforce.

Existing policy instruments on the legality of child labour were originally designed for white children only (Bosch & Associates, 2002). However, there was an exclusion for those children

working in the farm and domestic sectors until the early 1990s. The temporary Constitution of 1993 comprises clauses connected to child labour which was extended in the final Constitution of 1996. In this final Constitution, section 28 stipulates that every child classified as a person younger than 18 years is entitled to protection from all forms of mistreatment, abandonment, abuse, or humiliation. The same section 28 further asserts that, children must be defended from any type of unethical and abusive labour practices. Section 28 carries the benefit of the child at heart which is extremely important in every aspect which relates to the child (Bosch & Associates, 2002).

Furthermore, the South African School Act illustrates the importance of schooling, which makes it mandatory for children aged 7-15 years or those who have not finished Grade 9 to remain in school. Any parent or guardian who keeps the child out of school commits a serious offence by denying the child's access to formal education (Bosch & Associates, 2002). The child's rights framework outlined in the Constitution (Act 108 of 1996), specifically Section 28 of the Bill of Rights (BOR) classifies a child as any person aged 0-17 years old. They are a broad set of inseparable rights, comprising actionable socio-economic rights (Streak et al., 2007). The main legislation ruling child work and banning child labour is the Basic Conditions of Employment Act (BCEA) (No.75 of 1997) which illustrates the protections against children and guidelines concerning child labour.

Prompted by the continual rise in child labour in South Africa, the national authorities have tried to implement additional policies which aim to tackle child labour. For example, the National Child Labour Programme of Action for South Africa, Phase IV (2017-2021) whose purpose is to serve as the fundamental public policy measure to prohibit and remove child labour in the country. The policy outlines the decree of each agency to fight child labour, whereby South African Police Services (SAPS) informs the South African Department of Employment and Labour (SADOEL) of cases which seem to be linked to child labour. However, policy gaps persist which prevent the attempts to tackle child labour along with integrating child labour issues into relevant policies.

## **2.5 Review of past empirical studies**

### **2.5.1 Local empirical studies**

Past empirical studies on child labour using the SAYP data are scarce in South Africa. Firstly, Bosche & Associates (2002) stressed the significance of conducting the research. Overall

findings from the 1999 SAYP data concluded that 36% of South Africa's 13.4 million children dedicated a minimum of three hours to economic activities. The authors also found that five hours or more were dedicated to schooling and/or at least seven hours or more were devoted to household errands. For children who reported they worked at least three hours per week, 59% claimed that they entered the workforce out of economic necessity to support their families. In addition, a further 15% stated they worked to contribute to the household with monetary value to assist the family.

Nearly 60% of children who reported they took part in economic activities were involved in the agricultural sector (Bosch & Associates, 2002). The industry with the second highest incidence of children involved in economic activities for at least three or more hours per week or a 12 hour per week cut-off was retail and wholesale. The authors also found that 70% of child labourers were engaged in family-owned businesses to help the family without getting paid for their services rendered. The observed cohort of children aged 7-14 years engaged in economic activities are in breach of the Basic Conditions of Employment Act (BCEA). The authors also found that the 1999 SAYP data showed that children from poorer households had a greater tendency to engage in various types of labour in comparison to their peers. The study concluded that one in every ten children (about 1.4 million between the ages of 5-17 years) undertook academic-related work activities for at least five or more hours per week. The authors also stated that the activities incorporated such as cleaning, and maintenance of school infrastructure fell outside the scope of the study.

The study by Bray (2002) also used the 1999 SAYP data to investigate the missing links that social surveys have impacted society. The findings showed that 26% of children in South Africa reported to be economically active which was classified as economic activities for compensation, profit or any family benefit. These activities excluded uncompensated household labour executed and activities including the collection of wood, and water for any period of the work. Bray (2002) also reported that 45% of children residing in South Africa were involved in child labour which was (defined by a minimum of one hour of economic activity per week and/or five hours assigned to schooling and/or seven hours dedicated to household duties).

DoL (2010) conducted a study by analysing the SAYP 2010 data to closely monitor the activities of children in the employment sector to further develop the country's Child Labour

Programme of Action (CLPA). The report found a total of 121 000 children were employed, that is, they were involved in market activities over the course of the past week. The report further stated 41 000 worked for a wage, salary, commission, or any form of financial remuneration. A study was conducted to profile the children and youth of South Africa who were involved in labour market activities utilising data from a nationally representative cross-sectional survey. The study suggested that 42.7% of young cohorts who were enrolled in school throughout the duration of the survey also participated in labour activities. The author further explained that 97% of children and youth living with their mothers were unlikely to be associated with any sort of labour activities, while 81% of those living with their fathers were not engaged in labour activities in South Africa (De Wet & Ewemade, 2018).

Looking at other local empirical studies that involved the use of datasets other than the SAYP, first, Streak et al. (2007) analysed the levels of prevalence and characteristics of commercial and subsistence agriculture work among children aged 12-16 years in South Africa. The project team visited three locations in the Western Cape, KwaZulu-Natal, and Mpumalanga by adopting the focus group and survey questionnaire approaches to collect primary data; a total of 1 012 people took part. Overall, 51% of survey participants reported working in farming. Of these 51% people, 22% came from KwaZulu-Natal, 17% came from Western Cape and the remaining 14% from Mpumalanga. The Western Cape location in comparison to the other two locations had a lower incidence of children who worked in the agriculture industry.

Mturi & Nzimande (2003) conducted an analysis to determine the link between child labour and HIV/AIDs in South Africa, in selected towns and rural areas in KwaZulu-Natal. The authors explained that there existed a robust correlation between child labour and school enrolment. The investigation found that over 60% of working children interviewed were registered in school. The authors further elaborated that 88% of boys worked as domestic workers and were enrolled in schools. However, only half of the girls in the domestic sector were registered in schools. The proportion of children respondents that were engaged in schools for girls was 52%, and lower when compared to boys 71% (Mturi & Nzimande, 2003).

Edmonds (2006) compared two groups: children in the labour market who lived with a pensioner; and children who focussed primarily on schooling but also lived with a pensioner. The findings showed that the anticipated large cash transfers to senior citizens were associated with an upsurge in schooling but a decrease in child work hours. In South Africa, the average

rural child living with an elderly person who was not yet qualified to receive a pension grant dedicated three hours per day to the labour market. Also, big cash transfers to senior members (e.g., old-age pension) had a negative income effect on the child members of households, and hence it would drastically reduce child work hours as illustrated in the earlier discussed budget line-indifference curve theoretical framework in Figure 2.

Additionally, the author found that children in rural areas aged 13-17 years who lived with a pension-eligible household member were more than 10% more inclined to be admitted to school than those residing with someone who was nearly eligible (that is, the possible negative income effect which discourages child labour incidence or child labour work hours, as explained in Figure 1 earlier). Lastly, Edmonds (2006) found that the probability of children engaging in the labour market without attending school was 67% lower than a child who lived with an adult eligible for pension benefits.

#### 2.5.2 International Empirical Studies

Few studies have derived some general descriptive statistics on child labour internationally. First, the ILO (2007) projected that there were 211 million children aged 5-14 years involved in work activities in 2000. For those in the age category 5-9 years, it was approximated that nearly 73 million children were engaged in various child labour forms this year. It was also forecast that one in eight children within this age cohort was involved in economic activities. Many of these child workers who were not paid found themselves in environments such as family-owned businesses, farms, or private businesses. A small percentage of these working children who were paid participated in non-farming economic activities (ILO, 2007).

Internationally, significant steps have been made to decrease child labour in the past 20 years. The incidence of child labour has decreased by 85.5 million between 2000 and 2020 before the emergence of COVID-19 (ILO and UNICEF 2021). The decrease in the occurrence of child labour has steadily slowed down over time and has stopped since 2016. The increase in child labour significantly took a huge jump where estimates indicated more than eight million, from 152 to 160 million were involved in child labour activities (ILO and UNICEF 2021).

Child labour continues to be prevalent in Latin America affecting millions of children yearly. According to ILO (2020), global projections indicate that 8.2 million children – 2.7 million girls and 5.5 million boys – are involved in child labour which accounts for 6% in the Latin

America and Caribbean region (LAC). It was noticeable child labour and harmful employment decreased across the area between 2016 and 2020. The incidence of child labour decreased by 2.3 million over the 4 years. Although child labour is swerving in the right direction in the LAC region, a considerable amount of work will be required to achieve child labour incidence as close to zero as possible by 2025 in the Sustainable Development Goals.

Moving on to studies that examined child labour in emerging economies (most notably in Asia and Africa), firstly a study conducted in Ethiopia by Guarcello & Rosati (2007) found that household demand for labour was the most significant motive for people not sending their children to school in Ethiopia. The authors found that the contribution of each working child in Ethiopia has provided at least 4-7% of capital in household incomes in rural areas. It is no coincidence that low levels of school enrolment were attributed to high levels of child labour. The findings also indicated that only 28% of children aged 6-9 years were registered in the national schooling system.

Next, Degnet et al. (2007) claimed that roughly 45% of children who joined Grade One in Ethiopia stopped attending school before completing Grade Five because of various factors within the households. The authors argue that the factors influencing poverty from the demand side, such as parental education, a child's demographic characteristics and household income are noticeable determinants which contribute to children entering the labour market in the country.

Cockburn & Dostie (2007) reported that at least one child aged 4-14 years was involved in farming activities involving fetching wood and water, tending to livestock, and looking after their siblings, based on the findings of their research that analysed the connection between child labour participation and the economic status of households in four districts in eastern Ethiopia. The authors further stated that only 18% of children attended school even though schooling was not compulsory then. The working children in the four districts came from considerably low-income households; however, they had the highest ownership of land and livestock.

Martey, Entire & Koomson (2022) conducted a study to examine the connection between parental time scarcity, child labour involvement and educational enrolment in the Ghanaian context. The results from the analysis using the sixth and seventh rounds of the Ghana Living

Standard Survey suggested a progressive decline in children's school attendance. The study found that time poverty incidence was positively related to child work. The authors further found that there was a 3% surge in child labour among urban households.

While it is often assumed that children cannot simultaneously attend school and engage in child labour. According to Anker (2000), the World Bank survey data showed about 50% of school children aged 7-14 years were engaged in various forms of work-related activities, and only about 7% of these working children attended school in rural areas in countries such as Ghana and Côte d'Ivoire. It was expected that there would be a high number of school children who work in developing countries as they spend insufficient time at school, which impacts their respective future. For example, in Bangladesh, the duration of the school day lasts for only two hours, and the academic year is limited to just 120 days (Anker, 2000).

The cocoa industry has grown into a billion-dollar sector that has utilized child labour across West Africa since the late 1800s. Research conducted by the International Institute of Tropical Agriculture (IITA) estimated that 625 000 children were involved in at least one feature of Cocoa manufacturing in Côte d'Ivoire. As a result of these 625 000 children involved in child labour, 12 000 willingly worked in the cocoa industry (IITA 2002: 13,15). Mull & Kirkhorn (2005) conducted a study to determine the occupational dangers that children experienced while harvesting cocoa in Western Ghana. The authors stated that 62.5% child workers of the age cohort 5-17 years were involved in agricultural labour to a moderate extent. It was also found that a greater share of children was involved in farming-related activities which amounted to 76.6% of rural children compared to 21.5% of children who resided in urban areas.

In their 2021 study, Magdalena, Sukamdi & Rofi analysed the determinants of child labour in Indonesia. The research was carried out by Statistics of Indonesia which made use of the National Labour Force Survey. According to the study, the share of children aged 10-17 years who worked was 9.43% in 2012. This proportion decreased to 5.99% in 2015 before rising slightly to 6.35% in 2019. The population of children working in Indonesia also fluctuated throughout the years. One of the significant outcomes in the study was that 73% of the fluctuation in child labour was attributed to disparities in household conditions and socioeconomic indicators such as educational levels of households, the occupation of household heads and whether the children belong to social protection programmes.

Moving on to the study done by Hermanus et al. (2019), roughly 90% of tobacco production in Indonesia (especially the East Java, Central Java and West Nusa Tenggara regions) employed children aged 8-17 years to assist with the production of Tobacco. East Java and Central Java were also the two provinces with the highest incidence of child labour in the agricultural sector of the country (ILO, 2008). In fact, the ILO (2008) projected over 1.5 million child workers aged 10-17 years old are employed on farms every year in this country.

Kim, Olsen & Wiśniowski (2020) undertook a study to evaluate the occurrence of child labour among the age cohort 5-17 years in India and propose a combined-data approach utilizing a Bayesian inference. The study utilized a combination of the National Sample Survey on Employment and Unemployment of 2011/12 and the India Human Development Survey 2011/12. The results generated from the study suggested that a notable escalation in child labour took place among children aged 14 years in relation to children engaged in child labour in their younger years.

Das (2012) conducted a study to examine the prevalence of child labour involvement and school enrolment in India, revealing that 80% of children engaged in employment in India were of Dalit descent, who came from a minority tribe in India. On the other hand, according to UNICEF (2011), statistics showed that about 28 million children aged 5-14 years were engaged in employment in India. Additional approximations suggested that child labour was more prevalent among girls than boys in the country's rural areas.

The study conducted by He (2016), leveraging the unique Longitudinal, Multi-level survey, the Gansu Survey of Children and Families (GSCF) to examine the relationship between child labour and scholastic performance of students enrolled in school in China's rural regions. The author found a high incidence of child labour was observed in 2000, with 76.4% of the sampled participants needing to spend more than one hour working every day on economic activities. The author further found that 57.4% of children were required to work on family-owned farms whereas 48.3% of the children did household chores more than one hour daily.

Tang, Zhao & Zhao (2018) reported that in 2010, roughly 7.74% of Chinese children between the age cohort of 10-15 years were involved in the employment sector. The authors stated that approximately 90% of these children remained enrolled in school, balancing both academic responsibilities and economic activities. Those engaged in child labour worked an average 6.75

hours daily and typically dedicated 6.42 fewer hours daily to their studies each day compared to their peers who were not participating in labour market activities.

In a rare study on child labour in a wealthier nation, namely the United States of America (USA), children from wealthier families were more reluctant to engage in economic activities. Nonetheless, the information extracted from the National Longitudinal Survey of Youth (NLSY) found that upon reaching 14 years of age, 43% of children in the USA reportedly were involved in freelance work, whereas 24% worked as employees. This indication could suggest that poverty or economic pressure is not the only measure or indicator which determines whether a child works or not (Bosch & Associates, 2002). In fact, most of the work done by children took place in family-owned businesses which is legal in the USA.

The study by Gozdziaik (2012) zoomed into 142 cases of accompanied and unaccompanied migrant children also in the USA between the ages of 2-17 years old to establish whether these children were exploited for sexual or forced labour. The author found that 70% of all the accompanied children were targeted for sexual misuse, while 24% of unaccompanied children were recruited exclusively for labour which involved domestic slavery.

Some studies examined a group of countries at the same time. First, studying 11 Latin American countries and focusing on the paid work managed outside the home undertaken by children aged 8-15 years, Gunnarsson et al. (2006) found that the language and mathematics test scores of children involved in child labour activities were sporadically on average 7% and 7.5% less than the respective test results of non-working children. The authors further added the adverse impact of children involved in the labour market on educational achievement might only be damaging up to a certain level. As children grew older, they were able to take on additional responsibilities such as involvement in economic labour activities.

Putnick & Bornstein (2015) carried out a study to examine the relations of children's engagement in external labour, family-related tasks, and household chores, and their enrolment in formal education across 30 Low- and Middle-Income Developing Countries (LMIC). The research examined nearly 200 000 families with the inclusion of children within the age cohort 7-14 years. The authors found that over 62% of the countries engaged in child labour in this study had a low enrolment in schooling. However, in two countries, namely Gambia and Nigeria, 8% of children involved in the labour market were associated with a greater probability

of school enrolment. Those children engaged in work activities outside of the household were highly correlated with a reduced probability of school enrolment. The authors concluded that only 35% of the countries in the study engaged in child labour resulted in a lower probability of school enrolment in LMIC countries.

Finally, Pallage & Zimmermann (2007) investigated the feasibility of international transfers imposed by poorer countries on wealthier nations. The study measured how much it would take poor countries to eradicate child labour completely. The authors found that the essential steps needed to convince the poor to abandon child labour would result in 1.6% of the Gross Domestic Product (GDP) of the wealthy in the first 15-year period. The authors also found that in present value terms, the needed transfer amounts equated to 2.58% of the GDP of the richer nations to give up child labour completely in the first 150-year period. The authors further found that a wealthier nation would likely be open to paying a transfer in the region of 0.90% of their GDP to eradicate child labour.

## **2.6 Conclusion**

The chapter begins by discussing the conceptual framework, which looked at the interpretations of child labour and child activities. Secondly, it elaborated on the reasons for the involvement of child labour and the activities child labour is involved in. Thirdly, the chapter identified the different child labour theories by giving a brief explanation of each theory. Fourthly, the chapter focussed on the legislative framework surrounding child labour in South Africa. The chapter concluded by reviewing both past local and international empirical studies conducted on child labour.

To conclude the chapter, three research gaps have been identified: First, there has been a scarcity of experimental studies on child labour, particularly within the South African labour market environment. Secondly, the SAYP data has been seriously underutilized in South Africa. And for the domestic empirical studies that did analyse the SAYP data, the empirical findings are not comprehensive enough. The SAYP datasets remain largely underexplored, (despite their considerable potential to yield valuable insights into the dynamics of child labour). Thirdly, both the local and international studies hardly investigated the relationship between adult members' labour market outcomes and children members' child labour (or child work) incidence. Hence, this research study strives to resolve the above identified research

gaps. Chapter Three moves on by discussing the data and methods before the empirical findings are discussed in Chapter Four.

## CHAPTER THREE: METHODS AND DATA

### 3.1 Introduction

This chapter first presents a discussion on the data collection processes, the data itself, the methods utilized to examine the research question along with the limitations of the data collection processes. The chapter further explains the empirical data analysis which will be conducted to make projections of children aged between 7-17 years who work in the labour market. Section 3.2 focuses on everything related to the data, Section 3.3 explains the methods applied to conduct the empirical data analysis, before Section 3.4 brings the chapter to an end.

### 3.2 Data

The first survey of SAYP was administered by Statistics South Africa (StatsSA) in 1999 and was authorized by the Department of Labour (DoL) to manage the process of collecting and processing the data. On the other hand, the DoL was responsible for analysis and report writing (StatsSA, 2019).

The data that is analysed for this research will attempt to answer whether households with child labour impact adult members' decisions to seek employment or not. The main sources of data will be retrieved from StatsSA using all three waves of data for the period of 2010, 2015 and 2019 of the SAYP dataset. The word 'activities' in the name of survey was deliberately used instead of labour because those liable for creating the survey knew defining the concept of child labour is not a straightforward process. The research survey attempts to explain children's involvement in activities without rendering any ruling as to what work, labour or activities which involve child labour are. The SAYP data set contains a mixture of household data with children between the ages 7-17 years and data pertaining to the activities these children were engaged in.

StatsSA is the stakeholder which extracts information through SAYP responses as included in the relevant module concerning the Quarterly Labour Force Survey (QLFS). The SAYP covers information about children in the market production, household chores, likewise their engaged activities at school (StatsSA, 2021). Some of the exact objectives of the SAYP include, amongst others, comprehending the degree of the involvement of children in economic activities, and delivering information to formulate knowledgeable policies that will combat child labour within the country (StatsSA, 2021). The policies in place will monitor the

Sustainable Development Goals (SDGs) and the South African Child Programme of Action (CLPA).

The coverage of the survey is national with the lowest coverage being provincial. The SAYP survey excludes all people who are imprisoned, patients who are hospitalised, and individuals residing in boarding accommodations, lodges, and schools providing residential housing. The sampling of the data involves two stages. The first stage consists of identifying households which comprise members who are between the ages of 7-17 years during the period of the QLFS. Stage two involves conducting follow-up interviews with the children in the sampled households to determine the type of activities in which they are engaged (StatsSA, 2021). Weighting frequencies were used throughout the descriptive analysis of the surveys that took place.

The data collection mode is face-to-face which comprises questionnaires in two phases. The initial phase of the questionnaire addresses inquiries regarding the living standards of household members, encompassing details such as the type of residence, fuels utilized for cooking, lighting, and heating, as well as the water source for domestic purposes. It also gathers demographic information about both adults and children within the household. The questionnaire also covers questions which collect information on gender, age, racial or ethnic categorization of household members, the status of marriage, relational ties and educational level, school attendance, income of households for children between the ages of 7-17 years.<sup>1</sup> Additionally, the second phase of the questionnaire cover information focused on the sub-set of households containing at least one child who was engaged in a specific type of work or manner in the previous year to the survey (StatsSA, 2021).

The primary objective of the initial survey (i.e. SAYP 1999) was to gather information on children's economic activities such as paid and unpaid work. Succeeding surveys (SAYP 2010, 2015 and 2019) aim to update information on children's economic activities, providing an examination of child labour prevalence in South Africa. Note that this research study will not analyse the oldest 1999 SAYP data, because the questions asked are not comparable with those of the 2010, 2015 and 2019 SAYP questionnaires. Moreover, the 1999 SAYP data were not

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<sup>1</sup> In the 2019 SAYP, children aged 5-6 years were also allowed to part. However, to ensure comparable empirical findings are derived across the three waves of SAYP under study (2010, 2015 and 2019), only children aged 7-17 years would be included when deriving the 2019 empirical estimates in the next chapter.

integrated with the 1999 October Household Survey (OHS) labour data, hence, making it impossible to assess the relationship between the involvement of child labour and labour market outcomes of the adult members coming from the same households (because it is not possible to merge the 1999 SAYP data with the 1999 OHS data which contains information on employment outcomes of household adult members), even though the 1999 wave is the only SAYP survey that captures some data on child labour earnings but only in interval terms (refer to Question 5.17, Section 5 of the 1999 SAYP questionnaire).

### **3.3 Methodology**

This research study aims to identify the child labour work activities which may be a contributing factor having a child working in a household has an influence on adult members seeking employment or not and what child labour activities children are more likely to be involved in using the descriptive statistics.

The descriptive statistics elaborate and derive the profile of children involved in work activities classified as child labour. The findings will unpack the person-level characteristics (age, gender, education, school attendance status, province, ethnic group), household-level characteristics (number of employed adult household members) as well as work activities of child labour (e.g. type of employment involved, the labour sectors involved, and working hours).

The research will primarily focus on secondary data of the qualitative response model i.e., it will use a qualitative response model, a model whereby the dependent variable is not quantitative or an interval scale. In the field of social sciences, qualitative models are often used, (Gujarati, 2003: 580). This research thesis will make use of a binary model, for this nature to test the probability of having a child labour in a household impacts the decisions of adult members seeking employment.

This study will make use of the qualitative response model – binary model whereby it will run various multivariate probit regressions models. Probit regressions on:

1. Probit on the likelihood of involvement in economic activities of children aged 7-17 years (i.e., the dependent variable is binary: it is equal to 1 if the child is involved in economic activities but 0 was not involved in economic activities). We will include the number of employed adult household members as one of the explanatory variables,

along other person-level explanatory variables such as gender, age, race, education and province, amongst others.

2. Probit on the likelihood of being child labour 7-17 years (i.e., 1 = child labour; 0 = not child labour). We will include the same explanatory variables as regression 1 above.
3. Probit on labour force participation likelihood of all working-age population aged 15-65 years (i.e., 1 = labour force; 0 = inactive). We will include the number of children in the households as well as the number of child labour in the household as explanatory variables, to find out if there is any significant relationship between child labour incidence and adult labour force participation probability.
4. Heckprobit on unemployment likelihood of the working-age population (i.e., 0 = employed; 1 = unemployed), conditional on labour force participation. We will include the number of children in the household as one of the explanatory variables, along with the lambda derived from the labour force participation probit as well as gender, age, race, education, province, etc.

In equation terms, the specification of the regression's models can be shown as:

$$y = f(\beta_1, \beta_2, \beta_3 \dots \dots + \lambda)$$

where  $y$  is the binary variable,  $\beta_1 - \beta_3$  represents the explanatory variables and  $\lambda$  is the derived lambda. Our dependent variable  $y$  takes on two possible values: zero and one. For example,  $y$  can be defined to indicate whether an adult member has tertiary education or not (Gujarati, 2003). Therefore, let  $y = 1$  denote one of the outcomes and  $y = 0$  the other outcome. Note that  $y$  can take on only two values,  $\beta_j$  cannot be interpreted as the change in  $y$  given one unit increases in  $X_j$  holding all other factors constant:  $y$  changes either changes from zero to one or from one to zero (or it does not change).

The probit model was chosen for its suitability with binary outcome variables and its ability to address the limitations of the Linear Probability Model (LPM). The LPM can generate predicted probabilities outside the [0,1] interval and assumes homoscedasticity, which may result in inefficient and biased estimates (Wooldridge, 2010). In contrast, the probit model assumes a normal cumulative distribution function for the error term, ensuring predicted probabilities remain within the unit interval (Greene, 2012). While both logit and probit models are appropriate for binary data, the selection often depends on theoretical considerations and interpretability. This study employs the probit model due to its frequent use in related economic

research and its compatibility with the Heckprobit model for addressing sample selection bias (Cameron & Trivedi, 2005).

This research reports Average Marginal Effects (AMEs). AMEs represent the average impact of a one-unit change in an explanatory variable on the predicted probability, calculated across all individuals in the sample. AMEs are generally more robust and representative than Marginal Effects at the Mean (MEMs). This is particularly true when covariates are not normally distributed or when the sample includes categorical variables (Bartus, 2005).

This research study has several limitations. A key limitation is the lack of a panel data. Although the SAPY-QLFS linked data only provides cross-sectional extracts for 2010, 2015, and 2019. Without a panel structure it is not possible to track households or individuals over time. As a result, the causal impact of changes in adult household members' labour market status on child labour outcomes in later periods cannot be assessed.

Additionally, data on income and academic performance are absent. While the SAYP gathers information on children's involvement in economic activities, it does not capture data on earnings or educational outcomes. This limits the study's ability to evaluate whether working children receive wages above or below the statutory minimum wage, or whether engaging in labour correlates with diminished academic achievement.

Chapter Four will relate to the probit regressions on the likelihood of becoming part of the labour force. It will be followed by Heckprobit regressions on the likelihood of the labour force becoming employed on the condition of participation in the labour force. This can be achieved by estimating an employment probit. Although the sample of the participants in the labour force is random since the members have undergone some sort of selection process whereby some participants have decided to join the labour force and others have chosen to refrain from entering the labour force (Oosthuizen, 2006).

The estimated probit regression results on unemployment likelihood could suffer sample selection biasness because only the labour force participants are included. To combat the possible sampling selection bias problem, the Heckman two-step approach will be followed to conduct the unemployment probit analysis. Primarily a labour force participation probit is estimated utilizing certain household variables which shape a person's decision-making to

enter the labour market. The participation equation of the labour force accepts the estimation of the inverse Mills ratio ( $\lambda$ ) following the inclusion in the unemployment Heckprobit which makes it conditional on the labour force participation (Oosthuizen, 2006).

### **3.4 Conclusion**

The chapter presented a discussion of the data utilized in this research, (including some limitations of this research study, while a further discussion will be presented in chapter five) followed by the methodology applied in the thesis, the regression models that will be estimated and their expansion based on the selected explanatory variables. The empirical results of the research study will be addressed and analysed in Chapter Four.

## CHAPTER FOUR: EMPIRICAL FINDINGS

### 4.1 Introduction

This chapter begins with presenting the empirical findings. Section 4.2 provides a discussion of the Descriptive statistics whereas the econometric analyses is outlined in Section 4.3. The chapter concludes with Section 4.4 that finalizes the discussion.

### 4.2 Descriptive Statistics

#### 4.2.1 Overall summary statistics

Table 1 shows the summary statistics of children involved in economic and child labour activities for the years 2010, 2015 and 2019. Firstly, the total number of children was slightly above 11 million in all three waves under study. In 2019, children involved in market activities decreased contrary to the share in 2010. In 2010, the share of children involved in market activities was 1.05%. This share decreased to 0.75% in 2015 and further declined to 0.55% in 2019. Overall, the aggregate number of children working in market activities dropped by 53 000 (from 116 000 in 2010 to 63 000 in 2019), and it represents -15.85% in proportional terms, a proportion of the 333 000 upsurged in the aggregate child population.

Next, the incidence of children involved in non-market activities declined from 2.6 million in 2010 to 2.2 million in 2019, that is, a drop of 385 000 took place. This drop represents -116% proportionally of the 333 000 surge in the aggregate number of children across all survey years examined. Meanwhile, the number of children who did not engage in any form of economic activity rose from 8.38 million to 11.39 million, and in proportion terms, it represents 231% of the rise in the total number of children. This finding indicates the progress made by the government in its effort to mitigate the participation of children in economic activities.

Table 1 also presents the involvement of children participating in child labour activities. In 2010, the total number of child labour was 778 000 which represents 7% of all children; the corresponding figures were 571 000 and 5% in 2019. This decrease aligns with the significant declining trend of child labour incidence globally (ILO and UNICEF 2021). On the contrary, the incidence of children not engaged in child labour increased from 10.27 million to 10.81 million, thereby accounting for 162% of the observed increase in the aggregate number of children. This finding again implies the government's success in eradicating the involvement of children in (possibly illegal) work activities.

Table 1: Overall summary statistics on children's involvement in economic activities, household chores, child labour activities, as well as household composition

	2010		2015		2019		Difference: 2019 versus 2010	
	Number (1 000s)	Percent (%)	Number (1 000s)	Percent (%)	Number (1 000s)	Percent (%)	Number (1 000s)	Percent (%)
<u>Total number of children</u>								
Total	11 049	100.00	11 178	100.00	11 385	100.00	333	100.00
<u>Involvement in economic activities</u>								
Involvement in economic activities	2 673	24.20	2 415	21.60	2 235	19.64	-438	-131.53
- Involved in market activities	116	1.05	84	0.75	63	0.55	-53	-15.85
- Involved in non-market activities	2 557	23.15	2 331	20.85	2 172	19.09	-385	-115.68
Not involved in any economic activities	8 376	75.81	8 763	78.40	9 150	80.36	771	231.53
	11 049	100.00	11 178	100.00	11 385	100.00	333	100.00
<u>Involvement in child labour</u>								
Child labour	778	7.04	577	5.16	571	5.02	-207	-62.29
Not child labour	10 271	92.96	10 601	94.84	10 814	94.98	540	162.29
	11 049	100.00	11 178	100.00	11 385	100.00	333	100.00
<u>Engagement in household chores</u>								
Involvement in at least one household chore	8 909	80.63	8 861	79.27	9 255	81.31	346	103.92
Not involved in any household chores	2 140	19.37	2 317	20.73	2 130	18.69	-13	-3.92
	11 049	100.00	11 178	100.00	11 385	100.00	333	100.00
<u>School attendance status at the time of the survey</u>								
Attending school at the time of the survey	10 817	97.90	10 999	98.40	11 198	98.39	381	114.45
Not attending school at the time of the survey	232	2.10	179	1.6	187	1.61	-48	-14.45
	11 049	100.00	11 178	100.00	11 385	100.00	333	100.00
<u>Whether the parents were still alive</u>								
Both parents were still alive	8 557	77.45	8 356	74.77	9 965	87.55	1408	422
Only the father was still alive	374	3.39	408	3.65	263	2.31	-112	-33
Only the mother was still alive	1 527	13.82	1 595	14.27	945	8.30	-583	-175
Both parents were no longer alive	590	5.34	818	7.32	210	1.85	-380	-114.14
	11 049	100.00	11 178	100.00	11 385	100.00	333	100.00
<u>Whether the parents were household members</u>								
Both parents were household members	3 920	35.47	3 857	34.51	4 147	36.44	278	83.39
Only the father was household member	377	3.42	386	3.45	481	4.22	103	31.02
Only the mother was household member	4 294	38.86	4 100	36.68	4 702	41.31	409	122.80
Both parents were not household members	1 869	16.91	2 017	18.05	1 842	16.18	-27	-8.03
Both parents were no longer alive	590	5.34	818	7.32	210	1.85	-430	-129.17
	11 049	100.00	11 178	100.00	11 385	100.00	333	100.00

Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

Turning to the category of ‘engagement in household chores’ across all three waves of the study, about 80% of children were involved in at least one chore. Furthermore, there has been an increase of 346 000 children assisting with household chores between 2010 and 2019. Proportionally, this translates to a 3-percentage point growth in the overall number of children participating in household chores. This finding seems to suggest that there is a trend towards greater involvement of children assisting with household tasks (instead of involvement in economic activities and/or child labour work), as household responsibilities are shared amongst the adult and child members.

When examining school attendance, it is evident there has been a noteworthy consistency in the rate of school attendance among children. Nearly 97-98% share of children attended school during the time of each survey. Moreover, there has been a substantial increase of 381 000 children attending school between 2010 and 2019. This accounts for a proportional decrease of 14.45% within the ‘not attending school’ category. This result could be accredited to the legislation in place such as the South African Schools Act (Act 84 of 1996), which mandates school attendance for all children and enforces legal penalties or jail time for parents who do not comply with the legislation. These findings indicate that both the government and caregivers have been making concerted efforts to guarantee that children continue their enrolment in the education system and complete their studies.

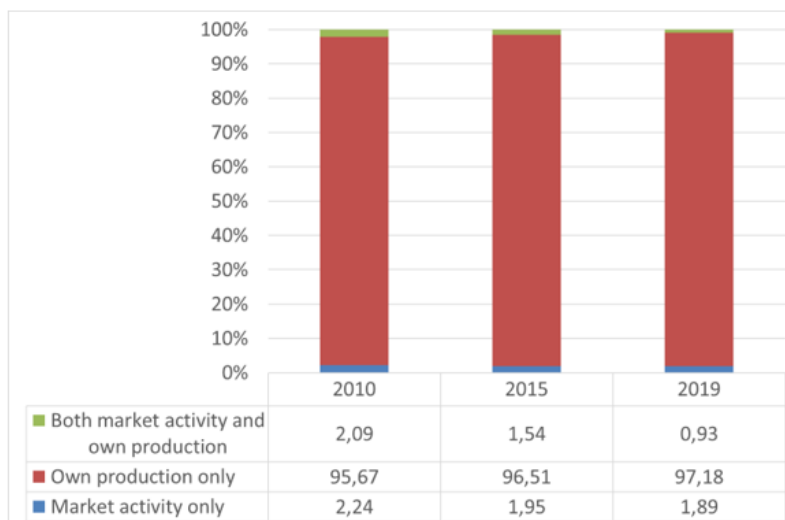
The total number of children who reported both parents were alive during the survey period increased from 8.56 million in 2010 (77.5% share) to 9.97 million (87.6%) in 2019. On the other hand, the share of children who reported only the mother was still alive dropped from 13.8% to 8.3%, the proportion of children who claimed only the father was still alive declined from 3.4% to 2.1%, whereas the percentage of children who indicated both parents were not alive decreased from 5.3% to 1.9%. Despite the downward trend of the last three categories, the results still imply that grandparents could play a partial role in looking after the children.

Lastly, a stable proportion of about 35% of children reported in all three waves that both parents were household members (i.e. they lived with the children). Interestingly, the proportion of children who said that only the mother was a household member increased from 38.9% in 2010 to 41.3% in 2019 (in absolute numbers, it increased from 4.29 million to 4.70 million), while the percentage of children who reported that only the father was a household member also increased from 3.4% to 4.2% (in absolute terms, it rose from 377 000 to 481 000). Lastly, it is

alarming that about 16-18% of children reported in all three waves that both parents were not household members (about 1.8-2.0 million in absolute terms). Again, these latter findings imply the possibility of grandparents needing to look after the children (or even the siblings, if living together, need to take care of one another). We will investigate later whether children with either parent or both parents not alive or not living in the households would lead to greater probability of these children involving in economic or child labour activities.

To finalise the analysis on the overall summary statistics, the type of economic activities in which children were involved in is shown in Figure 4 for all three waves under study. It is interesting that the predominant share of children who reported they were involved in economic activities were engaged in activities related to their ‘own production only’ (over 95% in all three waves).

Figure 4: Type of economic activities children were involved in (%) unless otherwise stated



Source: Author’s own calculations using the 2010, 2015 and 2019 SAYP data.

#### 4.2.2 Economic activities

Table 2 shows a comparative analysis of the demographics and geographic characteristics of children involved in economic activities with those not engaged in these type of activities. For the former group of children, the female proportion was moderately higher in 2010 (51.1%), but the male share was higher in both 2015 and 2019 (51.5%). On the other hand, for children not involved in economic activities, the male share was marginally higher in 2010 (50.5%), but in 2015 and 2019, the female share was slightly greater (50.3-50.4%).

Table 2: Demographic and geographic characteristics of children by their economic activities' involvement status (% , unless stated otherwise)

	2010			2015			2019		
	Involved in economic activities	Not involved in economic activities	All children	Involved in economic activities	Not involved in economic activities	All children	Involved in economic activities	Not involved in economic activities	All children
<b>Gender</b>									
Male	48.92	50.46	50.09	51.63	49.56	50.01	51.58	49.69	50.06
Female	51.08	49.54	49.91	48.37	50.44	49.99	48.42	50.31	49.94
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Population group</b>									
African	98.00	79.00	83.60	97.95	80.01	83.89	97.59	81.39	84.57
Coloured	1.20	11.22	8.80	1.58	10.74	8.76	2.07	10.04	8.47
Indian	0.44	2.38	1.91	0.05	2.37	1.87	0.00	2.38	1.91
White	0.36	7.39	5.69	0.43	6.88	5.49	0.34	6.20	5.05
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Age cohort</b>									
7-14 years	65.33	74.80	72.51	62.23	75.31	72.49	65.79	74.46	72.77
15-17 years	34.66	25.20	27.48	37.75	24.68	27.51	34.21	25.53	27.24
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<i>Mean age (years)</i>	<i>12.96</i>	<i>11.81</i>	<i>12.08</i>	<i>12.93</i>	<i>11.71</i>	<i>11.97</i>	<i>12.67</i>	<i>11.78</i>	<i>11.95</i>
<b>Province of residence</b>									
Western Cape	1.19	12.10	9.46	1.51	12.64	10.24	1.59	12.43	10.30
Eastern Cape	30.33	10.59	15.37	24.01	12.55	15.03	32.58	11.28	15.46
Northern Cape	1.78	2.19	2.09	1.77	2.41	2.28	2.25	1.68	1.79
Free State	1.62	6.40	5.24	0.65	5.64	4.56	1.64	6.88	5.85
KwaZulu-Natal	35.88	19.31	23.32	39.01	18.49	22.92	40.27	18.61	22.86
North West	6.20	7.57	7.24	5.67	7.59	7.18	5.28	9.04	8.30
Gauteng	1.68	20.51	15.95	1.13	20.44	16.27	0.69	22.52	18.23
Mpumalanga	4.14	10.81	9.19	8.75	9.08	9.01	5.64	8.03	7.56
Limpopo	17.18	10.52	12.13	17.50	11.15	12.52	10.06	9.54	9.64
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Area type of residence</b>									
Urban	13.56	65.32	52.80	12.93	65.06	53.80	18.91	67.33	57.82
Rural	86.44	34.68	47.20	87.07	34.94	46.20	81.09	32.67	42.18
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

Looking at results by race, about 98% of the share of children involved in economic activities belonged to the African ethnic group in all three waves of data under study, whereas for children not involved in these activities, the African share remained most dominant, but it was ‘only’ about 80%.

Moving on to results by age cohort, interesting findings were observed for children involved in economic activities, about two-thirds of them were aged 7-14 years (strictly speaking, they are the ‘illegal’ age cohort), while the remaining one-third came from the legal age cohort of children 15-17 years. In contrast, for the ‘not involved in economic activities’ group, 75% were 7-14 years and 25% came from the age cohort 15-17 years.

Geographically, the provinces with the greatest share of children involved in economic activities were KwaZulu-Natal, Eastern Cape, and Limpopo. The stated provinces are generally associated with comparatively high provincial poverty levels. On the contrary, when examining the provincial shares of the ‘not involved in economic activities’ category, Gauteng, KwaZulu-Natal, and Western Cape accounted for the greatest provincial shares (their respective shares in 2019 were 22.5%, 18.6% and 12.4%). As expected, these provinces are affiliated with greater levels of economic growth and development, thus the parents would most likely discourage or do not need their children from participating in economic activities. Lastly, regarding results by area type, more than 80% of children involved in economic activities were from agrarian areas, given that the urban proportion showed a higher prevalence (about two-thirds) for children not involved in economic activities.

Table 3 presents other personal characteristics of children involved in economic activities in comparison to those who were not involved. In terms of educational attainment, two sub-categories are noteworthy: incomplete primary schooling and incomplete secondary schooling. The 2010 survey revealed that approximately 60% of children involved in economic activities claimed they had not completed primary education. This proportion decreased further to 55% in 2015 and remained steady in 2019 (also 55%). Another notable statistic pertains to incomplete secondary education. In 2010, about 37% of children involved in economic activities had not completed secondary education. This proportion increased to 42% in the 2015 survey but decreased to just below 41% in 2019.

Table 3: Other personal characteristics of children who were involved in economic activities and children who were not involved in these activities  
(% unless stated otherwise)

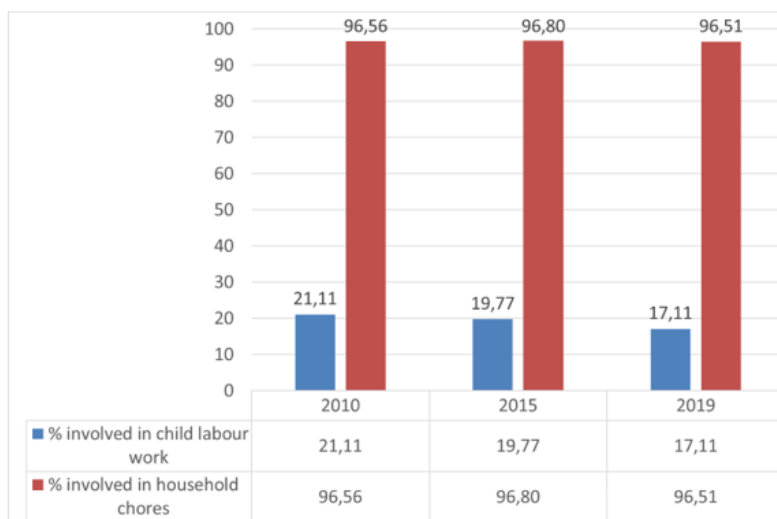
	2010			2015			2019		
	Involved in economic activities	Not involved in economic activities	All children	Involved in economic activities	Not involved in economic activities	All children	Involved in economic activities	Not involved in economic activities	All children
<b><u>Educational Attainment</u></b>									
None	3.13	7.30	6.29	2.75	6.12	5.38	3.52	6.00	5.51
Incomplete primary	60.04	59.61	59.72	54.71	60.64	59.36	55.39	59.24	58.48
Incomplete secondary	36.59	32.29	33.33	42.44	32.76	34.85	40.68	33.51	34.92
Matric	0.17	0.51	0.42	0.08	0.26	0.22	0.07	0.24	0.20
Matric + Certificate/Diploma	0.00	0.02	0.02	0.04	0.00	0.01	0.00	0.03	0.03
Degree	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other/Unspecified	0.07	0.27	0.22	0.01	0.22	0.17	0.35	0.98	0.86
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<i>Mean</i>	<i>5.43</i>	<i>4.84</i>	<i>4.98</i>	<i>5.63</i>	<i>4.88</i>	<i>5.05</i>	<i>5.51</i>	<i>4.96</i>	<i>5.07</i>
<b><u>School Attendance at the time of survey</u></b>									
Attending school	96.90	98.22	97.90	97.84	98.55	98.40	98.03	98.47	98.39
Not attending school	3.10	1.78	2.10	2.16	1.45	1.60	1.97	1.53	1.61
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b><u>Child Labour Status</u></b>									
Involved in child labour activities	21.11	2.55	7.04	19.77	1.13	5.16	17.11	2.06	5.02
Not involved in child labour activities	78.89	97.45	92.96	80.23	98.87	94.84	82.89	97.94	94.98
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b><u>Engagement in household chores</u></b>									
Engaged in at least one household chore	96.56	75.55	80.63	96.80	74.44	79.27	96.51	77.60	81.31
Not engaged in any household chores	3.44	24.45	19.37	3.20	25.56	20.73	3.49	22.40	18.69
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

Looking at the educational attendance status of children’s involvement in economic activities, the results from the table show that an exceedingly high 97-98% of these children indicated that they were enrolled in school during the time of each survey. This finding agrees with the study by Putnick & Bornstein (2015) that about 8% of children engaged in the job market were related to a higher likelihood of school involvement in Gambia and Nigeria. These findings might indicate that the government is committed to ensuring that education is provided for all children in South Africa are not in vain, but at the same time, one worries whether the involvement in economic activities at the same time would have any detrimental effect on these children’s academic performance at schools.

Regarding children not involved in economic activities (more than 98%) were attending school for the survey years under study. This could imply that there is a higher chance of parents being both household members (children not obligated to participate in economic activities) and focused primarily on schooling and/or there is a pensioner in the household who has prohibited them from participating in economic activities. The above stated agrees with the findings of Edmonds (2006), as discussed in Chapter Two, which indicated that children residing with a pensioner as a household member have a 10% greater likelihood of being enrolled in school when compared with those living with an individual who is nearing pension eligibility.

Figure 5: The share of children involved in child labour work and household chores (%), if they were involved in economic activities



Source: Author’s own calculations using the 2010, 2015 and 2019 SAYP data.

The last few rows of Table 3 and Figure 5 show the proportional share of children engaged in child labour activities and household chores for 2010, 2015 and 2019 by economic activities' involvement status. Focusing on children who were reported to be involved in economic activities, the results revealed a slight downward trend in child labour incidence, dropping continuously from 21% in 2010 to 17% in 2019. These findings may imply significant governmental efforts to eradicate child employment in South Africa. Regarding the household chores incidence, the results obtained showed that a remarkably high 97% of children involved in economic activities were also engaged in household chores. However, for children not involved in economic activities, 'only' about three-quarters of them claimed they performed household chores.

Table 4 presents statistics on household-level characteristics of children, by comparing those involved in economic activities with those who are not. When considering the mean household size for children involved in economic activities, it was bigger (about 6.3-6.4 members on average), compared with the corresponding mean for children who were not involved in economic activities (about 5.7) for the three years under study.

For children involved in economic activities, belonging to households with a mean number of members of about 0.57-0.70, which was lower than the mean household number (ranging between 1.08 and 1.12 across the three waves) for children who were not involved in economic activities. These findings imply that some children decided to be involved in economic activities due to a small number of employed adult members. On the other hand, in 2019, children engaged in economic activities came from households with about 0.51 other members being unemployed on average, whilst children not involved in economic activities resided in households with an average of 0.54 other members being jobless.

Looking at other results, for children involved in economic activities, the 'only mother being a household member' proportion was the highest (2010: 43%, 2015: 38%, 2019: 48%). On the contrary, for children not involved in economic activities, the 'both parents still alive' proportion was the highest (ranging between 78% and 89% across the three waves). These findings imply that if both parents were still alive, the households should fare better financially and hence there was no need for children to engage in economic activities, compared with children coming from single-parent families (households with fathers being absent).

Table 4: Household-level characteristics of children who were involved in economic activities and children who were not involved in these activities (% unless stated otherwise)

	2010			2015			2019		
	Involved in economic activities	Not involved in economic activities	All children	Involved in economic activities	Not involved in economic activities	All children	Involved in economic activities	Not involved in economic activities	All children
<b><u>Mean household-level statistics</u></b>									
Mean household size	6.43	5.91	6.03	6.39	5.73	5.88	6.34	5.75	5.86
Mean number of other employed members	0.57	1.08	0.96	0.65	1.11	1.01	0.70	1.12	1.04
Mean number of other unemployed members	0.26	0.44	0.40	0.31	0.47	0.44	0.51	0.54	0.53
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b><u>Whether the parents were household members</u></b>									
Only mother being household member	42.83	37.59	38.86	37.71	36.39	36.68	47.83	39.72	41.31
Only father being household member	3.09	3.52	3.42	3.64	3.40	3.45	3.66	4.36	4.22
Both parents being household members	23.12	39.42	35.47	21.11	38.20	34.51	20.97	40.22	36.44
Both parents are not household members	23.96	14.66	16.91	26.26	15.78	18.05	25.23	13.97	16.18
Both parents not alive	7.00	4.81	5.34	11.28	6.23	7.32	2.30	1.74	1.85
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b><u>Whether the parents were still alive</u></b>									
Only mother alive	19.10	12.14	13.82	19.43	12.84	14.27	11.73	7.46	8.30
Only father alive	4.87	2.91	3.39	4.73	3.35	3.65	3.12	2.11	2.31
Both parents alive	69.03	80.13	77.45	64.56	77.58	74.77	82.85	88.70	87.55
Both parents not alive	7.00	4.81	5.34	11.28	6.23	7.32	2.30	1.74	1.85
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

Lastly, the ‘both parents alive’ proportion was relatively lower (despite increasing from 69% in 2010 to 83% in 2019) for children involved in economic activities, compared with children not engaged in economic activities (the ‘both parents were alive’ share was as low as 80% in 2010 to 89% in 2019). These findings again imply that if both parents were still alive, the children residing in these households were relatively less inclined to be under financial strain to be involved in economic activities to support the families to make ends meet.

#### 4.2.3 Work Characteristics

Table 5 presents the work characteristics of children involved in economic activities. Notably, on average children spent 4-5 hours weekly on economic activities. In addition, the ‘one hour’ and ‘two hours’ proportions (they were equal to 22.68% and 17.06% in 2019, respectively) have always been the most dominant in all survey years. The below one-hour proportion (22.68% in 2019) does not concur with the study in 2002 by Bray who found that 45% of children spent a minimum of one hour of economic activity at least once every week. The below findings (three hours spent on economic activities per week) are not in line with what was found by Bosche & Associates (2002) as reviewed earlier in Chapter Two. However, the authors found that 36% of children spent at least three hours on economic activities per week from the 1999 SAYP data. Whereas using recent datasets, the results below decreased drastically which recorded that approximately 10% of children spent at least three hours on economic activities in 2019.

Table 5: Work characteristics of children involved in economic activities (%)

	2010	2015	2019
<u>Weekly work hours</u>			
0 hour	9.01	13.52	14.28
1 hour	17.20	19.43	22.68
2 hours	18.56	17.11	17.06
3 hours	10.99	9.98	9.77
4-5 hours	13.47	14.86	14.23
6-9 hours	16.96	13.93	13.29
10 hours or above	13.81	11.16	8.69
	100.00	100.00	100.00
<i>Mean</i>	4.95	4.63	4.03
<u>Broad occupational category</u>			
Skilled	2.00	2.03	5.16
- Manager	0.45	0.00	0.00
- Professional	0.60	0.00	0.62
- Associate professional	0.95	2.03	4.54

Table 5: Continued

	2010	2015	2019
Semi-skilled	30.05	24.90	14.82
- Clerk	0.60	1.32	0.00
- Service workers	18.31	11.91	9.00
- Skilled agriculture	4.67	3.34	2.49
- Craft and related trade	5.50	7.77	3.33
- Operator	0.97	0.56	0.00
Unskilled	67.94	73.07	80.03
- Elementary occupation	65.64	68.84	74.53
- Domestic worker	2.30	4.23	5.50
	100.00	100.00	100.00
<b><u>Broad industry category</u></b>			
Primary	7.66	10.63	12.03
- Agriculture	7.66	10.63	12.03
- Mining	0.00	0.00	0.00
Secondary	9.64	11.16	5.92
- Manufacturing	4.17	7.36	1.32
- Utilities	0.00	0.00	0.00
- Construction	5.47	3.80	4.60
Tertiary	82.70	78.21	82.04
- Wholesale & Retail	58.11	49.33	46.48
- Transport	1.54	2.05	0.34
- Finance	1.12	2.25	2.67
- CSP services	9.89	8.06	12.84
- Private household	12.04	16.52	19.71
	100.00	100.00	100.00
<b><u>Involvement in non-market activities [Sorted by descending order in the 2019 wave]</u></b> <i>(Note: respondents could choose more than one option)</i>			
Fetches water	90.02	82.47	87.98
Fetches wood/dung	30.99	27.39	23.81
Dust	30.95	24.46	21.24
Did farm work	15.76	18.37	18.73
Extreme cold or heat	17.09	17.11	16.68
Work in water	6.78	5.58	8.63
Caught food	3.96	8.62	5.70
Carry heavy loads at work	8.60	4.55	4.57
Work at heights	0.34	0.27	2.42
Fumes	10.06	0.85	1.92
Did construction work	2.18	1.75	1.69
Operate any machinery or heavy equipment or power tools	0.07	0.31	1.57
Dangerous tools	7.16	4.89	1.49
Loud noise or vibration	2.13	1.57	1.31
Work at night	0.81	1.21	0.51
Produced goods	0.36	1.27	0.29
Workplace that is too dark/confined	0.13	0.13	0.09
Explosives/Chemicals	0.51	0.09	0.09
Work underground	0.03	0.00	0.01

Table 5: Continued

	2010	2015	2019
<u>Suffered injury in the past 12 months</u>			
Yes	3.11	3.11	2.38
No	96.89	96.89	97.62
	100.00	100.00	100.00

Source: Author’s own calculations using the 2010, 2015 and 2019 SAYP data.

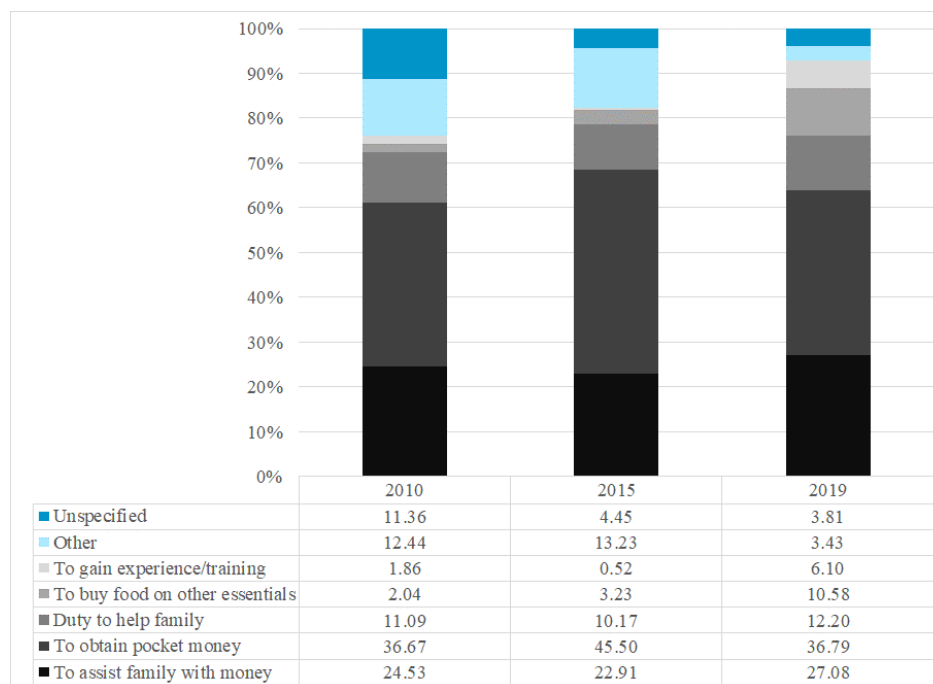
Moving on to the broad occupation category, most children involved in economic activities worked in unskilled occupations (increasing from 68% in 2010 to 80% in 2019), with the most dominant occupation category being elementary occupations – it was as low as 65.6% in 2010 and as high as 74.5% in 2019. The semi-skilled occupations’ share was second most dominant, albeit dropping from 30% in 2010 to 15% in 2019.

Looking at the broad industry category of the children’s economic activities, approximately 80% of them participated in tertiary sector activities, notably wholesale and retail trade (2010: 58%; 2015: 49%; 2019: 47%). On the other hand, whilst secondary sector share was greater than the primary share in 2010 (9.64% versus 7.66%), the former share was smaller than the latter share in 2019 (5.92% versus 12.03%). The above results concerning the primary industry in Table 5 indicate that the share for agriculture aligns with the findings of Streak et al. (2007), which affirms that over 51% of the respondents found themselves working in farming within the agricultural sector. The findings recorded is evident that the agricultural sector is the most dominant sector within the primary sector for the survey years under study.

For children who participated in non-market activities, ‘fetching water’ represented the most dominant share (it was as low as 82.5% in 2015 but as high as 90% in 2010), followed by ‘fetched wood/dung’ (about 24-30%) and ‘dust’ (although this share decreased from 31% in 2010 to 21% in 2019). This result concurs with the findings of Cockburn & Dostie (2007), which identified that a large percentage of Ethiopian children aged between 4-14 years were involved in agricultural activities, such as gathering water and wood, while examining the relation between child labour incidence and household chores. Lastly, the table shows that in the past 12 months, an exceedingly high 97% of the children reported no injuries in all three waves under study.

Lastly, Figure 6 shows that the most dominant reason for children to be involved in market activities was to obtain pocket money (2010 and 2019: 37%; 2015: 45.5%). The findings presented above align with those of DoL (2010), which indicated that 33.88% of children engaged in market activities for a wage, salary, commission, or any financial remuneration that could be associated with obtaining pocket money for various reasons, slightly lower than the 37% reported in that study. This was followed by assisting families with money (this share increased slightly from 24.5% in 2010 to 27.1% in 2019). These findings once again suggest that children worked because of the financial obligations to support their families.

Figure 6: Main reason for involving in market activities (% unless stated otherwise)



Source: Author’s own calculations using the 2010, 2015 and 2019 SAYP data.

#### 4.2.4 Child labour activities

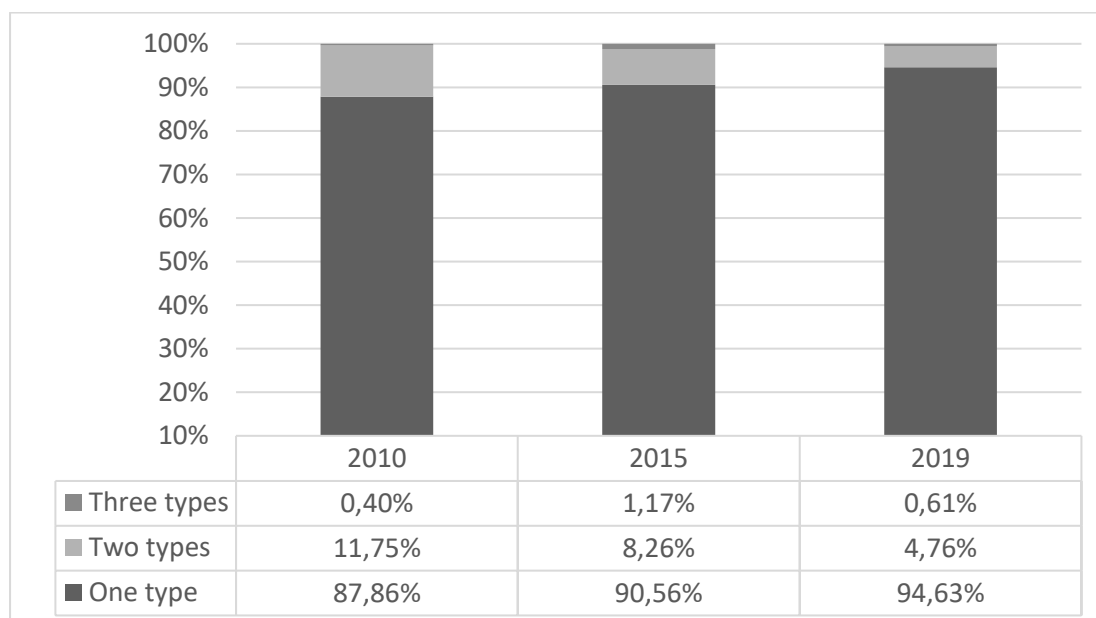
Table 6 shows the various types of child labour activities that children were involved in. The percentage of children who reported working extended hours across various types of work combined had the most dominant share for the three survey years – it increased slightly from 53.57% in 2010 to 56.05% in 2019. This is followed by children involved in hazardous work (this share fluctuated between 33.75% and 37.41% between 2010 and 2019) and doing work prohibited by the BCEA (it hovered between 14.1% and 15.7%).

Table 6: Involvement of children in various types of labour activities in the market

	2010		2015		2019	
	Number (1 000s)	Percent (%)	Number (1 000s)	Percent (%)	Number (1 000s)	Percent (%)
<b><u>Type of child labour activity</u></b>						
<i>Note: The children could be involved in more than one activity, and thus the percentages do not add up to 100%.</i>						
[1]: Doing work prohibited by BCEA	122	15.66	81	14.06	83	14.51
[2]: Working long hours on all types of work combined	417	53.57	349	60.54	3200	56.05
[3]: Involved in market activities interfering with schooling	11	1.40	1	0.21	2	0.32
[4]: Absent from or experienced difficulties at school due to market activities	35	4.49	4	0.61	8	1.34
[5]: Involved in hazardous work	291	37.41	203	35.19	193	33.75
<b><u>Number of child labour activities involved</u></b>						
One type	684	87.86	522	90.56	540	94.63
Two types	91	11.75	48	8.26	27	4.76
Three types	3	0.40	7	1.17	3	0.61
More than three types	0	0.00	0	0.00	0	0.00
Total	778	100.00	577	100.00	571	100.00

Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

Figure 7: Type of child labour activity in market place (% unless stated otherwise)



Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

The last few rows of Table 6 as well as Figure 7 present the findings regarding the number of child labour activities involved. The findings imply that the proportion of children involved in only one (out of five) type of child labour activities was most dominant – it increased from 87.86% in 2010 to 94.63% in 2019. This was followed by those involved in two types of activities (but this share dropped from 11.75% in 2010 to 4.76% in 2019). In fact, no child labour was reported involving four or all five types of child labour activities.

The characteristics of those who were child labour (see Tables 7 and 8) were highly alike to those engaged in economic activities as discussed earlier in Tables 2, 3 and 4. Most of the child labour were female Africans who were lowly educated. Just below two-thirds of child labour belongs to the 7-14 years age cohort (which could suggest these children are illegally employed in the workforce). Furthermore, most of the child labour originated from provinces such as KwaZulu-Natal and the Eastern Cape. For the former, approximately 43% of child labour was recorded in 2010 versus 38% in 2019, whereas the latter province recorded a greater share of children employed in the labour market (33.10%) in 2010 compared to (24.47%) in 2019.

Looking at the area type of residence of children involved in child labour, it is hardly surprising that a large proportion of children come from rural regions. This finding was in line with the study by UNICEF (2011), which provided estimates indicating that the level of prevalence of child labour was greater among girls in agrarian areas compared to boys in India. The results revealed a slight downward trend in child labour incidence, dropping continuously from 75.22% in 2010 to 71.40% in 2019.

Focusing on the level of education completed of children's involvement in child labour versus those not involved in child labour, the results from Table 8 show that more than half (55.90%) of these children reported they were child labour in 2010 had incomplete primary education, while this incomplete primary education share was 48.82% in 2019. Another notable statistic pertains to incomplete secondary education; about 40% of child labour had not completed secondary schooling, while this proportion was 48% in 2019.

Table 7: Demographic and geographic characteristics of children who were involved in child labour and children who were not involved in child labour (% unless stated otherwise)

	2010			2015			2019		
	Child labour	Not child labour	All children	Child labour	Not child labour	All children	Child labour	Not child labour	All children
<b>Gender</b>									
Male	47.46	50.29	50.09	51.26	49.94	50.01	48.95	50.12	50.06
Female	52.54	49.71	49.91	48.74	50.06	49.99	51.05	49.88	49.94
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Population group</b>									
African	94.64	82.76	83.60	95.39	83.26	83.89	95.92	83.97	84.57
Coloured	3.22	9.22	8.80	2.76	9.09	8.76	0.98	8.87	8.47
Indian	1.09	1.97	1.91	0.16	1.96	1.87	0.46	1.99	1.91
White	1.04	6.05	5.69	1.70	5.69	5.49	2.63	5.17	5.05
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b>Age cohort</b>									
7-14 years	61.88	73.33	72.51	54.36	73.48	72.49	61.86	73.33	72.77
15-17 years	38.11	26.68	27.48	45.66	26.52	27.51	38.13	26.66	27.24
Total	99.99	100.01	99.99	100.02	100.00	100.00	99.99	99.99	100.01
<i>Mean age (years)</i>	<i>13.02</i>	<i>12.01</i>	<i>12.08</i>	<i>13.38</i>	<i>11.90</i>	<i>11.97</i>	<i>13.18</i>	<i>11.89</i>	<i>11.95</i>
<b>Province of residence</b>									
Western Cape	3.44	9.92	9.46	2.95	10.63	10.74	1.41	10.77	10.30
Eastern Cape	33.10	14.02	15.37	13.85	15.09	15.03	24.47	14.99	15.46
Northern Cape	0.78	2.19	2.09	0.53	2.37	2.28	0.26	1.87	1.79
Free State	2.22	5.47	5.24	1.27	4.74	4.56	1.58	6.07	5.85
KwaZulu-Natal	42.72	21.85	23.32	44.46	21.75	22.92	38.36	22.04	22.86
North West	3.00	7.56	7.24	2.10	7.46	7.18	2.48	8.61	8.30
Gauteng	3.94	16.86	15.95	4.72	16.90	16.27	13.48	18.48	18.23
Mpumalanga	5.92	9.44	9.19	12.87	8.80	9.01	12.17	7.32	7.56
Limpopo	4.88	12.68	12.13	17.25	12.26	12.52	5.78	9.85	9.64
	100.00	99.99	99.99	100.00	100.00	100.01	99.99	100.00	99.99
<b>Area type of residence</b>									
Urban	24.78	54.92	52.80	20.35	55.62	53.80	28.60	59.37	57.82
Rural	75.22	45.08	47.20	79.65	44.38	46.20	71.40	40.63	42.18
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

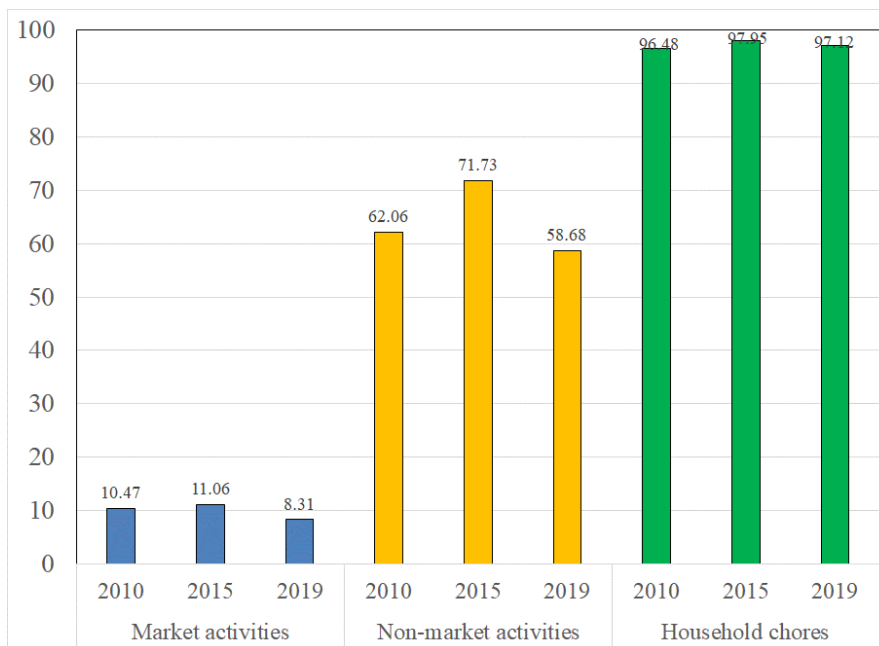
Table 8: Other personal characteristics of children who were involved in child labour and children who were not involved in child labour (% unless stated otherwise)

	2010			2015			2019		
	Child labour	Not child labour	All children	Child labour	Not child labour	All children	Child labour	Not child labour	All children
<b><u>Educational Attainment</u></b>									
None	3.40	6.51	6.29	2.73	5.53	5.38	2.59	5.67	5.51
Incomplete primary	55.90	60.01	59.72	47.12	60.02	59.36	48.82	58.99	58.48
Incomplete secondary	40.27	32.80	33.33	49.82	34.04	34.85	47.90	34.24	34.92
Matric	0.33	0.43	0.42	0.11	0.23	0.22	0.00	0.21	0.20
Matric + Cert/Dip	0.10	0.01	0.02	0.07	0.00	0.01	0.00	0.03	0.03
Degree	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other/Unspecified	0.00	0.24	0.22	0.15	0.17	0.17	0.68	0.87	0.86
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<i>Mean</i>	<i>5.56</i>	<i>4.94</i>	<i>4.98</i>	<i>6.08</i>	<i>4.99</i>	<i>5.05</i>	<i>6.08</i>	<i>5.02</i>	<i>5.07</i>
<b><u>School Attendance Status at the time of survey</u></b>									
Attending school	95.21	98.10	97.90	96.45	98.50	98.40	97.47	98.43	98.39
Not attending school	4.71	1.90	2.10	3.55	1.50	1.60	2.53	1.57	1.61
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b><u>Involvement in Household Chores</u></b>									
Engaged in at least one household chore	96.48	79.43	80.63	97.95	78.26	79.27	97.12	80.48	81.31
Not engaged in any household chores	3.52	20.57	19.37	2.05	21.74	20.73	2.88	19.52	18.69
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

Considering the educational attendance status of child labour, the findings from Table 8 indicate that an extremely high 95-97% share of these child labour stated they were enrolled in school during the period each survey was conducted. These results might indicate that the interventions carried out by the government to provide education for children in South Africa are not in vain, but one may worry whether the simultaneous participation of children as child labour would have unfavourable outcomes on these children's academic performance at school. The above findings are equivalent to what was found by Mturi & Mzimande (2003), reviewed earlier in Chapter Two, indicating a robust correlation between child labour activities and school participation (it was greater than 60%). Lastly, regarding the status of household chores among children involved in child labour, a very high prevalence of 96-98% of child labour were engaged in household chores between the survey years of 2010 and 2019.

Figure 8: Percentage of child labour who were also involved in market activities, non-market activities and household chores



Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

Figure 8 shows that for child labour, about 8-10% of them were also involved in market activities between 2010 and 2019, while a much greater share of child labour was engaged in non-market activities albeit this proportion dropped from 62% in 2010 to 59% in 2019. Furthermore, the last few rows of Table 8 and Figure 8 show that almost all child labourers were also involved in household chores. In the 2002 Bray study, only 45% of children who worked as child labour also were involved in household chores, but this proportion increased

significantly to over 90% using the SAYP data in 2010s. Interestingly, about 20% of children who were not child labour also reported that they were not involved in household chores.

Table 9 presents household-level characteristics, by comparing those involved in child labour with those not involved. When reviewing the mean household size for children engaged in child labour, it was slightly greater (6.1 members on average), in comparison with the equivalent mean for those not involved in child labour (roughly 5.9) in all three surveys. For children engaged in child labour, they were part of households with an average number of other employed members of about 0.66-0.85, which was lower than the mean household number (spanning in the 0.98-1.05 range across the three waves) for children not engaged in child labour.

These findings could imply that a certain percentage of children decided to engage in child labour due to the presence of a small number of employed adult household members. Alternately, in 2019 children engaged in child labour came from households with about 0.52 other members being unemployed on average, while children not involved in child labour, lived in households with a mean of 0.54 other members being out of work.

Looking at other findings in Table 9, for children engaged in child labour, the ‘only mother being a household member’ share was the highest (2010: 40%, 2015: 39%, 2019: 51%). Notably, the result in the table contradicts De Wet & Ewemake (2018) who concluded that 97% of children with mothers as only household members were not involved in child labour, as discussed earlier in Chapter Two. However, in recent datasets, about 41% of children reported to have not been involved in any child labour who resided with mothers as only household members in 2019.

Furthermore, among children not involved in child labour, it seems that the ‘both parents household members’ proportion was the second highest (ranging between 35% and 37% in the three waves under study). These results imply that if both parents are household members, the household should fare better financially and thus there was no reason for children to enter the labour market, relative to children stemming from single-parent families (especially households with absent fathers).

Table 9: Household-level characteristics of children who were involved in child labour and children who were not involved child labour (% unless stated otherwise)

	2010			2015			2019		
	Child labour	Not child labour	All children	Child labour	Not child labour	All children	Child labour	Not child labour	All children
<b><u>Mean household-level statistics</u></b>									
Mean household size	6.13	6.03	4.98	6.08	5.86	5.88	6.10	5.85	5.86
Mean number of other employed members	0.66	0.98	6.03	0.70	1.03	1.01	0.85	1.05	1.04
Mean number of other unemployed members	0.34	0.40	0.96	0.70	0.45	0.44	0.52	0.54	0.53
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b><u>Whether the parents were household members</u></b>									
Only mother being household member	39.73	38.79	38.86	39.23	36.54	36.68	51.09	40.80	41.31
Only father being household member	3.78	3.39	3.42	3.02	3.48	3.45	3.99	4.24	4.22
Both parents being household members	28.20	36.02	35.47	23.98	35.08	34.51	21.51	37.22	36.44
Both parents are not household members	21.12	16.59	16.91	23.07	17.77	18.05	21.06	15.92	16.18
Both parents not alive	7.17	5.20	5.34	10.69	7.14	7.32	2.35	1.82	1.85
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
<b><u>Whether the parents were still alive</u></b>									
Only mother alive	18.01	13.51	13.82	14.68	14.25	14.27	13.22	8.04	8.30
Only father alive	4.67	3.29	3.39	3.40	3.66	3.65	2.40	2.30	2.31
Both parents alive	70.15	78.00	77.45	71.22	74.66	74.77	82.03	87.84	87.55
Both parents not alive	7.17	5.20	5.34	10.69	7.14	7.32	2.35	1.82	1.85
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

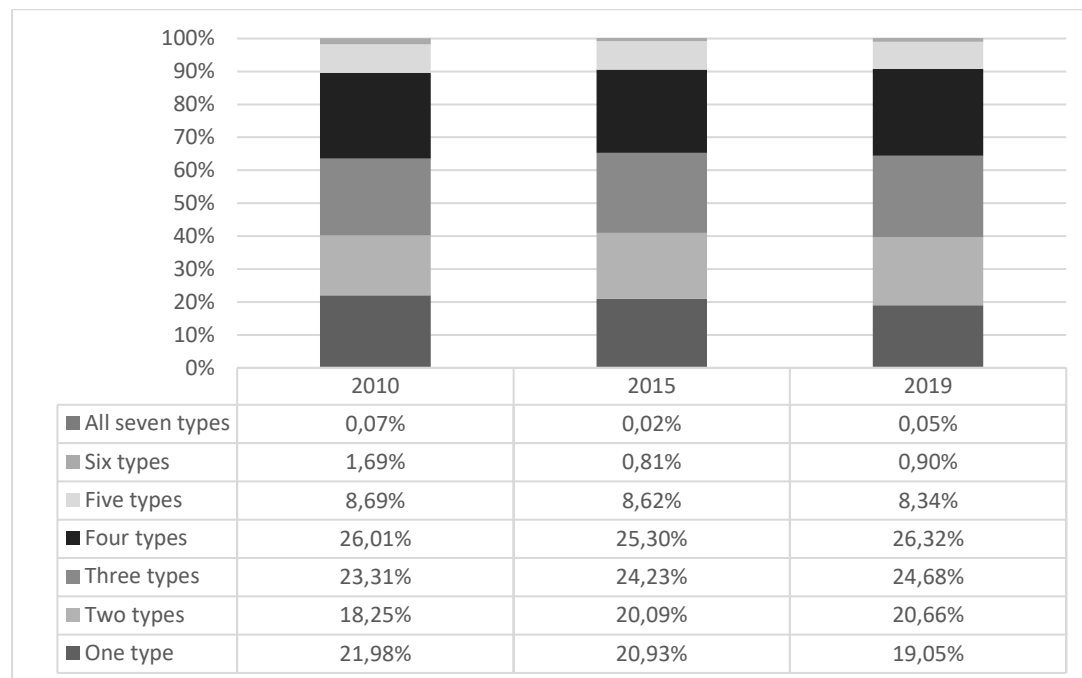
Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

Lastly, upon reviewing whether parents were still alive or not, the ‘both parents alive’ proportion was relatively lower (regardless increasing from 70% in 2010 to 82% in 2019) for children engaged in child labour, compared with children not engaged in child labour (the ‘both parents were alive’ share was as low as 78% in 2010 to 88% in 2019). These results again may suggest that if both parents were still alive, the children residing in these households were moderately less likely to be under severe financial strain to take part in child labour to support the families to make a living.

#### 4.2.5 Household chore activities

Table 10 presents the involvement of children in household chores. The percentage of children who reported going to shops to purchase items for household usage had the most dominant share for the three survey years, despite showing a slight downward trend from 78.79% in 2010 to 77.86% in 2019. It was followed by children cleaning the homes (about 75% proportion) and chores which involved cooking (shares floated between 58.92% and 64.30% respectively). This result concurs with the conclusions drawn by Street et al (2012) as previously discussed. On a final note, another notable household chore was washing clothes; proportionally 52.68% was recorded in 2010, however, there was a slight drop to 51.66% in 2019.

Figure 9: Type of household chores in market place (% unless stated otherwise)



Source: Author’s own calculations using the 2010, 2015 and 2019 SAYP data.

Table 10: Involvement of children in various types of household chores in the market (% unless stated otherwise)

	2010		2015		2019	
	Number (1 000s)	Percent (%)	Number (1 000s)	Percent (%)	Number (1 000s)	Percent (%)
<b><u>Type of household chores</u></b>						
<i>Note: Children could be involved in more than one household chore, and thus the percentages do not add up to 100%.</i>						
[1]: Cooking	5 250	58.92	5 370	60.60	5 951	64.30
[2]: Cleaning	6 780	76.10	6 746	76.13	6 975	75.36
[3]: Washing Clothes	4 693	52.68	4 692	52.95	4 781	51.66
[4]: Caring for children/elderly/sick	1 271	14.27	1 152	12.99	1 172	12.66
[5]: Repairing household equipment	389	4.37	279	3.14	320	3.45
[6]: Going to shops to buy items for household use	7 020	78.79	6 717	75.80	7 206	77.86
[7]: Other	123	1.38	131	1.48	172	1.86
<b><u>Number of household chores involved</u></b>						
One type	1 959	21.98	1 855	20.93	1 763	19.05
Two types	1 626	18.25	1 780	20.09	1 912	20.66
Three types	2 077	23.31	2 147	24.23	2 284	24.68
Four types	2 318	26.01	2 242	25.30	2 436	26.32
Five types	774	8.69	763	8.62	772	8.34
Six types	151	1.69	72	0.81	84	0.90
All seven types	6	0.07	2	0.02	5	0.05
Total	8 909	100.00	8 861	100.00	9 255	100.00

Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

The last several rows of Table 10 as well as Figure 9 show that the proportion of children involved in only four (out of seven) types of household chores was most prevailing – although it decreased from 26.01% in 2010 to 25.30% in 2015, it increased slightly to 26.32% in 2019. It was followed by those involved in three types of household chores (but this share increased moderately from 23.31% in 2010 to 24.68% in 2019). In fact, all children reported being involved in at least one type of household chore during the three survey years under study.

#### 4.2.6 Other results

Table 11 displays the LPFRs and unemployment rates of adult members, by the children's economic activity involvement status. Concentrating on what happened between the three waves, for adult members emerging from households with the inclusion of at least one child member involved in economic activities, these adults had the lowest LFPR (38% in 2019) but

a higher unemployment rate (32% in 2010 and 2015, and 40% in 2019), compared to adult members who came from households with no child members involved in economic activities (LFPR was at about 60% while unemployment rate was below 30% in all three survey years).

Table 11: Labour force participation and unemployment rates of adult members, by children's economic activity involvement status (% unless stated otherwise)

	Number of children involved in economic activities					
	2010		2015		2019	
	None	At least one child	None	At least one child	None	At least one child
Employed	44.36	19.57	46.40	21.36	43.96	22.57
Unemployed	14.71	9.26	15.48	10.14	17.50	15.30
Discouraged workseekers	5.52	11.10	5.36	12.17	6.82	11.12
Inactive	35.41	60.07	32.76	56.33	31.73	51.01
	100.00	100.00	100.00	100.00	100.00	100.00
LFPR	59.07	28.83	61.88	31.50	61.46	37.87
Unemployment rate	24.90	32.12	25.02	32.19	28.47	40.40

Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

The above findings could imply that there could be something wrong with these adult members' labour market prospects (perhaps they are jobless because of their low level of education or obsolete skills which are redundant in the labour market, and hence the children are 'pushed/forced' to be involve in economic activities to help households survive financially).

Table 12: Labour force participation and unemployment rates of adult members, by child labour involvement status (% unless stated otherwise)

	Number of child labour members in the household					
	2010		2015		2019	
	None	At least one child	None	At least one child	None	At least one child
Employed	41.94	23.80	44.28	23.91	42.61	27.97
Unemployed	14.16	10.54	15.06	9.85	17.34	16.41
Discouraged work seekers	6.16	8.15	6.06	7.94	7.07	10.61
Inactive	37.74	57.51	34.60	58.31	32.97	45.00
	100.00	100.00	100.00	100.00	100.00	100.00
LFPR	56.10	34.34	59.34	33.76	59.95	44.38
Unemployment rate	25.24	30.69	25.38	29.18	28.92	36.98

Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

Next, Table 12 presents the labour force participation and unemployment rates of adult members by the involvement of children in child labour for the three survey years. The results are highly alike to those from Table 11. That is, for adults emerging from households with the inclusion of at least one child involved in child labour, these adults suffered lower (LFPR 44% in 2019) but higher unemployment rate (37% in 2019). On the contrary, for adults living in households with no child labour member, LFPR was higher (just below 60%), but the unemployment rate was lower (25-29% over the years).

To conclude the descriptive statistics discussions, Table 13 depicts the 2×2 transitional matrices of the child labour market activities status in the three survey years under study. The share of children involved in both economic activities and child labour work has dropped from 5.11% in 2010 to 3.31% in 2019, whereas the share of children not involved in either economic activities or child labour work rose marginally from 73.87% to 78.71%.

Table 13: Transitional matrices of the labour market status of children involved in economic activity and child labour (% unless stated otherwise)

<b>2010</b>				
		<b>Economic activity</b>		
		<b>Yes</b>	<b>No</b>	<b>Total</b>
<b>Child labour</b>	<b>Yes</b>	5.11	1.93	7.04
	<b>No</b>	19.09	73.87	92.96
<b>Total</b>		24.20	75.80	100.00
<b>2015</b>				
		<b>Economic activity</b>		
		<b>Yes</b>	<b>No</b>	<b>Total</b>
<b>Child labour</b>	<b>Yes</b>	4.27	0.89	5.16
	<b>No</b>	17.34	77.51	94.85
<b>Total</b>		21.61	78.40	100.01
<b>2019</b>				
		<b>Economic activity</b>		
		<b>Yes</b>	<b>No</b>	<b>Total</b>
<b>Child labour</b>	<b>Yes</b>	3.31	1.66	5.02
	<b>No</b>	16.28	78.71	94.99
<b>Total</b>		19.64	80.37	100.01

Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

### 4.3 Econometric Analyses

This section focuses on examining the multivariate econometric findings. Table 14 reveals the findings of the Probit regressions on children's likelihood to involve in economic activities, by regressing on various person- and household-level characteristics as explained in the preceding chapter. Moreover, Table 15 displays the estimates of the Probit regressions on the likelihood of children being child labour using the same explanatory variables as in Table 14.

First, Table 14 provides the findings of the nine probit regressions by adopting the stepwise approach; initially the number of other employed members was the only explanatory variable; next, all person-level explanatory variables were added before finally the remaining household-level explanatory variables were also included. In regressions [I], [IV] and [VII] for all the survey years, the number of other employed adult members was the only explanatory variable. The marginal effects in the three regressions suggest that if the number of employed adult members in the household increased by one person, the likelihood of the child involving in economic activities dropped by between 8.25% (in 2019) to 11.95% (in 2010), and this result was statistically significant.

However, after controlling for other personal characteristics (such as gender, race, age, province, area type, education and school attendance), *ceteris paribus*, when the number of employed adult members in the household increased by one, the probability of the child involving in economic activities decreased by between 2.46% and 2.97% as shown in regressions [II], [V] and [VIII]. Nevertheless, it was worth noting that after also adding the household-level explanatory variables, the marginal effects of the 'number of other employed adult members' explanatory variable became about -2%, as shown in regressions [III], [VI], and [IX], but this finding remained statistically significant.

In terms of gender, the male dummy was a significant explanatory variable only in 2010, with marginal effects of about -2%, which means male children were about 2% less prone to be involved in economic activities in contrast to their female counterpart, after controlling for differences in personal-level and household-level characteristics. Considering the population groups, the Coloured and White dummy variables were statistically significant across all three survey years, the findings indicate that these children were significantly less seemingly to be involved in economic activities relative to the reference group (African children).

Table 14: Probit regressions on children's involvement in economic activities (average marginal effects)

	2010			2015			2019		
	[I]	[II]	[III]	[IV]	[V]	[VI]	[VII]	[VIII]	[IX]
<u>Labour market characteristic</u>									
Number of other employed members	-0.1195***	-0.0282***	-0.0218***	-0.0940***	-0.0297***	-0.0213***	-0.0825***	-0.0246***	-0.0173***
<u>Personal-level characteristic</u>									
Gender: Male		-0.0256***	-0.0254***		-0.0016	-0.0008		-0.0007	-0.0008
Race: Coloured		-0.1040***	-0.1042***		-0.0694***	-0.0657***		-0.0775***	-0.0752***
Race: Indian		-0.0696*	-0.0713*		-0.1246***	-0.1221***		N/A	N/A
Race: White		-0.1314***	-0.1329***		-0.0907***	-0.0890***		-0.0896***	-0.0885***
Age in years		0.0609***	0.0611***		0.0147	0.0133		0.0340**	0.0339**
Age in years squared		-0.0012**	-0.0013**		0.0004	0.0004		-0.0007	-0.0006
Province: Eastern Cape		0.2060***	0.2033***		0.1436***	0.1303***		0.2510***	0.2453***
Province: Northern Cape		0.1389***	0.1413***		0.1044***	0.0991***		0.1913***	0.1995***
Province: Free State		-0.0300	-0.0320		-0.0829***	-0.0833***		-0.0174	-0.0177
Province: KwaZulu-Natal		0.1359***	0.1373***		0.1849***	0.1784***		0.1774***	0.1775***
Province: North West		-0.0111	-0.0091		0.0031	0.0001		-0.0120	-0.0126
Province: Gauteng		-0.0791**	-0.0778**		-0.0785***	-0.0752***		-0.1112***	-0.1086***
Province: Mpumalanga		-0.1014***	-0.1013***		0.0402	0.0369		0.0067	0.0068
Province: Limpopo		0.0069	0.0071		0.0543**	0.0526**		0.0192	0.0210
Area type: Urban		-0.2646***	-0.2642***		-0.2191***	-0.2178***		-0.1674***	-0.1657***
Education years		0.0140**	0.0139**		0.0226***	0.0232***		0.0159**	0.0158**
Education years squared		-0.0025***	-0.0025***		-0.0029***	-0.0029***		-0.0023***	-0.0023***
School attendance status: Yes		-0.0138	-0.0119		-0.0273	-0.0278		-0.0175	-0.0140
<u>Household-level characteristic</u>									
Only mother is still alive			0.0202**			0.0221**			0.0236*
Only father is still alive			0.0450**			-0.0057			0.0182
Both parents are not alive			0.0001			0.0187			-0.0038
Only mother is household member			-0.0072			-0.0102			0.0073
Only father is household member			-0.0155			0.0203			-0.0203
Both parents are household members			0.0028			-0.0150			-0.0102
Number of children 0-6 years in the household			0.0044			0.0080**			0.0039
Number of other children 7-17 years in household			0.0031			0.0100***			0.0090***

Table 14: Continued

	2010			2015			2019		
	[I]	[II]	[III]	[I]	[II]	[III]	[I]	[II]	[III]
Number of male members 15-59 years in household			-0.0092**			-0.0118***			-0.0057
Number of female members 15-59 years in household			-0.0096**			-0.0110***			-0.0167***
Number of elderly members 60+ years in household			-0.0076			-0.0091*			-0.0113**
Number of observations	17372			13 640			11 212		
LR chi-squared statistic	454.64			150.22			226.79		
Probability > Chi-squared	0.0000			0.0000			0.0000		
Pseudo R-squared	0.0545			0.0406			0.0353		
Observed probability	0.2420			0.2161			0.1964		
Predicted probability (at X-bar)	0.2270			0.2053			0.1869		

Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

\*\*\* Significant at 1%

\*\* Significant at 5%

\* Significant at 10%

N/A: Imperfect collinearity

Reference category: Gender – female; Race – African; Province – Western Cape; Area type – Rural; School attendance – no; Whether parents are still alive – both are alive; Whether parents are household members – both are not household members

Moving onto the provincial dummy variables, in 2019, the likelihood of children being involved in economic activities was significantly higher in Eastern Cape, Northern Cape and KwaZulu-Natal relative to those living in the Western Cape. However, children from Free State and Gauteng were found to be significantly less likely to be involved in economic activities (in 2015), after controlling for variations in personal-level characteristics.

Furthermore, the Eastern Cape and Northern Cape positive marginal effects were statistically significant in all regressions, denoting that children residing in these provinces have a greater likelihood of engaging in economic activities. Next, when examining area type, children based in urban regions had a significantly lower likelihood of involvement in economic activities, with marginal effects being approximately -26%, -22%, and -18% across the three waves of data, *ceteris paribus*.

Considering the education and education squared explanatory variables, the marginal effects were positive for the education years variable but rather negative for the education squared variable, yet statistically significant across all three survey years. This reveals that there exists an inverse non-linear concave (albeit significant) relationship between the education of children and children associated with economic activities. That is, as the years of education for children increased, the likelihood of children involved in economic activities decreased, however, it decreased at an increasing rate (*ceteris paribus*).

Lastly, when analysing household-level characteristics, for the category 'only mothers still alive,' the marginal effects were statistically significant and positive across all three surveys. These marginal effects indicate that, assuming all factors remain constant (*ceteris paribus*), if only the mother was still alive during the survey period, the probability of the child engaging in economic activities increased approximately by 2% between 2010 and 2019, respectively. In the context of the variable 'number of children between 0-6 years in the household', and their involvement in economic activities, after controlling for variations in other personal-level and household-level characteristics, it was found that when the number of children in a household increased by one, the likelihood of a child being involved in economic activities rose significantly by 0.80% in 2015, respectively.

Transitioning to the variable representing, number of other children between 7-17 years in households, it was observed that in 2015 and 2019 the marginal effects were statistically significant. The results suggest that when the number of other children aged 7-17 years in the household increase by one, the probability of a child engaging in economic activities increased by at least 1% on average, *ceteris paribus*. This phenomenon is primarily due to the larger presence of children (meaning more members need financial dependence, for example). Consequently, this situation often forces other child members to ‘work’ to help their families meet their essential economic needs.

In addition, after controlling for household-level characteristics, the regression findings from the survey in 2015 imply that an increase of one additional male aged 15-59 years in a household would result in a reduced probability of children being involved in economic activities by an average of 1.2%. Also, the regression estimates were significant for 2010 but insignificant for 2019. Similarly, when female adult members increase by one in the household, the probability of the child member being involved in economic activities dropped by about 1%. This finding was statistically significant across all three survey years.

Lastly, in two out of the three years analysed (2015 and 2019), the existence of a higher number of elderly members in households was attributed to a significantly lower likelihood of children involved in economic activities, *ceteris paribus*. The possible cause for this finding is that a higher proportion of elderly household members means a higher amount of old-age pension grant income available, which subsequently lightens the pressure to push the children to be involved in economic activities to earn money.

Next, Table 15 summarizes the findings of the Probit regressions concerning the probability of children’s involvement in child labour, and the same stepwise approach as explained earlier was adopted. First, in regressions [I], [IV], and [VII], the number of other employed adult members was the only explanatory variable. The marginal effects from these three regressions imply that the addition of one other employed adult household member is correlated with a reduced probability of child labour involvement by between 1.12% (in 2019) and 2.62% (in 2010), and this finding remained statistically significant across all three survey years.

Table 15: Probit regressions on children's involvement as child labour (average marginal effects)

	2010			2015			2019		
	[I]	[II]	[III]	[IV]	[V]	[VI]	[VII]	[VIII]	[IX]
<u>Labour market characteristic</u>									
Number of other employed members	-0.0262***	-0.0061***	-0.0032	-0.0200***	-0.0071***	-0.0050**	-0.0112***	-0.0019	0.0004
<u>Personal-level characteristic</u>									
Gender: Male		-0.0075**	-0.0078**		-0.0001	0.0000		-0.0032	-0.0027
Race: Coloured		-0.0169*	-0.0191**		-0.0041	-0.0038		-0.0256**	-0.0243**
Race: Indian		-0.0166	-0.0221		-0.0289**	-0.0281**		-0.0204	-0.0179
Race: White		-0.0322***	-0.0357***		-0.0078	-0.0085		0.0014	0.0041
Age in years		0.0042	0.0047		-0.0032	-0.0030		0.0131**	0.0140**
Age in years squared		0.0001	0.0000		0.0004	0.0004		-0.0003	-0.0003
Province: Eastern Cape		0.0525***	0.0526***		0.0066	0.0057		0.0565**	0.0548**
Province: Northern Cape		-0.0186*	-0.0155		-0.0156	-0.0153		-0.0182	-0.0182
Province: Free State		-0.0159	-0.0166		-0.0130	-0.0113		0.0017	0.0017
Province: KwaZulu-Natal		0.0432	0.0480***		0.0539***	0.0539***		0.0557**	0.0549**
Province: North West		-0.0291***	-0.0279***		-0.0213**	-0.0206**		-0.0127	-0.0125
Province: Gauteng		-0.0227**	-0.0233*		0.0021	0.0038		0.0543**	0.0552**
Province: Mpumalanga		-0.0179**	-0.0171*		0.0377**	0.0385***		0.0648**	0.0630**
Province: Limpopo		-0.0402***	-0.0394***		0.0192	0.0199		-0.0009	-0.0018
Area type: Urban		-0.0460***	-0.0470***		-0.0375***	-0.0368***		-0.0418***	-0.0409***
Education years		0.0024	0.0021		0.0038	0.0036		0.0025	0.0019
Education years squared		-0.0002	-0.0002		-0.0004*	-0.0004**		-0.0003	-0.0002
School attendance status: Yes		-0.0399***	-0.0377***		-0.0367	-0.0388***		-0.0194	-0.0144
<u>Household-level characteristic</u>									
Only mother is still alive			0.0044			-0.0096**			0.0101
Only father is still alive			0.0072			-0.0111			-0.0066
Both parents are not alive			0.0063			0.0067			-0.0003
Only mother is household member			0.0042			0.0052			0.0021
Only father is household member			0.0104			0.0026			-0.0057
Both parents are household members			0.0157***			0.0000			-0.0103*
Number of children 0-6 years in the household			0.0004			0.0003			0.0036**
Number of other children 7-17 years in household			-0.0021			0.0028**			-0.0025*

Table 15: Continued

	2010			2015			2019		
	[I]	[II]	[III]	[IV]	[V]	[VI]	[VII]	[VIII]	[IX]
Number of male members 15-59 years in household			-0.0039**			-0.0027			-0.0021
Number of female members 15-59 years in household			-0.0076***			-0.0031			-0.0009
Number of elderly members 60+ years in household			0.0044			0.0039			-0.0066**
Number of observations	17372			13 640			11 212		
LR chi-squared statistic	75.85			150.22			321.95		
Probability > Chi-squared	0.0000			0.0000			0.0000		
Pseudo R-squared	0.0167			0.0163			0.1114		
Observed probability	0.0704			0.0516			0.0502		
Predicted probability (at X-bar)	0.0671			0.0489			0.0316		

Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

\*\*\* Significant at 1%

\*\* Significant at 5%

\* Significant at 10%

N/A: Imperfect collinearity

Reference category: Gender – female; Race – African; Province – Western Cape; Area type – Rural; School attendance – no; Whether parents are still alive – both are alive; Whether parents are household members – both are not household members

Nonetheless, after controlling for other personal-level characteristics, *ceteris paribus*, an increase of one employed adult member in the household results in a reduced likelihood of a child being engaged in child labour from 0.61% to 0.71% as indicated in regressions [II] and [V]. Furthermore, even after adding the household-level explanatory variables, the marginal effects of the number of other employed members explanatory variable remained statistically significant in 2015 only (-0.5%). This finding is in line with what Duryea et al (2007) found: that the inclusion of one more employed adult member resulted in a reduction in child labour likelihood, *ceteris paribus*.

Regarding gender, the male dummy displayed regression results comparable to that in Table 14, with marginal effects of about (-0.80%) and only statistically significant in 2010. More precisely, the likelihood of child labour involvement was lower among males compared to their female counterparts. In terms of race, Whites were significantly 3.57% less likely to engage in child labour than Blacks as seen in 2010 (this could suggest that; children of colour have a higher probability of involvement in child labour because of the lasting effects of apartheid), controlling for differences at the personal and household-levels, *ceteris paribus*. Regarding the age cohort variable, the marginal effects of the age in years variable were statistically significant only in 2019 (see regressions [VIII] and [IX]).

Moving onto the provinces, the only provincial dummy that was statistically significant across all three survey years was Mpumalanga (but marginal effects were negative in 2010 and somehow positive in the other two survey years). Looking at area type, children from urban areas in 2019 were 4% less inclined to be engaged in child labour than those from agrarian areas (all results were negative and statistically significant). Furthermore, the education squared variable was only statistically significant in 2015 compared to the results in Table 14 (all results were statistically significant), which implies a non-linear concave relationship between years of educational accomplishment and child labour probability.

Next, examining the household-level variables, some results are worth mentioning. First, having only one's mother alive during the survey period significantly reduced the likelihood of involvement in child labour by 1% in 2015 (*ceteris paribus*). However, Table 14 had similar findings, but the marginal effects were slightly higher in absolute terms. Next, the inclusion of having more male or female adult household members, in general, was correlated with a reduced child labour probability, however, the finding was only statistically significant in 2010.

Finally, it was only in 2019 that having more senior household members was related to a substantially smaller prevalence of child labour, *ceteris paribus*. The latter finding again implies the possibility of elderly individuals allocating cash transfers to their children or grandchildren through income from old-age social grants. This result concurs with Edmond's (2006) findings, which indicated that large cash transfers to senior members were linked with a higher educational attendance but a decline in child work hours. This leads to a lower likelihood of children being coerced into child labour activities.

Table A1 presents the findings of probit regressions on the labour force participation probability of the working-age population. As these regressions are not the top priority of this research study, only the marginal effects of the 'total number of children involved in economic activity' and 'total number of children involved in child labour' explanatory variables are discussed below. First, in regressions [I]-[III], in 2010 and 2015, if one additional child was involved in economic activity, it was associated with about 2.5% significantly lower likelihood of the working-age adult member being a labour force participant, after controlling for differences in other characteristics. Next, the findings from regressions [IV]-[VI] show that it was only in 2015 that if one additional child was child labour, the probability of the working-age adult member from the same household seeking work in the labour market dropped significantly by 3.7%, *ceteris paribus*.

Table 16 presents the Heckprobit regression analyses concerning the probability of unemployment among the working-age population, conditional on labour force participation (i.e. the regressions in Table A1). Before the Table 16 results are discussed, it is worth noting that in the labour force participation probit regressions (i.e. Table A1), the presence of a greater incidence of children being involved in economic activities was correlated with a significantly lower labour force participation likelihood of adult members from the same household in 2010 and 2015, after controlling for differences in other characteristics. In addition, the presence of a higher number of children being categorized as child labour was associated with a significantly lower labour force participation probability of adult household members in 2015, *ceteris paribus*.

Table 16: Heckprobit regressions on the probability of working-age population being unemployed, conditional on labour force participation (average marginal effects)

	2010				2015				2019			
	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]
<u>Household-level characteristic</u>												
Total number of children involved in economic activities	-0.0246***	0.0051			-0.0077	0.0051			0.0276***	0.0269***		
Total number of children involved in child labour work			0.0085	0.0251**			-0.0265*	-0.0047			0.0341**	0.0258
<u>Personal-level characteristic</u>												
Gender: Male		0.0097		0.0100		0.0070		0.0103		0.0225**		0.0256***
Race: Coloured		-0.0740***		-0.0738***		-0.0607***		-0.0612***		-0.0659***		-0.0667***
Race: Indian		-0.1252***		-0.1241***		-0.1260***		-0.1281***		-0.1440***		-0.1466***
Race: White		-0.1874***		-0.1870***		-0.1856***		-0.1863***		-0.1935***		-0.1945***
Age in years		0.0003		0.0002		0.0100**		0.0121**		0.0181***		0.0208***
Age in years squared		-0.0001*		-0.0001*		-0.0002***		-0.0003***		-0.0003***		-0.0004***
Province: Eastern Cape		-0.0583***		-0.0604***		-0.0082		-0.0101		0.0474***		0.0495***
Province: Northern Cape		-0.0321**		-0.0317**		0.0984***		0.0988***		0.0276		0.0281
Province: Free State		0.0083		0.0089		0.0577***		0.0571***		0.0803***		0.0796***
Province: KwaZulu-Natal		-0.1256***		-0.1274***		-0.0969***		-0.0978***		-0.0708***		-0.0704***
Province: North West		-0.0352**		-0.0340**		-0.0324**		-0.0350**		0.0059		0.0019
Province: Gauteng		0.0202		0.0205		0.0939***		0.0945***		0.1021***		0.1010***
Province: Mpumalanga		-0.0124		-0.0109		0.0045		0.0044		0.0891***		0.0877***
Province: Limpopo		-0.0798***		-0.0779***		-0.0960***		-0.0976***		-0.1081***		-0.1118***
Area type: Urban		0.0354***		0.0394***		0.0393***		0.0406***		0.0251**		0.0233**
Education years		0.0327***		0.0328***		0.0377***		0.0375***		0.0365***		0.0365***
Education years squared		-0.0021***		-0.0021***		-0.0023***		-0.0022***		-0.0021***		-0.0020***
Lambda	0.2583***	0.2372***	0.2472***	0.2364***	0.2106***	0.2748***	0.2099***	0.2911***	0.2522***	0.3165***	0.2572***	0.3350***
Number of observations	26 544	26 544	26 544	26 544	25 643	25 643	25 643	25 643	24 499	24 499	24 499	24 499
LR chi-squared statistic	711.13	2272.83	703.15	2282.41	529.35	2462.19	530.64	2467.74	647.75	2694.30	634.56	2684.19
Probability > Chi-squared	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Pseudo R-squared	0.0335	0.1491	0.0331	0.1495	0.0211	0.1257	0.0212	0.1258	0.0267	0.1358	0.0263	0.1353
Observed probability	0.2544	0.2544	0.2544	0.2544	0.2559	0.2559	0.2559	0.2559	0.2946	0.2946	0.2946	0.2946
Predicted probability (at X-bar)	0.2475	0.2115	0.2477	0.2114	0.2516	0.2211	0.2516	0.2210	0.2899	0.2604	0.2899	0.2604

Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

\*\*\* Significant at 1%

\*\* Significant at 5%

\* Significant at 10%

N/A: Imperfect collinearity

Reference category: Gender – female; Race – African; Province – Western Cape; Area type – Rural.

Going back to the unemployment Heckprobit regressions in Table 16, notably, the lambda explanatory variable was statistically significant across all 12 regressions, which indicates the presence of sample selection bias and underscores the significance of stabilizing labour force participation results and their precision. In other words, it means it is a correct decision to conduct the unemployment probit regressions with the ‘two-step’ Heckprobit approach.

Concentrating on the ‘total number of children in economic activities’ and ‘total number of children in child labour work’ explanatory variables, first, in 2019 (regressions [I] and [J]), the presence of an additional child involving in economic activities was related to a higher unemployment probability of the working-age population jobseeker (marginal effects of 2.7% and the results were statistically significant). The negative and significant marginal effects in regression [A] were something surprising though, as one would expect a positive sign. Next, in 2010 (regression [D]) and 2019 (regression [K]), the presence of an additional child involved in child labour work was associated with a greater likelihood of the adult labour force participant being jobless (marginal effects were significant at 2.5% in 2010 and 3.4% in 2019).

To conclude, the results of Tables 16 and A1 suggest that in some survey years, the incidence of a greater cohort of children engaging in economic activities or child labour activities was related to a significantly smaller labour force participation probability but a higher unemployment probability of the adult members coming from the same household, after controlling for differences in other personal- and household-level characteristics.

#### **4.4 Conclusion**

This chapter discussed the empirical descriptive statistical and econometric findings. The descriptive results indicated that most children reporting involvement in economic activities were engaged in activities related solely to their own production, with over 95% in all three waves. Additionally, regarding racial demographics, approximately 98% of the children involved in economic activities belonged to the African ethnic group across all three waves of data. The provinces with the greatest prevalence of child involvement in economic activities were KwaZulu-Natal, the Eastern Cape, and Limpopo. Conversely, in the category of children not involved in economic activities, Gauteng, KwaZulu-Natal, and Western Cape represented the largest provincial proportion. Regarding educational attainment, the 2010 survey revealed

that approximately 60% of children involved in economic activities had not completed primary education. On average, the time children devote to economic activities was 4-5 hours per week.

Furthermore, the characteristics of those classified as child labourers, particularly as detailed in Tables 7 and 8, closely resembled those involved in economic activities as previously described in Tables 2, 3, and 4. Most child labourers were African females with low levels of education. Regarding age cohorts, just under two-thirds of child labourers were within the 7-14 years age group, indicating illegal employment in the labour market. Additionally, most child labour originated from provinces such as KwaZulu-Natal and the Eastern Cape. Approximately 43% of child labour was recorded in 2010, compared to 38% in 2019, while Eastern Cape recorded a greater proportion of children's involvement in child labour (33.10%) in 2010 compared to (24.47%) in 2019.

Lastly, the probit regressions further support the descriptive statistics. The Heckprobit regression results revealed that African children had an increased likelihood of unemployment when participating in the labour force. Additionally, children from KwaZulu-Natal and Limpopo were less prone to be unemployed when participating in the labour force; however, it was observed that children from Northern Cape and Gauteng had a higher likelihood of unemployment (approximately 10%) when participating in the labour force. It was also found that children from urban areas had a higher probability of being unemployed compared to those from rural areas.

## CHAPTER FIVE: CONCLUSION

### 5.1 Introduction

This chapter brings the thesis research study to a close by first summarising the key empirical results in Section 5.2. The chapter will move on by elaborating further on the contribution to policy and practice, drawing on the empirical results in Section 5.3. Finally, it addresses the limitations encountered in this study in Section 5.4 and outlines recommendations for future research studies in Section 5.5.

### 5.2 Review of Key Findings

The descriptive results indicated that most children who reported involvement in economic activities were engaged in activities related solely to their production, with over 95% share across all three waves. Regarding racial demographics, almost all the children involved in economic activities belonged to the African ethnic group across all data. Moreover, the provinces with the greatest prevalence of children involved in these economic activities were KwaZulu-Natal, Eastern Cape and Limpopo.

Regarding educational attainment, the 2010 SAYP data revealed that about 60% of children involved in economic activities had not completed primary education. Regarding work characteristics, on average, children spent 4-5 hours per week on economic activities. Concerning the broad occupation category, a significant share of children's engagement in economic activities worked in unskilled occupations, with the most dominant occupation category being elementary occupations.

Furthermore, the characteristics of those classified as child labourers closely resembled those involved in economic activities. That is, most child labourers were African females with low levels of education. Regarding age cohorts, just under two-thirds of child labourers were within the 7-14 years age group, indicating illegal involvement in child labour.

Moving onto the multivariate econometric findings, for children emerging from households with a low incidence of employed adult members, the probability of these children being involved in economic activities or engaged in child labour was significantly higher overall, after controlling for differences in other characteristics. Next, the probit regressions on the Labour Force Participation (LFP) probability of working-age population the results showed

that if these working-age members came from households with a higher number of children members being child labour or involved in economic activities, in some years the working-age adult members had significantly reduced probability to seek employment opportunities in the labour market.

Finally, the Heckprobit regressions on the unemployment probability of the working-age population (conditional on labour force participation) indicated that in some SAYP waves and some regressions, for the households having a higher incidence of children being child labour or involved in economic activities, the unemployment probability of the working-age adult members residing within the same households was significantly higher, *ceteris paribus*.

### **5.3 Contribution to Policy and Practice**

The extent of child labour practices within the South African context is increasingly concerning, exacerbated by the rising cost of living, which compels many household members, particularly children, to join the workforce. Despite South Africa's advancements in policy development to combat child labour, ongoing economic disparities, limited enforcement resources, and the informal nature of child labour pose substantial challenges.

Policies implemented by the South African government are instrumental in reducing and ultimately eliminating child labour in the future. Regarding policy recommendations, collaboration amongst multiple stakeholders (i.e. private sector, government, Non-Governmental Organizations (NGOs), Non-Profit Organizations (NPOs) and communities) is essential in combating child labour incidence. Policymakers should consider various underlying factors, such as poverty, labour market inefficiencies, unemployment and lack of access to education, among other overlapping causes of child labour. The policy recommendations below can influence the dynamics of child labour directly or indirectly through applications primarily focused on children, thereby ultimately benefiting the economy and welfare of South Africa.

#### **5.3.1 Improving labour market prospects of adult members**

The dynamic of improved labour market prospects for adult members can alleviate the pressure on children to engage in work at a young age. Brown and Hesketh (2004), as well as Nickson et al. (2012), all asserted that the traditional approaches to address the skills gap have predominantly emphasised technical qualifications. However, there is now a broader

recognition that *technical skills* alone are insufficient for securing employment within the employment sector. The authors further highlighted the significance of *soft skills*, which are crucial for employability across both higher and lower tiers of the job market.

Furthermore, it is not unexpected that a need exists for *additional public works programmes* in South Africa. Thwala (2011) argues that these programmes could be utilised as a policy measure, targeting high unemployment rates and skill deficits among youth and adult members. For instance, the Expanded Public Works Programme (EPWP) attracts a significant number of unemployed people to work temporarily and contribute to the labour market, whilst ensuring workers obtain higher-level skills and on-the-job training, to improve long-term employability and earnings. This, in turn, provides children with the opportunity to exit the labour market, as adults are adequately prepared with the required skills and knowledge to earn a wage, by improving skills match in the labour market. Bokolo (2013) elaborates on the benefits seen in nations such as Bangladesh and India that effectively adopted similar intervention programmes, causing a drop in poverty and unemployment levels.

The above skills development programmes mentioned are one of many government initiatives to attempt to close the gap between the economic expansion and the widespread unemployment and low-skilled labour individuals who are currently marginalised from economic development. Bhorat (2012) argued that when policies are directed to aid initiatives to improve the likelihood of adult employability, a *transportation subsidy* to unemployed job seekers in the labour market, especially those who reside in rural areas, could improve their labour market status. These individuals usually have a shortage of skills and a lack of access to opportunities. Transportation costs can be costly, which can demoralize an individual from actively seeking employment. Bhorat (2012) further reported that South Africans, on average, allocate around 34 minutes per day commuting to work. However, if the government can prioritize a transportation subsidy for individuals to travel to interviews and skills development programmes, this could help increase the employability prospects of adult members and lessen the pressure of children engaging in child labour.

### 5.3.2 Incentivizing Family Support Programmes

A widely used policy tool geared towards reducing poverty and improving social findings such as education and health, *Conditional Cash Transfer (CCT) programmes* play an essential role in decreasing child labour incidence. In South Africa, CCT could potentially contribute

significantly to reducing child labour by providing financial incentives to encourage school enrolment rather than engaging in the job market. The study by Kabeer and Waddington (2015) underscored the necessity for policies to be structured around the conditionalities of the CCT programmes, which are predicated on educational and health objectives. These incentives have the potential to encourage parents to ensure their children's continued school attendance, thereby fulfilling their responsibility towards the child's entitlement to receive an education, in exchange for receiving a grant.

Muller & Schmidt (2016) recommended that emphasis should be placed on developing a framework for policymakers to refine and strengthen cash transfer initiatives, thereby helping drive the reduction pertaining to child labour and the support of long-term educational and economic outcomes in South Africa. The authors further argued that to determine the progress of such an initiative, there should be rewards for regular educational attendance and penalties for child labour. The researchers further stated that families should be provided with a clear financial initiative to ensure continuous education and eliminate early entry into the labour market.

By adopting the above initiative, the South African government can effectively target vulnerable households, improve educational standards, and incorporate a gender-sensitive model, which are crucial steps to maximize the efficacy of these programs in combating child labour. Muller and Schmidt (2016) concurred that the Child Support Grant (CSG) already offers monetary assistance to households with children; however, this could be expanded to include requirements for school attendance or participation in vocational training.

### 5.3.3 The role of Microfinance to alleviate economic pressure

Another focal point to address child labour, policies should be geared towards credit and microfinance initiatives that *promote financial inclusion* and training for unemployed individuals in the country. To alleviate economic pressure, microfinance can help reduce the pressures that often lead to enabling children to engage in child labour. This action plan can address one of many core reasons why children enter the labour force. Microfinance can enable unemployed adult members to generate income through small businesses, thus reducing the financial reliance on children involved in the labour market. According to Dammert, De Hoop, Mvukiyehe & Rosati (2018), policies that are geared towards microcredit to adult members to

start small businesses may improve household earnings and simultaneously lower child labour likelihood through confronting the restraints to entrepreneurial activities.

Additionally, the above recommendation is supported by Crepon, Devoto, Duflo & Pariente (2015), who argue that households in rural Morocco with exposure to microfinance increased independent work and earnings. The authors further found that, in addition to changes in the labour supply of adults, their estimates also showed a substantial decrease in the amount of time invested in household chores and work-related activities by adult members in households aged 6-15 years, correspondingly.

By adopting a similar example, the South African government can also form partnerships between banks in the private sector, NPOs and Micro Small Medium Enterprises (MSMEs) by offering incentives for banks to allocate some of their resources to smaller-scale businesses and customise finance options to cater to the requirements of MSMEs. The NPOs can also act as implementing agents to train and upskill self-employed/unemployed individuals in the labour market, which activates the Corporate Social Responsibility (CSR) model whereby all stakeholders involved can contribute to the welfare of society, which benefits the broader community while reducing child labour simultaneously.

#### 5.3.4 Publish Child labour Data more frequently

It is imperative that researchers *consistently publish child labour statistics* to evaluate progress and guide policymakers in ensuring compliance with both national and international labour regulations. Ideally, these statistics should be disseminated annually to present a deeper understanding of trends, challenges, interventions, and advancements over time. The South African government should prioritize additional funding for research to offer a distinct depiction of the pressing dynamics of child labour in South Africa, as noted by Serwadda (2006). Further investment in *educating and informing the public about child labour* is crucial, as the regular publication of data will raise awareness of the pressing realities faced by children. The publication of regular child labour reports could serve as a tool to alleviate and eradicate child labour.

One potential measure that the South African government could implement is to enhance public awareness of child labour. Transforming perceptions and attitudes is crucial for fostering social mobilization among South Africans to eradicate child labour (Veeran, 2003). A notable gap

exists in the comprehension of the impact of child labour and the dangerous conditions children face. It is essential to raise awareness through campaigns that emphasize the rights of children to basic education and prevent unethical child labour practices in the workforce. By prioritizing and adopting a similar strategy by implementing these initiatives, the South African government can help reduce and eventually eliminate child labour. Manohar (2011) suggests that public speaking and awareness programmes can be key initiatives in resolving and reforming the high levels of child labour. Goddard and Saunders (2001) emphasize the critical function of mass media as agents of awareness, serving as the eyes, ears, and voices of children, and underscore the importance of children's fundamental rights. These awareness campaigns are pivotal in the plight of exposing employers who employ children illegally in the labour market.

#### 5.3.5 The Need to Harmonize International Standards

The *harmonization of international standards and regulations* is essential for aligning laws, policies, and enforcement practices across countries. This alignment ensures consistency and cooperation in handling the international matter of child labour. It is imperative to ***establish an integrated global framework*** to combat child labour exploitation globally. Consequently, international legal instruments such as the ILO Conventions No.138 (Minimum Age) and No.182 (Worst Forms of Child Labour) provide crucial regulations for member states. A study by Vambe and Saurombe (2019) highlighted concerns regarding the movement of children between borders, particularly girls, from Zimbabwe, Zambia, and Mozambique into South Africa. The study further revealed that in border patrol regions such as the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC), and the Southern African Development Community (SADC), officials are susceptible to bribery, resulting in these children often working on white-owned farms for low wages. Although policies exist in these respective countries, their enforcement remains a significant challenge.

Bernard (2023) posits that legal harmonization of international regulations can mitigate conflicts within current judicial systems by establishing common minimum principles that supersede national laws. The author underscores the significance of harmonization laws, asserting that the specific type of law being harmonized is inconsequential. What is paramount is that harmonization will promote consistency and coherence, or internal harmony, thereby reducing conflicts within legal systems and aiding in the battle against child labour. Achieving

consensus among stakeholders within the government of South Africa is anticipated to diminish the prevalence of child labour.

*Implementing child labour laws on a global scale* will facilitate the development and enforcement of legal standards and frameworks integrated through trade agreements and treaties, which are consistent with the universal prohibition of child labour. When the South African government enacts child labour laws at an international level, it will contribute to global efforts to address multinational challenges such as cross-border child trafficking and exploitation in international supply chains. Kim (2009) notes that there is ambiguity regarding specific duties, which complicates lawmakers' ability to determine when to interfere or limit child labour activities.

The ILO conventions and reformations regarding the removal of child labour have been adopted by multiple nations, such as Brazil, which has reformed its legal working age to 16 years in alignment with the labour code (ILO Conventions 138 and 182) and strictly prohibits dangerous work for children below 18 years (Yap, Sedlacek, and Orazem, 2009). However, in South Africa, the implementation and public awareness of these regulations require further refinement to safeguard children's development. When the South African government aligns its policies with a similar approach, it will demonstrate how regulation can be legally reformed to meet international standards, coupled with strong enforcement and social programmes (facilitated by NGOs, community leaders, and church leaders) that can ultimately reduce child labour. Essentially, it is about creating a consolidated universal legal response to child labour, ensuring that no country becomes a refuge for exploitation due to weak regulations or implementations.

#### **5.4 Limitations of the Study**

While the SAYP provides helpful observations into child labour in South Africa, the household-level survey exhibits several limitations. Based on the findings of Statistics South Africa (2018), these limitations include the coverage of the SAYP household-level surveys conducted in 2010, 2015 and 2019, which were collected nationally. However, the survey may not have encompassed all young individuals in South Africa, as it excludes populations such as those in prisons, individuals residing in boarding houses, hotels, and boarding schools, as well as patients in hospitals. Due to the sensitive nature of child labour, many instances of unrecorded and hidden labour remain protected within the labour market. Furthermore, the

survey may have excluded certain groups, including those active in the informal labour markets, notably street traders and domestic workers.

For example, SAYP might fail to capture data relating to children involved in informal work, namely domestic labour or street trading, which are common types of child labour in many parts of South Africa but may not be reported as official economic activity. Chirwa et al. (2013) note that the incidence of child labour within the informal economy or illicit work, namely domestic chores or street work, often goes underreported in household surveys like SAYP because such activities are not always recognised as labour or are not easily captured in time-use surveys.

Finally, a significant temporal limitation results from the discontinuation of the SAYP survey after 2019. The planned survey wave in the early 2020s did not take place, most likely due to the COVID-19 pandemic thereby resulting in a gap in the available data. This temporal discontinuity limits the study's capacity to analyse child labour dynamics in the post-pandemic period, a time when socio-economic conditions likely changed substantially.

## **5.5 Recommendations for Future Research**

Future research may benefit from the inclusion of a broader array of variables that examine the impact of cultural and social norms on perceptions of child labour, especially within rural and traditional communities. For instance, this research is constrained by its reliance on cross-sectional data rather than balanced panel data. Bhorat, Hill & Steenkamp (2019) argue that the QLFS does not collect all the required information on patterns to conclude key results. The QLFS could also include questions relating to health impacts and psychological and emotional effects. Children may experience stress or emotional strain that could impact their development of working at an early age. These questions are often overlooked in labour surveys.

In a separate study, the National Income Dynamic Study (NIDS) data could be used to assess whether the involvement in child labour is a short-term or long-term socioeconomic issue in the labour market. The NIDS is a longitudinal study that follows the same households and individuals over time, collecting data on a wide range of socio-economic factors, including employment, income, and education. This makes it a valuable resource for examining the aspects of child labour in South Africa, especially about how much progress has been made in the long run. Given that the NIDS monitors individuals over time, it can help establish whether

children who are engaged in child labour at one point continue to engage in labour as they grow older or transition into formal employment (Woolard, Leibbrandt & De Villiers, 2010).

Additionally using balanced panel data, for the same cohort of child labour over time, provides another area of research which ensures that each participant is consistently observed at every time point in the study. Ultimately, this could result in a more profound comprehension of the connection between the labour market status of children and adults within households, potentially aiding policymakers and regulators in their attempts to eradicate child labour involvement in South Africa.

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## APPENDIX

Table 17: Probit regressions on labour force participation likelihood of working-age population

Independent variable	Average marginal effects					
	[II]	[III]	[III]	[IV]	[V]	[VI]
	2010	2015	2019	2010	2015	2019
Gender: Male	0.2170***	0.1824***	0.1779***	0.2172***	0.1825***	0.1779***
Race: Coloured	0.0174	0.0019	0.0159	0.0197	0.0030	0.0160
Race: Indian	-0.0232	-0.1456***	-0.0945***	-0.0221	-0.1456***	-0.0945***
Race: White	-0.0634***	-0.0761***	-0.0495***	-0.0647***	-0.0771***	-0.0497***
Age	0.0926***	0.0932***	0.0965***	0.0928***	0.0933***	0.0966***
Age squared	-0.0011***	-0.0011***	-0.0012***	-0.0011***	-0.0012***	-0.0012***
Province: Eastern Cape	-0.1049***	-0.1104***	-0.0789***	-0.1102***	-0.1128***	-0.0790***
Province: Northern Cape	-0.0617***	-0.0068	-0.0714***	-0.0620***	-0.0074	-0.0708***
Province: Free State	-0.0311**	-0.0285*	-0.0218	-0.0299**	-0.0275*	-0.0217
Province: KwaZulu-Natal	-0.1113***	-0.1083***	-0.1176***	-0.1143***	-0.1098***	-0.1177***
Province: North West	-0.0875***	-0.1188***	-0.1158***	-0.0847***	-0.1177***	-0.1155***
Province: Gauteng	0.0004	0.0401***	0.0006	0.0006	0.0402***	0.0003
Province: Mpumalanga	-0.0039	-0.0069	0.0308**	0.0012	-0.0052	0.0302**
Province: Limpopo	-0.1303***	-0.1033***	-0.1382***	-0.1278***	-0.1021***	-0.1379***
Resident Area: Urban	0.1207***	0.0985***	0.0903***	0.1303***	0.1032***	0.0907***
Education years	-0.0122***	-0.1112***	-0.0069**	-0.0119***	-0.0112***	-0.0069**
Education years squared	0.0027***	0.0023***	0.0018***	0.0027***	0.0023***	0.0018***
Married	0.0198***	0.0296***	0.0267***	0.0198***	0.0297***	0.0267***
Number of children 0-6 years	-0.0163***	-0.0135***	-0.0051	-0.0166***	-0.0137***	-0.0051
Number of other children 7-17 years	-0.0208***	-0.0158***	-0.0170***	-0.0267***	-0.0188***	-0.0172***
Number of males 18-59 years	-0.0265***	-0.0225***	-0.0242***	-0.0262***	-0.0224***	-0.0241***
Number of females 18-59 years	0.0169***	0.0009	0.0083**	0.0176***	0.0012	0.0083**
Number of elderly	-0.0507***	-0.0580***	-0.0533***	-0.0503***	-0.0579***	0.0194
Total number of children in economic activity	-0.0263***	-0.0224***	0.0030	NA		
Total number of children in child labour	NA			0.0054	-0.0372***	0.0194
Number of observations	46 773	40 828	38 467	46 773	40 828	38 467
LR Chi-square statistic	7422.28	7554.54	6874.14	7395.51	7603.54	6883.80
Prob. > Chi-square	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Pseudo R square	0.2119	0.2173	0.2091	0.2114	0.2172	0.2091
Observed probability	0.6081	0.6415	0.6487	0.6081	0.6415	0.6487
Predicted probability (at $\bar{X}$ )	0.6331	0.6738	0.6801	0.6334	0.6739	0.6801

Source: Author's own calculations using the 2010, 2015 and 2019 SAYP data.

\*\*\* Significant at 1%

\*\* Significant at 5%

\* Significant at 10%

N/A: Imperfect collinearity

Reference category: Gender – female; Race – African; Province – Western Cape; Area type – Rural.