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Children Working in the Carpet Industry of Pakistan: Prevalence and Conditions

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Abstract

This was a study of the prevalence of working children and child labor in the production process of the export-oriented handmade carpet industry in Pakistan in 2009-2010. The study included wool-processing activities (supplying the yarn) as well as carpet production and finishing. This study adhered to international standards by considering all persons younger than 18 years of age to be children. The methodology included preliminary qualitative research, development of a national sampling frame, and a large-scale cross-sectional sample survey of factory-based and household-based production.

The survey estimated that 646 factories and 39,366 households were engaged in Pakistan's carpet industry, employing a total workforce of 105,915 usual workers, of whom 33,413 (31.5 percent) were children. Even though more than 33,000 children were found to be working in the carpet industry, the number and prevalence of working children and the size of the total industry were much smaller than earlier estimates. Almost all (96.3 percent) the children working in the carpet industry in Pakistan were working in households. Almost all children working in carpet households and carpet factories (91.7 percent and 94.0 percent, respectively) were living with their parents. More than half (53.6 percent) of the child carpet workers were girls, but the factory-based children were predominantly (78.1 percent) boys.

The study estimated that all (100 percent) children working in the carpet industry in Pakistan were engaged in hazardous work (child labor). In addition, the data showed indications that four- fifths (81.1 percent) of the children worked excessive hours. There were strong indications that many children working in the carpet industry and their families were in forced/bonded labor, as one-fifth of the households were indebted, and two-thirds of the indebted households reported having difficulties repaying their debts.

Pakistan's labor standards defined the industry as hazardous and established 14 years of age as the minimum legal age to work in hazardous work or in factories. Since half (50.1 percent) of the children working in the industry and 56.6 percent of the factory-based child workers were below 14 years of age, their employment was in breach of Pakistani law.

Keywords

Pakistan, working children, child labor, carpet industry, working conditions

Comments

Suggested Citation

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Children Working in the Carpet industry of Pakistan: Prevalence and Conditions

Research on Children Working in the Carpet Industry in India, Nepal and Pakistan

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PREFACE

In 2007, the Bureau of International Labor Affairs, United States Department of Labor (ILAB-USDOL) funded a cooperative agreement with Macro International (ICF) [1] entitled "Research on Children Working in the Carpet Industry of India, Nepal, and Pakistan" (Carpet Project). The Carpet Project's overall objective was to develop reliable and accurate data and information about the prevalence, working conditions, and demand for children's work and child labor in the production process of the handmade-carpet export industry in India, Nepal, and Pakistan. To accomplish its objectives, the Carpet Project designed and conducted six major quantitative research studies as well as semi-structured qualitative research activities. These included the following.

- Three Prevalence and Conditions (PC) Studies for India, Nepal and Pakistan. These were large-scale quantitative studies conducted to produce reliable, statistically sound, and nationally representative estimates of the prevalence of working children and child labor as well as detailed descriptions of children's working conditions in the production process of the national carpet industries.
- The Labor Demand (LD) Survey. This was a longitudinal panel study of establishments producing carpets in all three countries to understand the underlying causes of variation in management's decisions about employing children in the carpet industry.
- The Sending Areas (SA) Study in Nepal. This was a qualitative rapid assessment of child trafficking and bonded labor focused on rural children who migrated to work in the carpet factories in the Kathmandu valley.
- The Schooling Incentives Project Evaluation (SIPE) Study in Nepal. This was a randomized controlled trial to assess the impact of two educational interventions on children's attendance and success in school.
- The Program and Practice (PP) Review. This was a qualitative meta-analysis of existing and documented programs and practices (or interventions) that targeted child labor in the carpet industry in one or more of the three countries (India, Nepal, and Pakistan).

This report is for the Prevalence and Conditions Study for Pakistan. This country report was written by Art Hansen and Pablo Diego Rosell on behalf of the ICF research team. ICF acknowledged the important role played by AKIDA Management Consultants, especially Mr. Haider Zaidi (AKIDA's president). The authors received valuable advice from Charita Castro, Angela Peltzer, and Merima Dulic-Lokvancic of USDOL and Don Ellison of ICF International.

[1] The company was Macro International when the Cooperative Agreement was signed with USDOL. The company was ICF International, hereafter referred to as ICF, when this report was written.

ABSTRACT

This was a study of the prevalence of working children and child labor in the production process of the export-oriented handmade carpet industry in Pakistan in 2009-2010. The study included wool-processing activities (supplying the yarn) as well as carpet production and finishing. This study adhered to international standards by considering all persons younger than 18 years of age to be children. The methodology included preliminary qualitative research, development of a national sampling frame, and a large-scale cross-sectional sample survey of factory-based and household-based production.

The survey estimated that 646 factories and 39,366 households were engaged in Pakistan's carpet industry, employing a total workforce of 105,915 usual workers, of whom 33,413 (31.5 percent) were children. Even though more than 33,000 children were found to be working in the carpet industry, the number and prevalence of working children and the size of the total industry were much smaller than earlier estimates. Almost all (96.3 percent) the children working in the carpet industry in Pakistan were working in households. Almost all children working in carpet households and carpet factories (91.7 percent and 94.0 percent, respectively) were living with their parents. More than half (53.6 percent) of the child carpet workers were girls, but the factory-based children were predominantly (78.1 percent) boys.

The study estimated that all (100 percent) children working in the carpet industry in Pakistan were engaged in hazardous work (child labor). In addition, the data showed indications that four-fifths (81.1 percent) of the children worked excessive hours. There were strong indications that many children working in the carpet industry and their families were in forced/bonded labor, as one-fifth of the households were indebted, and two-thirds of the indebted households reported having difficulties repaying their debts.

Pakistan's labor standards defined the industry as hazardous and established 14 years of age as the minimum legal age to work in hazardous work or in factories. Since half (50.1 percent) of the children working in the industry and 56.6 percent of the factory-based child workers were below 14 years of age, their employment was in breach of Pakistani law.

ABBREVIATIONS AND ACRONYMS

AKIDA	Al-Khalil Institutional Development Associates (Pakistan research organization)
DHS	Demographic and Health Surveys
HH	Household
ICF	ICF International, Inc.
ILAB	Bureau of International Labor Affairs (USDOL)
ILO	International Labour Organization (United Nations)
IPEC	International Programme on the Elimination of Child Labor (ILO)
NGO	Non-Governmental Organization
OCFT	Office of Child Labor, Forced Labor, and Human Trafficking (ILAB-USDOL)
PC Study	Prevalence and Conditions Study
PCMEA	Pakistan Carpet Manufacturers and Exporters Association
SIMPOC	Statistical Information and Monitoring Programme on Child Labour (ILO)
UNCHR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
USD	United States Dollar[2]
USDOL	United States Department of Labor
WFCL	Worst Forms of Child Labor

[2] From 1999 through mid-2007 (when this project began), the rate for exchanging U.S. dollars (USD) with Pakistan rupees fluctuated between 1:51 and 1:64. By early 2009, the rate was 1:79, by early 2010 1:84, and by early 2011 it was1:86. To fix a standard rate to use throughout the period of research, this report used an exchange rate of 1:80.

INTRODUCTION

Child labor (when working children are exploited) is a global problem. In 2000, the ILO noted that one-fourth of the world's children (5-17 years old) were working, and 246 million of those working children were in child labor conditions. By 2008, 215 million children were still working in child labor conditions (ILO, 2010). More than half of the world's child laborers were located in the Asia and Pacific region, and child labor in the carpet industry in Asia had received a lot of international attention. A widely-circulated 1996 report noted:

> The past few years have seen increasing public awareness…of the high incidence of child servitude in the carpet industry of South Asia. As a consequence, the international public has come to associate "child servitude" with the image of small children chained to carpet looms, slaving away over the thousands of tiny wool knots that will eventually become expensive carpets in the homes of the wealthy (Human Rights Watch, 1996:3).

This Prevalence and Conditions (PC) Study of Pakistan addressed the problem of child labor and focused on the children who worked in the production process of the handmade carpet export industry of Pakistan. Those children worked in households and factories processing wool for yarn and producing and finishing carpets to be exported. This research was relevant because previous reports about child labor in the carpet industry in Pakistan had not provided accurate and reliable national-level estimates of the number and prevalence of working children and the prevalence and nature of child labor in the industry.

This study had three objectives:

(1) Produce reliable, statistically sound, and nationally representative estimates of the prevalence of working children and child labor in the carpet industry in Pakistan.
(2) Describe children's working conditions in the production process of the carpet industry in Pakistan.
(3) Compare the working and living conditions of children working in the carpet industry and children working in other industries in Pakistan.

Five broad research questions guided the design of the research. Some were directly testable, while others addressed areas and issues that were more broadly critical to the research.

(1) How many children were working in the carpet industry in Pakistan, and what was the prevalence of children in that industry's work force?
(2) What were the characteristics of the children working in that carpet industry?
(3) What was the nature of the children's work in the carpet industry, and what were their working conditions?

(4) What were the indications of the existence of child labor, including the worst forms, in the situation of the children working in the carpet industry in Pakistan?
(5) How did the working (and living) conditions of the child carpet workers compare with the working (and living) conditions of children working in other industries in Pakistan?

The primary sources of data for this report were cross-sectional sample surveys of the industry's factory-based and household-based establishments that were conducted in 2009-2010. The surveys were preceded by qualitative research and development of national sampling frames. In each sampled factory, the manager and a sample of workers were interviewed. The household survey sampled rural and urban areas that had households engaged in carpet industry activities. In each sampled area, the survey team randomly sampled equivalent numbers of carpet and non-carpet households. In each sampled household, the head of household and all children aged 5-17 were interviewed. The interviewers completed an observation form for each factory and area.

This research made the following contributions to the knowledge base on the prevalence and nature of children's work and child labor in the carpet industry in Pakistan:

(1) Expanded the definition and scope of the carpet industry to include 16 specific activities that range from carpet-related supply chain processes (carding and spinning wool, producing and applying dyes) through carpet weaving and hand-looming to the final finishing processes.

(2) Produced reliable, statistically sound, and nationally representative estimates of:
    a. The number and prevalence of working children in the carpet industry in Pakistan.
    b. The existence and prevalence of child labor in the carpet industry in Pakistan.

(3) Produced detailed descriptions of children's work and working conditions in the carpet industry in Pakistan that included a number of key findings (noted in the Discussion and Summary chapters).

(4) Produced benchmark data that compared the family background and living and working conditions of children working in the carpet industry and similar children working in other industries.

The first section of this report is an introduction, and the second section notes the international laws and conventions that provided the internationally-accepted definitions and standards for this study. The third section provides background information on child labor and the carpet industry in Pakistan, and the fourth section describes in detail the methodology used in this research. The fifth section describes the data that were produced by this study about children working in the carpet industry and describes the nature and prevalence of child labor among those working

children, and the sixth section discusses key issues not covered by the data in the previous section, compares this study's findings with earlier findings, and notes the strengths and limitations of this study. The seventh section summarizes and concludes the report. That is followed by the bibliography and appendices.

RESEARCH FRAMEWORK

1.1. UNITED NATIONS INSTRUMENTS ON CHILD LABOR AND FORCED LABOR

The international legal framework for this study consisted of the United Nations instruments that defined and regulated children's work, child labor, forced/bonded labor, and child trafficking.

- ILO Convention 29 on Forced or Compulsory Labor (1930). Pakistan ratified this Convention in 1957.
- ILO Convention 90 on Night Work of Young Persons (Industry) (1948). The Convention specifically established a different age limit for Pakistan, and its ages were always one year younger than the international standards. Pakistan ratified this Convention in 1951.
- UN Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery (1956)
- ILO Convention 105 on the Abolition of Forced Labor (1957). Pakistan ratified this convention in 1960.
- ILO Convention 138 on Minimum Working Age (1973), as amended by Recommendation 146 (1973). Pakistan ratified this Convention in 2006.
- UN International Convention on the Rights of a Child (UNCRC, 1990) and the Optional Protocol on the Sale of Children, Child Prostitution, and Child Pornography (2000). Pakistan ratified the Convention in 1990 and the Optional Protocol in 2011.
- ILO Convention 182 on the Worst Forms of Child Labor (1999) as amended by Recommendation 190 (1999). Pakistan ratified this Convention in 2001.
- UN Trafficking Protocol, also known as the Palermo Protocol (2000) or the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, Supplementing the UN Convention Against Transnational Organized Crime
- Note on the definition of 'child trafficking' (2007). This note resulted from a dialogue among the ILO's program Towards the Elimination of the Worst Forms of Child Labour (TECL), the UN Office on Drugs and Crime, and the International Organization for Migration (IOM).

1.2. LEGAL PROTECTIONS FOR CHILDREN IN THE PAKISTAN CARPET INDUSTRY

Pakistan ratified ILO Conventions 29, 90, 105, 138, and 182, the UN Convention on the Rights of the Child, and the Optional Protocol on the Sale of Children. While most definitions used in this study were based on international conventions, the Pakistan national legal framework was used to define aspects not covered by the international framework. The following instruments were in force at the time this research was conducted, but the effects of the 2010 Eighteenth

Constitutional Amendment on labor law regulation and enforcement were still being processed when this report was written in early 2012.

Constitution of Pakistan (2004)

- Forbid slavery, all forms of forced labor, trafficking in human beings, and employment of children below the age of 14 years in any factory, mine, or any other hazardous employment.

Constitution (Eighteenth) Amendment Act (2010)

- Each provincial assembly became responsible for drafting its own labor laws. Provincial governments were to assume regulatory authority by June 30, 2011, but progress on passing necessary legislation was still occurring when this report was written.
- Free and compulsory education would be made available to all children 5-16 years old.
- The North West Frontier Province became Khyber Pakhtunkhwa.

The Factories Act (1934)

- Defined children as persons younger than 15 and prohibited employing any child younger than 12 to work in a factory.
- Defined a factory as an establishment employing at least 20 workers. Factories were regulated, but not workshops employing fewer than 20 employees.
- Limited children younger than 15 to working no more than five hours a day.
- Prohibited children younger than 15 from working between 7 p.m. and 6 a.m. (night work).

The Employment of Children Act (ECA) (1991)

- Defined children as persons younger than 14 years old.
- Prohibited employing children under 14 years of age to work in factories, but factories were defined as establishments employing at least 10 workers. Workshops employing fewer than 10 employees were not regulated.
- Prohibited employing children younger than 14 to work in listed hazardous occupations and processes. Carpet weaving, wool cleaning, and the wool industry were listed.
- Limited children under 14 from working more than seven hours a day, more than six days a week, or at night (7.00 p.m. to 8.00 a.m.), and children under 14 had to have a one hour break after three continuous hours of work.
- Exempted from regulation all family-run establishments[3] and training institutes (schools) that were established, assisted, or organized by the Government.

[3] The specific wording was "…any establishment wherein such process is carried on by the occupier with the help of his family…"

The Bonded Labour System (Abolition) Act (1992)

- Abolished the bonded labor system, including the "peshgi" system.

The Prevention and Control of Human Trafficking Ordinance (2002)

- Forbid human trafficking.

1.3. Differences Between International and Pakistan Standards

This study relied on international standards, utilized the international definition of a child as any person younger than 18 years of age, and applied the international definitions of child labor to the work and working conditions of all children who were employed in the carpet industry, even when they were working in their own household with their family or in workshops (factories or sheds) of any size. This report presents its estimates of the existence and prevalence of child labor using both international and Pakistani standards to facilitate a comparison.

One important difference between international standards and Pakistani standards is the age of a child. International standards define a child as a person under 18 years of age. Those standards are the basis for this study, which considered all carpet workers under the age of 18 to be child carpet workers. Pakistan's child labor legislation (specifically the 1991 Employment of Children Act) defines a child as a person under 14 years of age, prohibits employing children under 14 years of age (minimum working age) in a factory or in any of the listed hazardous occupations and processes, and limits the hours a child under 14 may work. Pakistan's legal protection of children differs from international standards because it fails to protect children 14-17 years of age from hazardous and unacceptable work and working conditions. Half (50.1 percent) of Pakistan's child carpet workers were children 14-17 years of age; they were not protected by Pakistan's labor laws because of their age.

Another important difference between international standards and Pakistani standards concerns the establishments that are regulated. The 1991 Employment of Children Act exempts family-run establishments from regulation, which means that HH-based child carpet workers who are working with their families are not protected by the legislation. Almost all (96.3 percent) of Pakistan's child carpet workers were HH-based, and 90 percent of them were working with their families. The 1991 Act also prohibits employing children below 14 years of age (minimum working age) to work in any factory, but defines factories as establishments employing ten or more workers. The Act does not regulate establishments with fewer than ten employees, where one-fifth (20.5 percent) of Pakistan's factory-based child carpet workers were employed.

The study utilized Pakistan's standards when they defined specific issues that were not defined by international standards. Examples included:

- Specifying occupations or processes that were considered by Pakistan to be hazardous.
- Specifying the number of hours a child could work in a day (or days in a week).
- Specifying the nighttime hours when a child could not work.

LITERATURE REVIEW

2.1. WORKING CHILDREN AND CHILD LABOR IN PAKISTAN

Before 1996, estimates of the number of working children ranged from two million to 19 million, and child labor was reported to be of "massive proportions."[4] The Bonded Labor Liberation Front (NGO) estimated that eight million children were bonded laborers (USDOL, 1994). The 1996 Child Labor Survey produced the first reliable statistics: 40 million children (5-14) were in Pakistan, and 3.3 million (8.3 percent) of those were working (Government of Pakistan, 1996).[5] ILO-IPEC calculated that 1.5 million (1.2 million boys and 0.3 million girls) of those 3.3 million children were in conditions of child labor, based on their excessive hours of work.[6]

In 2006, Pakistan's annual labor survey (total workforce) reported that 2.8 million children (aged 10-14) were working (2.0 million boys and 0.8 million girls). One-fifth of all boys worked vs. one-tenth of all girls (15 percent of all children). The great majority of working children were older rural boys who were unpaid family helpers in agriculture, but the 2000-2006 increase in working children was almost totally due to more girls working (Government of Pakistan, 2006, 2007). Three-fourths of the working children were not enrolled in school.

In 2007, the Human Rights Commission for Pakistan reported widespread child labor and that 3.6 million children under the age of 14 worked under hazardous and exploitive conditions.

Table 1. Child Labor Estimates in Pakistan, 1996-2007

Year	Source	No.	Prevalence	Age
1992	Bonded Labour Liberation Front	8.0 million	-	-
1996	Child Labour Survey	1.5 million	46% of working children	5-14
2007	Human Rights Commission	3.6 million	-	5-14

Note: Child labor defined in 1996 by excessive hours of work. Defined in 2007 by work in hazardous and exploitive conditions. Prevalence meant presence of child labor among working children.

[4] "Child Work" and "Child Labor" represent two different constructs, although definitions vary across countries and research methodologies. For the definitions used in this study, see sections 3.2.2. and 3.2.3.

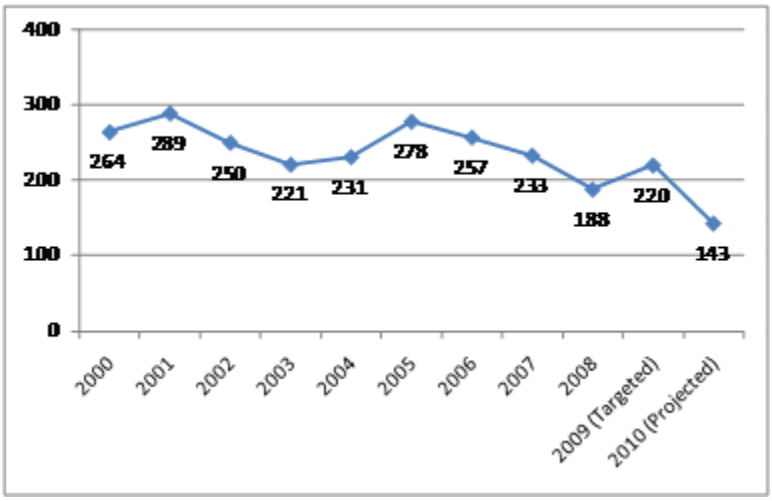
[5] This study distinguished between working children and child labor (when working children were exploited), but Pakistan Government surveys reported working children as child labor.

[6] ILO-IPEC (2004) considered that working more than 35 hours a week was excessive for children between 5 and14 years of age, and based its calculations on the hours of work reported in the 1996 survey.

2.2. THE CARPET INDUSTRY IN PAKISTAN

In the 1970s, increased international demand from Europe and the U.S.[7] stimulated the industry's rapid growth. During the 1980s and 1990s, the carpet industry in Pakistan became an important employer and an important sector for generating foreign capital, as almost all the handmade carpets were exported. The industry claimed that more than 1.5 million people were employed as carpet weavers in Pakistan and that more than three million people depended on the sector directly or indirectly (PCMEA). In the early 2000s, carpet exports comprised about 2.5 percent of Pakistan's total exports (Rozina, 2004, as cited in Cameron and Khair-uz-zaman, n.d.). Then the industry began diminishing in size (see Figure 1). The 2004 ILO report noted "…In Punjab, many contractors have withdrawn from the carpet sector, leaving many skilled carpet weavers jobless...found many workshops closed that once employed more than 20 people" (Nasir, 2004). The decline was still occurring in 2009-2010 when this research was conducted.[8]

Figure 1. Pakistan Carpet Export Volume (In million USD)



Source: TDAP (Trade Development Authority of Pakistan)/ PCMEA

According to industry estimates, 90 percent of carpet weaving occurred in households using family labor, and only 10 percent of the looms were operated by hired workers in factories (PCMEA, as cited by USDOL, 1994). Many of the factories ("sheds") were small, and most shed owners were not wealthy, owned only a small number of looms, and employed only a handful of workers, including children (Nasir, 2004). The base of the industry's socioeconomic structure was the individual weaver at a loom, but the exporters and largest manufacturers at the top were usually separated from weavers by layers of middlemen. NGOs reported that Pakistan's labor

[7] During 2009-2011, the U.S. imported one-third of Pakistan's carpet exports and was the largest importer of Pakistan's carpets (Trade Development Authority of Pakistan).

[8] "Pakistani carpet exports slide by 50%" (April 10, 2010). Fibre2fashion News Desk – India.

laws and international pressure had motivated many exporters and large-scale carpet manufacturers to split large carpet enterprises into smaller units and outsource production to small manufacturers and to contractors, who subcontracted the work to household-based weavers (USDOL-ILAB, 1994; Human Rights Watch, 1996).

Punjab was considered to be the main carpet producing area in Pakistan, and the cities of Lahore (Punjab) and Karachi (Sindh) served as the main weaving centers (Dogar, 2000). The Afghan refugee population was also an important source of weavers, and many carpets from Khyber Pakhtunkhwa (formerly the Northwestern Frontier Province, or NWFP) may have been produced in Afghanistan, then transported over the border and sold as products of Pakistan (Nasir, 2004).

2.3. CHILD LABOR IN THE CARPET INDUSTRY IN PAKISTAN

2.3.1. Estimated Prevalence of Child Labor in the Carpet Industry.

During the 1990s, the prevalence of children in the industry's workforce and the magnitude of child labor were disputed (USDOL, 1994: Human Rights Watch, 1995; Silvers, 1996). The industry and the Government produced estimates that were much lower than the estimates that were produced by international and NGO sources (USDOL, 1994).[9]

Three UNICEF-sponsored studies in the early 1990s were the first to estimate the prevalence of working children and bonded child labor in the carpet sector.[10] The surveys produced two estimates: (a) 900,000 children worked in the carpet industry and comprised 90 percent of the industry's one million workers and (b) one million children and 1.5 million total workers (as cited in USDOL, 1994). The surveys stated that 80 percent of all workers were under 15 (the minimum working age under the Factories Act); 30 percent were under 10; and many of the older children had started working in the industry before they were 10 years old. Most of the working children were boys, and 94 percent of the working children were suffering the effects of hazardous working conditions (UNICEF, 1991; CIWCE and UNICEF, 1992; Silvers, 1996).

In 1994, the PCMEA countered with its own study that estimated that only 120,000 (eight percent) of the 1.5 million carpet workers were children, most of whom worked in their own family units. That was the lowest estimate. The Bonded Labour Liberation Front (BLLF) claimed that eight million children were bonded in Pakistan, and half a million of those were in the carpet industry (as cited in USDOL, 1994).

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[9] Retrieve at http://www.dol.gov/ilab/media/reports/iclp/sweat/pakistan.htm.

[10] The Center for the Improvement of Working Conditions and Environment (CIWCE) in Punjab's Labor Department participated in UNICEF's Punjab survey.

Table 2. Child Labor Estimates in Pakistan's Carpet Industry, 1992-2006

Year	Source	No.	Prevalence	Age
1992	CIWCE and UNICEF	900,000	90 percent	5-17
1992	UNICEF	1 million	67 percent	5-17
1994	BLLF, as cited in USDOL	500,000	-	
1994	PCMEA	120,000	8 percent	5-14
1996	Silvers, citing UNICEF	500,000-1 million	90 percent	4-14
2001-2006	AKIDA and ILO – Punjab, Sindh, and Khyber Pakhtunkhwa	240,300	-	5-17

Note: The BLLF statistic refers specifically to bonded child labor in the carpet industry.

The ILO-IPEC Carpets Project conducted rapid assessments of child labor in the carpet industry in Punjab (2001), Sindh (2006), and Khyber Pakhtunkhwa (then NWFP, 2006).[11] The studies estimated that 240,300 children (5-17 years) were weaving carpets in the three provinces; more than two-thirds of those children were in Punjab.[12] There were differences within Punjab. In central Punjab, two-thirds were girls and almost all the children worked in their homes. In northern and southern Punjab, boys were the majority of the carpet weavers, and a smaller percentage worked in their homes (AKIDA, 2001, 2007a, 2007b).

2.3.2. Nature of Children's Work in the Pakistan Carpet Industry

The carpet research project studied children's work throughout the production process from the preparation of raw wool (carding, spinning, dyeing, etc.) to produce dyed yarn through the primary production of carpets and the many specific activities (washing, stretching, clipping, binding, etc.) that resulted in finished export-ready carpets. Unfortunately, all the reports of children in the carpet industry focused on only one activity -- weaving carpets. That narrow focus missed all of the other activities in which children might have been involved, so there was no baseline information on the nature of children's work in the carpet industry other than carpet-weaving. The 2001 Punjab study reported that children at an early age became involved in carpet weaving activities as helpers and learners, and, after learning the craft, older children (nine years and older) became active weavers.

2.3.3. Reasons Why Children Worked in the Pakistan Carpet Industry.

The Anti-Slavery Society (2007) stated that the major reasons for the carpet industry to employ children were "…their very low wages…their docile acceptance of terrible working conditions… their good eyesight, which allows them to perform intricate work in very poor light."

[11] The ILO-IPEC Carpets Project, which was funded by USDOL, is described in section 3.4. The rapid assessments were conducted by AKIDA, the same company that assisted ICF with this study.

[12] Numbers of children were rounded to the nearest hundred.

In the ILO-IPEC studies, more than three-fourths of the adult respondents in Punjab reported that children's work was needed for the family's socio–economic survival. Poverty was the family's main reason for their children working and not attending school, and more than half of the carpet households were in debt. In Sindh, four-fifths of the adult respondents said that earning money was the primary benefit of children's work, and, when asked if children should stop working, 40 percent of the adults thought children should not stop, even if they wanted to go to school. In Khyber Pakhtunkhwa (then NWFP), most carpet weaving was done by Afghans in refugee camps, and more than half of the adult respondents thought the children should not stop working, even if they wanted to go to school (AKIDA, 2001, 2007a, AKIDA 2007b).

A smaller study in 2004 reported the child carpet worker's reasons for working. Their reasons were poor economic conditions and large families. Though the children were not well paid, they still served as major contributors to their families' income. The children were happy with the carpet industry and wanted to continue to work in spite of the fact that they were paid at much lower rates than the adult carpet workers and their working conditions caused illnesses of various kinds (Kousar, 2005).

Children weaving in Quetta – Balochistan | Washing unit in Lahore - Punjab | Finishing unit in Attock - Punjab

2.3.4. Occupational Safety and Health Hazards in the Pakistan Carpet Industry.

Many articles and reports during the 1990s documented unhealthy consequences for children who worked in the carpet industry. The 1996 Child Labor Survey collected information on hazards affecting children in different industries, and the carpet industry had the highest prevalence of illness and injuries for children. The enclosed environment of the sheds was a respiratory health hazard. Almost all child carpet workers experienced cutting themselves, especially their fingers, while using sharp instruments, and no medical help was available in case of emergency (Nasir, 2004). The following hazards and dangers for child carpet workers were identified: work-related injuries, eye disease, eye strain due to insufficient light in workshops, pain due to continuously sitting in specific fixed positions, pulmonary diseases due to wool dust,

headaches due to the concentration required by the work, skeletal deformation, weakness and malnutrition due to inadequate food, arthritis, skin diseases, and physical and sexual abuse (Vijayagopalan, 1993).

The ILO-IPEC studies reported the extent to which the families of the child carpet workers were aware of the hazards. Two-thirds of the adult respondents in Punjab and in Khyber Pakhtunkhwa said that the children's health was adversely affected by carpet weaving, with backache, joint pains, cuts/injuries, weak eyesight, and respiratory disorders being the most common ailments. In Sindh, on the other hand, only one-third of the families thought that carpet weaving negatively affected children's health (AKIDA, 2001, 2007a, 2007b).

2.3.5. Forced and Bonded Labor in the Pakistan Carpet Industry.

The 1990 UNICEF study reported bonded labor among child carpet workers in Pakistan. Children were being trafficked into the carpet industry because of debts assumed by their parents and were unable to leave their carpet workplaces because of debt bondage. The ILO, in its 1993 World Labor Report, assessed the problems of debt-bondage in Pakistan to be among the worst in the world, and an NGO (the Asian-American Free Labor Institute) reported that carpet exporters had acknowledged that the bonded labor system ("peshgi") was regularly practiced, even though that was a violation of Pakistan's 1992 Bonded Labor System (Abolition) Act (cited in ILAB, 1994).

The number of bonded children in the carpet industry was debatable, but the Bonded Labor Liberation Front (BLLF) estimated that half a million children were bonded in the industry. The interpretation of the "peshgi" system was the central issue. To some observers, peshgi was a system of cash advances. To others, it was a system of bonded labor. The question was how to interpret the effects of the advance paid to the child's parents in committing the child to the employer and the workplace.

A 2004 ILO rapid assessment found that there were three main types of advance with different implications (Nasir, 2004). The most common type was a small advance below 1,000 rupees (12.50 USD), and there usually were no serious consequences because the weavers were able to repay the loan in easy installments as the work progressed. The other two less common types involved large advances, more than 5,000 rupees (62.50 USD), with more serious consequences. Borrowing such a large amount often resulted in a vicious cycle, and high fees and interest rates often resulted in bonded-labor conditions because of debt accumulating instead of being repaid.

That 2004 study stated that an earlier estimate (that 60 percent of carpet-weavers were bonded) was exaggerated, but found that young children whose parents received the advance for the children's work were the true victims. Many child carpet workers were in debt bondage; one-

fourth were girls under the age of 15. Those bonded children received half the wages of older workers and were not allowed to leave the premises until the debt was fully paid (Nasir, 2004).

2.3.6. Child Trafficking in the Pakistan Carpet Industry.

There was little mention of child trafficking in the carpet industry, but the widely reported frequency of child labor and bonded child labor in the carpet industry implied the existence of trafficking (Nasir, 2004), and a Human Rights Commission of Pakistan survey (released in 2006) found that school children in one poor rural area were being forced to work in a carpet factory.

2.4. Government Efforts to Combat the Worst Forms of Child Labor in the Carpet Industry

The federal and provincial authorities administered and participated in many programs to combat child labor and encourage school attendance. Some focused on specific sectors, while others addressed multiple sectors. In 1994, the Government and ILO signed a Memorandum of Understanding, which initiated many surveys, assessments, and other ILO-IPEC programs and projects (ILO, 2004). In 2000, the Government established a National Policy and Plan of Action to Combat Child Labour, followed in 2001 by a policy and plan to abolish bonded labor. A National Time Bound Programme was established in 2003, in which carpet weaving was identified as a hazardous occupation, but not one of the six highest priorities. The Government administered the National Project on Rehabilitation of Child Labour, which was designed to withdraw children from working in hazardous occupations (carpet weaving was one of those) and enroll them in accelerated educational programs.

The ILO-IPEC Carpets Project (Combating Child Labour in the Carpet Industry in Pakistan) specifically targeted children working in the carpet industry. That project, which was funded by USDOL, was in the field from 1999 through early 2007 and featured the active participation of PCMEA. The PCMEA agreed that during the first phase all its members would commit to not employing anyone younger than 14; all contractors would be registered; and all workplaces would be identified and open for monitoring. ILO-IPEC would assist in establishing internal and external monitoring systems.

The first phase surveyed three Punjab districts, identified 107,100[13] child carpet weavers, and implemented programs to provide non-formal education, mainstreaming, and pre-vocational education to about 23,000 carpet weaving children and access to micro-credit to 10,000 of the poorest carpet weaving households. The second phase expanded to three more districts, designed

[13] Numbers of children were rounded to the nearest hundred.

a child labor monitoring system for rural areas and a prototype ergonomic loom to improve the productivity of adult labor, disbursed loans to mothers of child carpet weavers to establish alternate income generation activities, and distributed awareness raising materials (Dogar, 2000: ILO, 2004).

RESEARCH METHODOLOGY

3.1. RESEARCH FOCUS

This research starts by describing the number, prevalence, and working conditions of children working in the carpet industry and then analyzes the prevalence and nature of unacceptable work and working conditions (child labor) among those working children.

3.1.1. Research Questions

The purpose and objectives were noted earlier. The research was designed to address a set of specific questions that were asked by USDOL. Each question is addressed in the results or discussion sections of this report (specific sub-section in parenthesis).

(1) How prevalent is the use of children in the carpet industry in Pakistan? (see 5.2)

(2) What are the demographic characteristics of children and families working in the carpet industry? (see 5.3.2.1, 5.3.2.2, and 5.4.1)
   a. What are the individual characteristics of children working in the carpet industry (i.e., age, sex)? (see 5.4.1)
   b. What is the educational status of children working in the carpet industry, and what is the educational status of their families? (see 5.3.2.1 and 5.4.2)
   c. What are the household demographics, working status, and socioeconomic status of working children's families? (see 5.3.1.1, 5.3.1.2, and 5.3.2.1)

(3) What is the relationship between a child's working status and educational opportunities? (see 5.4.2)
   a. Are there particular educational barriers that make children more vulnerable to working in the carpet industry? (see 5.4.2 and 5.4.1)

(4) To what extent do children and families migrate to work in the carpet industry? (see 5.5.3)
   a. What role does the family play in children's migration? (see 5.5.3 and 5.7.4)

(5) To what extent are children who work in the carpet industry working under forced and/or bonded labor conditions? (see 5.7.3)
   a. To what extent are children trafficked into these situations? (see 5.7.4)

(6) What particular aspects of the carpet industry encourage or discourage the use of children? (see 5.3.2 and 5.4.2) Are there aspects of the carpet industry that lead to greater exploitation of children? (see 5.3.2)

a. How do children enter into the carpet industry? (see 5.5)
b. What percentage of children work for their families vs. work as hired labor? (see 5.6.7)
c. Are there wage/payment systems that lead to exploitation of child workers? (see 5.6.5)
d. Is more or less child labor anticipated in the carpet industry in each country in the future? (see 5.3 and 6.3)

(7) What are children's working conditions in the carpet industry? (see 5.6)
a. In what specific activities are children engaged? (see 5.6.1)
b. What are the occupational safety and health hazards to which children are exposed? (see 5.6.4)
c. What are the typical hours of work? (see 5.6.3)
d. How are children paid (piece rate, by time period, etc.), and how does this relate to their overall conditions of work? (see 5.6.5)
e. How does children's work affect their participation in education? (see 5.4.2)
f. To what extent are children abused in the workplace, and by whom? And what is the nature of that abuse? (see 5.6.4)

(8) In what regions is the carpet industry concentrated, and are there concentrated areas where children are most likely to be working? (see 5.2.1)

3.1.2. Research Populations of Interest

3.1.2.1. Children Working in the Carpet Industry

The target population was the population of children (persons younger than 18 years of age) who were working in the production process (defined by 16 specific activities) of the handmade carpet industry in Pakistan during the period of the research (2008-2010). That population included any refugee child carpet workers who were resident in Pakistan at that time. The project assumed that the type of establishment influenced the characteristics of the work and working conditions and sampled separately two subpopulations of child carpet workers.

- Household-based child carpet workers. The majority of the child carpet worker population in Pakistan lived and worked in carpet households (HHs). Almost all of the HH-based child carpet workers were living and working in their own family households.
- Factory-based child carpet workers. A minority of the child carpet worker population in Pakistan worked in carpet factories, and almost all factory-based child carpet workers were hired workers.

3.1.2.2. Children Working in Other Industries

The project compared the conditions of child carpet workers with those of children who worked in other industries. To do that, in each area where the study surveyed carpet HHs and HH-based child carpet workers, the project also surveyed an equal number of non-carpet HHs. The study interviewed all the children aged 5-17 within the carpet and non-carpet HHs. The populations of non-carpet HHs and the children in those HHs who were working in other industries were sampled only for the purpose of comparison with carpet HHs and child carpet workers, not for extrapolation to estimate any national populations.

3.1.3. Protection of Human Subjects

ICF International was in compliance with Department of Health and Human Services regulations for the protection of human research subjects (45 CFR 46) and had established an Institutional Review Board (IRB) to review all research involving human subjects. The IRB was required to submit documentation of its reviews and approvals to the Federal government. The IRB at ICF International[14] was responsible for the protection of human subjects in this research, including supervising the training and certification of the project director/principal investigator in the protection of human research participants. The ICF IRB and the client of this research (USDOL) reviewed and approved the design, instruments, and protocols of this study. The application to the IRB seeking its approval for this study included a detailed description of the research design, any possible risks, and steps taken to avoid or mitigate them, as well as copies of all instruments, protocols, and training materials.

The IRB review and approval process ensured that persons participating in this study were protected from any risks of harm associated with participating in the study, that children were presented with research situations appropriate to their ages, that the research did not compromise the children's emotional or physical well-being, and that all IRB-approved study procedures for the protection of human subjects were implemented, even when study procedures were outsourced to another company or vendor. The organization in Pakistan (AKIDA) that was subcontracted to collect and process survey data for the study also agreed to a detailed set of IRB procedures for implementing the study and protecting the human subjects and the data, including oral informed consent from all participants. This consent detailed survey procedures, confidentiality, survey purpose, and benefits of the survey, as well as the right to refuse to participate.

[14] The company was named Macro International when the Cooperative Agreement was signed in 2007.

3.2. Conceptual and Operational Definitions

The project established explicit definitions for all important factors based on the concepts described in UN and ILO documents and academic articles and also, when needed, created explicit operational definitions that consisted of specific features that researchers were able to directly measure.[15]

3.2.1. The Carpet Industry and Establishments

This research defined the carpet industry to include 16 specific work activities that started with processing raw wool and ended with export-ready carpets (see Table 3).

Table 3. Sixteen Activities of Manual Labor that Defined the Carpet Industry's Production Process

Carpet-related Activities	
1	Separating wool according to its colors (e.g. in a bale there may be different colors of wool mixed together like black, white, brown, etc.)
2	Cleaning/sorting out goat drops/other dirt from the raw wool
3	Washing wool or silk
4	Carding wool
5	Spinning wool to make thread
6	Dyeing thread
7	Balling thread
8	Mixing/joining many colored yarns into one (e.g. same as plying, but joining is done usually for blending 3/4 different colors into one, depending upon the type of prints and patterns of the carpet)
9	Plying many yarns (usually silk) into one to make it thick (e.g. 12 plies, 15 plies, 20 plies, etc. depending upon the No of knots of the carpet)
10	Tufting carpets
11	Hand looming carpets
12	Weaving carpets
13	Washing carpets
14	Trimming carpets
15	Stretching carpets
16	Repairing errors/assuring rows are straight

A carpet establishment was any location where one of the 16 carpet industry activities occurred.

- A carpet factory was any establishment using primarily hired labor.
- A carpet HH was any establishment using primarily family labor.

[15] ILO's guidelines for survey research noted that, "Operational definitions of the concepts…are needed to design a survey, which break down the legal definitions into elements that can subsequently be measured" (ILO, 2011).

Usually the difference was obvious, but field workers developing the sampling frames in Pakistan learned of scattered establishments that could not be visited. Without interviewing the owners, the field workers did not know whether those establishments should be listed as factories or HHs. To assist the workers, the project created revised definitions that were used only when developing the sampling frames in Pakistan:

- A carpet establishment was a factory if one of these specific activities (dyeing yarn, washing carpets, or finishing carpets) occurred there or if five or more weaving looms or five or more wool-spinning units (spindles or tops) were located there.
- A carpet establishment was a HH if none of those specific activities (dyeing yarn, washing carpets, or finishing carpets) occurred there and fewer than five looms or five spinning units (spindles or tops) were located there.

The standard operational definition of a household (HH) was a person or group of persons who lived together in the same house or compound and shared the same cooking arrangements. The HH did not have to be a family and might include employees.

- A carpet HH was a HH in which at least one member worked in the carpet industry.
  A non-carpet HH was a HH in which no member worked in the industry.

The standard two reference periods to measure the work force were:

- Current workers, persons who had worked at least once during the last seven days.
- Usual workers, persons who had worked at least once during the last 12 months.

This study followed standard practice by reporting most measures on the basis of usual workers. The study measured and reported on current workers for detailed specific information about the number of hours worked during the day, time of day for activities, etc. The project asked only about the last few days because children's recollection would be more accurate for that shorter and more recent period.

3.2.2. Working Children

This report clearly separates the description of working children from the description of child labor. Most of the report describes the living and working conditions of children who work in the carpet industry. Afterwards, the study analyzes the nature and conditions of their work to estimate the existence and prevalence of unacceptable work and working conditions (child labor) among those working children.

This study defined all persons below the age of 18 years as children. Studying only the children in the 5 to 17 age range has been adopted by SIMPOC and many other child labor studies (ILO, 2004, p. 20). This range considers children under five years old to be too young to be interviewed, and they also are outside the usual child labor pool.

Working children were defined as those in the economically active population. The economically active population "comprises all persons of either sex who furnish the supply of labor for the production of economic goods and services as defined by the United Nations system of national accounts and balances during a specific time referenced period" (ILO, 2000).

This definition included the following: paid employees (paid in cash or in kind), self-employed persons, own-account workers, apprentices who received payment in cash or in kind, and unpaid family workers who produced economic goods or services for their own household consumption. This definition excluded the following: household chores, including fetching wood and/or water,[16] and activities that were part of schooling (ILO-IPEC, 2004).

One of the goals of this study was to obtain a precise measure of the prevalence of children working in the carpet industry; another was to compare children's work in the carpet industry with children's work in other sectors. For this reason, information about work was collected in the following two ways:

- Carpet work was measured by the question -- "Have you engaged in (*comprehensive list of carpet-related activities*) for at least one hour in the past 12 months?" A person was considered to have worked in the carpet industry if she/he has done any of the listed activities for at least one hour in the last 12 months.
- Non-carpet work was measured using a simple direct question -- "In the past 12 months, did you engage in any income generating or productive work not related to processing wool or silk or producing carpets?".

3.2.3. Unacceptable Work (Child Labor)

The project wanted to differentiate between those forms of children's work that were considered acceptable, based on national and international standards, and those forms of children's work that were considered unacceptable (child labor). By unacceptable work, the study meant that the nature of the work and/or the working conditions exploited and/or abused working children. In addition to identifying those exploitative situations, the project wanted to measure them and estimate the prevalence of unacceptable work. By prevalence, the study meant the percentage of children working in the carpet industry who were engaged or trapped in unacceptable work.

This study looked to international conventions for guidance in identifying unacceptable kinds of work and working conditions. In general, international and Pakistani standards agreed. Pakistan had ratified many ILO conventions and the UN Convention on the Rights of a Child (UNCRC), and Pakistan had passed legislation that was based on or adapted international standards.

[16] SIMPOC-supported surveys have considered fetching wood and water as work activities. The study decided, in the context of Pakistan, that including those activities as household chores facilitated understanding the difference between work and chores.

Although the international and national standards agreed in general, the two sets of standards differed in some specific details and in the implementation. This study relied on international standards whenever there were differences between the two sets of standards and utilized Pakistani standards when they defined specific issues that were not defined by international standards.

The project developed a set of measures[17] to indicate and estimate the prevalence of two forms of unacceptable work in the carpet industry in Pakistan:

- **Hazardous work**. The study examined the nature of the work (whether it was defined as inherently hazardous), the characteristics of the working conditions and workplace, and the medical histories of the working children.

- **Excessive work.** Another measure calculated the number of hours of total work for each child and compared that with the amount of work that was considered to be appropriate for the child given his or her age.

The study did not collect sufficient information to create measures to indicate and estimate the prevalence of other forms of unacceptable work, such as forced labor, bonded labor, and child trafficking. However, the study identified a number of variables that were critical to understanding those unacceptable forms, and this report provides a descriptive analysis of those variables, including whether there were indications that children were forced/coerced to start working or to continue working, and/or whether there were indications that children could not stop working and leave the workplace due to force, coercion, or outstanding debts.

3.3. RESEARCH DESIGN

The project's approach combined qualitative and quantitative research techniques. The qualitative research helped the project develop a synthesis of the general features of existing systems and conditions and guided the development of instruments and protocols for the subsequent formal survey.

3.3.1. The Prevalence and Conditions (PC) Study

The primary source of information for this report was the Prevalence and Conditions (PC) Study in 2009, which consisted of cross-sectional sample surveys of carpet factories and carpet HHs. The instruments for the surveys were based on standard questionnaires[18] that were augmented by

[17] The composition of the measures is described in more detail in Appendix C.

[18] This study adopted many questions from the standardized instruments that were developed by ILO's Statistical Information and Monitoring Programme on Child Labour (SIMPOC) and USAID's Demographic and Health Surveys (DHS).

several modules added specifically for this study, including a battery of carpet-related activities, a literacy/numeracy module, and a psychosocial quality-of-life module (Personal Well Being Scale). ICF designed the master questionnaires.

Visit to carpet factory in Attock – Punjab

Dyeing unit in Attock – Punjab

Research Team in Burewala - Punjab

3.3.1.1. The Carpet Factory Survey and Instruments

In the survey of carpet factories, the primary sampling unit (PSU) was the individual factory. The study utilized three structured instruments for the factory survey: the manager and worker questionnaires and the observation sheet. In each sampled carpet factory, after interviewing the manager and a sample of carpet workers, the team recorded its observations about the factory, the factory workforce, and the conditions of the interviews.

3.3.1.2. The Household Survey and Instruments

In the survey of carpet households (HHs), the PSU was the geographic area that contained carpet HHs. In each sampled PSU, the team identified and interviewed a random sample of the carpet HHs and then interviewed an equivalent number of randomly selected non-carpet HHs. The study utilized three structured instruments for the HH survey: the head of HH and child questionnaires and the observation sheet. After interviewing the head of HH (or the adult most knowledgeable about the HH and its members) and all children aged 5-17 in the HHs, the team recorded its observations about the PSU and the conditions of the interviews.

3.3.1.3. Comparing Working Children

The children working in the carpet industry were the key targeted population, but this study also established a benchmark for comparing the working and living conditions of HH-based child carpet workers with the conditions of neighboring children who lived in non-carpet HHs and

worked in other industries.[19] The study assessed the influence of household poverty and indebtedness and whether children working in the carpet industry were better or worse-off than neighboring children working in other industries. Both samples were selected in the same PSUs, so many geographical and household variables were relatively similar.

3.4. SAMPLING

3.4.1. Sampling Frames

The study required two sampling frames, one of rural and urban areas containing carpet HHs and the other of carpet factories. To develop the sampling frames, ICF and AKIDA conducted both primary and secondary research. The secondary research included collecting, updating, and consolidating existing lists of exporters, manufacturers, processors, contractors, and areas. The Pakistan Carpet Manufacturers and Exporters Association (PCMEA) cooperated by providing its list (as of June 2008) of 416 members (279 in the north and 137 in the south). Other lists that were used included the Pakistan Spinning Mill Association (PSMA) list of members and the lists of areas and informants identified by AKIDA's 2001-2007 research on the carpet industry for ILO-IPEC in the provinces of Punjab (2001), Sindh (2006), and Khyber Pakhtunkhwa (2007).

ICF's primary research started with an exploratory site visit by the ICF project director and the Child Labor Research specialist in May-June 2008. Then, in February-March 2009, the ICF project director and the president of AKIDA spent three weeks conducting a rapid assessment and travelling by road through Punjab and parts of Sindh.

The major amount of primary research involved phone calls, site visits, and personal interviews with the members of the industry associations. Each PCMEA and PSMA member was interviewed to learn the locations of (a) their wool-processing and carpet factories, (b) the wool-processing and carpet factories of any manufacturers or processors they knew, and (c) the areas of HH-based wool-processing and carpet production activity in Pakistan. For each of those three categories, respondents were probed to identify any establishment, contractor, or area that carried out any of five general activities: (1) Spinning Yarn, (2) Dyeing Yarn, (3) Producing Carpets, (4) Washing Carpets, or (5) Finishing Carpets. Those five general activities were sufficiently differentiated, yet comprehensive enough, to cover all 16 sub-activities. In addition, the AKIDA teams revisited areas and spoke with informants they knew from the earlier AKIDA research.

[19] Other possible comparisons were not pursued in this report because they were not of equivalent priority. The study collected the data to compare: (a) child carpet workers, children working in other industries, and non-working children in carpet HHs; (b) children working in other industries and non-working children in non-carpet HHs; and (c) all working and all non-working children.

Afterwards, the president of AKIDA made more site visits to key carpet areas in Punjab, Sindh, and Khyber Pakhtunkhwa[20] in April-May 2009 to check with the local teams and validate the information they had collected.

The final sampling frames (described in Table 31) included:

- 950 areas of HH-based activity with an estimated total of 38,684 carpet HHs. There were areas in all four provinces: 702 areas in Punjab, 215 in Sindh, 20 in NWFP (now Khyber Pankhtunkhwa), and 13 in Balochistan. Five different carpet-related activities were recorded[21]:
    - 18 areas reported spinning wool into yarn. Those were localized in Attock (Punjab), Afghan Basti (Sindh), Quetta (Balochistan), and one area in Khyber Pakhtunkhwa. All of those areas had large populations of Afghan refugees.
    - One area (in Khyber Pakhtunkhwa) reported dyeing yarn.
    - 948 areas reported weaving carpets.
    - Two areas (in Khyber Pakhtunkhwa) reported washing carpets.
    - No area reported finishing carpets.

- 652 factories (379 in Punjab, 145 in Sindh, 24 in Khyber Pakhtunkhwa, and 104 in Balochistan) in eight major zones, including Lahore, Attock, Faisalabad, Burewala, Multan, Karachi, interior Sindh, Khyber Pakhtunkhwa, and Quetta. The 652 factories included 374 factories involved in carpet-producing activities and 278 factories not involved in carpet-producing activities. Five different industry-related activities were recorded[22]:
    - 65 factories spun wool into yarn.
    - 186 factories dyed yarn.
    - 374 factories weaved carpets.
    - 222 factories washed carpets.
    - 230 factories finished carpets.

3.4.2. The Samples of Areas, Households, and Workers

According to earlier research, the great majority of workers in the carpet industry in Pakistan were spread-out in HH-based areas. Larger strata with greater variance require larger samples to be estimated with precision[23] so the study anticipated to select a sample of 3,000 HHs. The PSU

[20] Balochistan could not be included due to security concerns.

[21] Some areas contained HHs performing different or multiple activities, which is why the sum of areas by activity is greater than the total number of areas.

[22] Some factories performed multiple activities, which is why the sum of factories by activity is greater than the total number of factories.

[23] See for example Kish, 1965, p. 139.

for the HH survey were the geographic areas (950 clusters) from which a sample of 50 clusters were planned. Clusters were stratified by province and district, and selected with probability proportional to the estimated number of CHHs in each location[24]. This initial selection of PSUs was done based on the estimated number of CHHs available from the sampling frame. Within each PSU, the team first made a rough listing of the PSU. Based on this rough listing, one of two approaches was taken to sample HHs within each PSU:

1. When the PSU was relatively small (e.g., less than 600 HHs), the team canvassed the PSU to learn the precise number and location of carpet HHs and then randomly selected a sample of carpet HHs and a random sample of non-carpet HHs. When more than 30 carpet HHs were available, 30 carpet HHs were selected at random. When there were 30 or less carpet HHs, all carpet HHs were selected. When the team was unable to meet the target of 30 carpet HHs, a replacement PSU was selected.
2. When the PSU was large (e.g. more than 600 HHs), secondary sampling units (SSUs) were selected. In those large PSUs, the teams made rough listings of the PSU and then, starting from the northwest corner, divided the PSU into blocks, each estimated to have an average of 300 HHs. The team canvassed an initial block selected at random to identify all carpet HHs in the block. When more than 30 carpet HHs were available, 30 carpet HHs were selected at random. When there were 30 or less carpet HHs, all carpet HHs were selected. When the team was unable to meet the target of 30 carpet HHs, the team continued the same procedure block by block until achieving the target of 30 carpet HHs[25].

In each sampled HH, the HH questionnaire was administered to the head of HH or the adult member of the HH most knowledgeable about the HH and its members. Then all children aged 5-17 in each sampled HH were interviewed.

3.4.2.1. Children's Interviews and Response Rates in Households

Children working in HHs were easily accessible, although some children refused the interview or were not available after several attempts. Children's response rates were very high (93 percent in carpet HHs and 95 percent in non-carpet HHs), and non-response patterns were analyzed using data from HH interviews to rule out the presence of non-response biases. A comparison of the total sample of children as identified by HH interviews vs. the final sample of children who were

[24] Five PSUs were self-representing because each contained many carpet HHs. Each of those PSUs was assigned more than 30 carpet HHs in proportion to its estimated population of carpet HHs. One other PSU was selected twice and assigned 60 HHs.
[25] The study found many fewer carpet HHs than expected in two PSUs (Noshera and Peshawar) in Khyber Pakhtunkhwa because Afghan refugees had repatriated from camps (see Table 32). The original estimates of CHHs were obtained from rather reliable camp records, but more than 270,000 Afghan refugees returned to Afghanistan in 2008 and another 50,000 in the first half of 2009.

interviewed by critical variables (gender, age, type of household, school attendance, work status, and district) showed few differences, indicating little cause for concern about non-response biases (see Table 33 and Table 34).

3.4.2.2. The Final Samples of Households and Children

- 1,506 carpet HHs and 1,491 non-carpet HHs were surveyed (see Table 52 for the distribution of HHs by province and district).
- 3,836 (93 percent) of the 4,117 children found in carpet HHs were interviewed (see Table 53 for the distribution by province and district and the response rate).[26]
    - 1,086 (28 percent) of the 3,836 children were working in the carpet industry.
- 3,484 (95 percent) of the 3,663 children found in non-carpet HHs were interviewed.

3.4.3. The Samples of Carpet Factories and Workers

According to earlier research, a small minority of the workers in the carpet industry in Pakistan were factory-based. Smaller strata require smaller samples to be estimated with the same precision as larger strata so the study collected a sample of only 200 carpet factories. The PSU for the factory survey was the individual carpet factory. The sample of 200 factories was selected from the estimated 652 factories using proportionally stratified random sampling from the urban and rural strata of the sampling frame; 163 of the 525 urban factories were selected and 37 of the 127 rural factories.

3.4.3.1. Selecting the Sample of Workers

Originally, only the child carpet workers were to be interviewed in the factories, but qualitative research revealed that focusing only on the child workers (17 years old or younger) would inhibit and potentially deny the team's access to factory workers. The team expanded the survey focus to interview a sample of all factory workers with a disproportionately larger sample of younger workers. In each factory, after interviewing the manager, the team started by counting and recording the total number and gender of workers and listing them in two groups:

- A Group consisted of those workers who appeared (based on visual observation) to be 20 years old or younger.
- B Group consisted of those who appeared to be older than 20 years.

The study set a maximum number of workers to be interviewed per factory, regardless of the total number of workers in the factory. In each factory, eight workers were selected at random

[26] Children's non-responses were noted in the previous subsection.

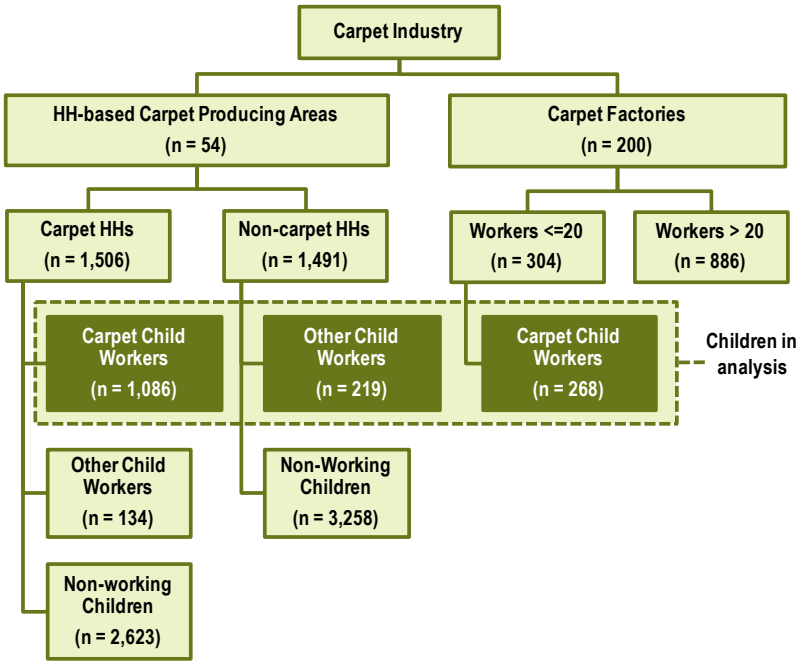
from each group to be interviewed. If there were eight or fewer workers in a group, then all of them were interviewed. By dividing the workers at an older age and interviewing workers from both groups, the innovative approach served to diffuse the sensitivity and potential resistance.

3.4.3.2. The Final Samples of Factories and Workers

- 200 factories were surveyed (see Table 35 and Table 36 for a full description of the factory samples).
- 304 (77.2 percent) of the 394 workers found in A Group were interviewed.
    - 268 of the 304 (88.1 percent) were child carpet workers (under 18).
- 886 (37.2 percent) of the 2,379 workers found in B Group were interviewed.

Figure 2 summarizes the sampling design for the PC study and the final samples collected. Note that data were collected for six different groups of children, but only three groups of children were used in the analysis presented in this report.

Figure 2. Sampling Design and Final Sample for the Prevalence and Conditions Study in Pakistan



Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Survey (June-December 2009)

3.5. IMPLEMENTATION OF THE SURVEYS

3.5.1. Translating, Customizing, and Pretesting the Instruments

ICF designed the master questionnaires and then sent them to AKIDA, the Pakistani research organization that implemented the survey, to customize to Pakistani terms and conditions, cognitively test, translate into Urdu, and pretest in English and Urdu. Customizing consisted of changes to match Pakistan's administrative units, languages, religions, and ethnicities. After being translated into Urdu and local languages (for critical words), the instruments were pretested during a national training workshop that AKIDA conducted in Lahore in June 2009 for team leaders and experts from all four provinces.

3.5.2. Recruiting and Training Interviewers

The country was divided into eight zones, and eight local team leaders and 135 field interviewers were selected to collect the survey data.[27] Most of the field interviewers were residents in those eight zones and/or were selected from AKIDA's pool of researchers. The interviewers were trained in groups of 20-30 in each of the eight fieldwork zones.

3.5.3. Data Collection

Five months (May-September 2009) were spent collecting the household and factory survey data. An interviewer administered an IRB-approved oral informed consent form to each respondent before proceeding with each interview. The local team leaders were given the responsibility of checking the completeness of interviews and conducting spot checks and back checks. The completed questionnaires were edited manually at two levels, first by the field supervisors in the field itself, and then by the professional data scrutinizers at AKIDA's office.

3.5.4. Data Processing

The first round of data processing (DP) was completed September-November 2009, but the processing was not accepted by ICF because there were quality and format deficiencies. The ICF Research Consultant was deployed to Lahore in early December 2009 to diagnose the root causes of the data quality problems, finding that AKIDA lacked qualified DP personnel and had inadequate data processing systems. While adequate data processing systems such as CS-Pro were freely available, qualified data processing professionals were scarce in Pakistan.

[27] Details of the distribution of interviewers to the eight zones is presented in the appendices.

To complete the second round of data entry, AKIDA recruited the head of DP for the National Institute of Population Studies, which had been fully-trained by ICF as part of previous work with the Demographic and Health Surveys (DHS) in Pakistan, and had experience supervising previous large-scale data entry exercises. DP was managed by him and conducted by a team of 15-20 operators in a computer lab facility with the cooperation of the Institute of Business Administration (IBA) at the University of the Punjab. DP procedures included double data entry and in-depth quality checks of the final datasets, including:

- Match of collected samples to the sampling plan;
- Completeness of variables, labels, and codes;
- Correct filters and skip patterns were applied for each question;
- Plausibility of frequency distributions;
- Unique individual and household identification variables to link datasets unequivocally.

Briefing of DP team in Lahore

Editing questionnaires in Lahore

Data entry in Punjab University - IBA Lab

ICF conducted further quality control measures to check for consistency with the sample plan, duplicate records, data completeness (variables, labels, missing data), data validity (frequency distribution anomalies, out of range values), and data consistency (e.g., interviewing dates and length by interviewer, correspondence between number of interviews at each level, skip patterns, etc.). That process identified a number of data consistency problems that could be solved during the quality control process and some that could not, chiefly missing data in several variables.

As an example, one of the most sensitive variables for estimating the carpet industry workforce was the carpet activity module, which asked if each person (adults and children) had performed any of 16 carpet-related tasks in the last 12 months and then, for those who claimed to have performed a given activity, probed about the last time that such activity had occurred. Although the first question (which had no missing cases) was sufficient to determine prevalence of work in the last 12 months, the follow-up probe was essential to determine the number of persons who were current workers (worked in the last seven days). Expected responses (cases with an affirmative response to the first item) versus actual responses (those providing a valid response to the second item) were examined for both factory-based and HH-based adult and child carpet workers to analyze the pattern of missing data (see Table 4).

Missing responses for any of the main tasks were near or below five percent of the expected responses and were only two percent at the aggregate level, so their effect could be ignored for the analysis of distributions (Tabachnik & Fidell, 1989). However, these missing data had to be taken into account when considering estimates of persons who had worked in the last seven days, as they would be slightly under-represented.

Table 4: Missing Data in Timing of Carpet-Related Activities

	Factory-Based			Household-Based			Total Child Workers		
	Expected n	Actual n	% missing	Expected n	Actual n	% missing	Expected n	Actual n	% missing
Weaving carpets	638	627	2%	1,036	1,012	2%	1,674	1,639	2%
Hand looming carpets	109	107	2%	86	82	5%	195	189	3%
Trimming carpets	187	182	3%	3	3	0%	190	185	3%
Washing carpets	173	163	6%	8	7	13%	181	170	6%
Repairing errors	147	143	3%	12	12	0%	159	155	3%
All activities	1,175	1,144	3%	1,086	1,062	2%	2,261	2,206	2%
Total cases	1,190	1,190	0%	7,320	7,320	0%	8,510	8,510	0%

Note: Multiple response items.
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Survey (June-December 2009)

3.5.5. Analysis

3.5.5.1. Procedures

Most of the data that were analyzed in this study were quantitative, but qualitative inputs collected during the exploratory phase were interwoven to enhance the depth of the analysis. The study used a descriptive analytical approach using univariate or bivariate analysis.[28] The reference period was work in the last 12 months. The composition of the comparison groups was based on their occupational status during the last 12 months, but work in the last seven days or last three days was used to analyze the specific number of days and hours worked. In several sections of the report, data on children were available from both adult household respondents and the children's interviews. Only the children's reports were used except in cases where the comparison of both reports was critical.

3.5.5.2. Variable construction

Many of the variables that were studied and questions that were in the survey instruments were standardized and drawn from standard child labor surveys such as those implemented under the ILO SIMPOC program, ICF's Demographic and Health Survey (DHS) or widely-used and pre-

[28] The analysis was not based on experimental data, precluding causal inferences.

coded modules studying literacy and numeracy competence (from the Indian/Prather Annual Status of Education Report) or psychosocial quality-of-life (Personal Well Being Scale). For the analysis of the quantitative data, ICF created all computed variables, including simple variable recodes (age, education, etc.), work status variables, and well-being scales, as well as population weights for each dataset. The indicator of the hazardous nature of work had a simple value system, but the other indicators of child labor were composed of multiple variables.

3.5.5.3. Statistical methods

Data in this report were presented in simple tables with the analytic variables presented as rows and the comparison groups as columns. The first rows presented the weighted population estimate (*Weighted N*), rounded to the nearest whole number. The weighted N represented the sample base or denominator used to compute the results shown in each table.

Missing cases. Cases with missing responses for a given variable were omitted from the sample base or denominator when analyzing that given variable. The unweighted and weighted number of missing cases was shown in the table notes for each comparison group.

Rounding errors. Results were shown as percentages, averages, or medians. Percentages were always column percentages, rounded to the first decimal. The *Total* column summed the entire sample. Some totals did not sum to 100 percent. Some column and row totals did not add up because of rounding or because multiple items or multiple-response items were reported in the same table.

Insufficient sample size. Columns with a small sample size (unweighted n<30) were shown in table footnotes as having "insufficient sample" size, and results were omitted (shown as *).

Significance testing. Difference between groups (columns) were tested for statistical significance using the SPSS complex samples module to adjust for the complex sampling design, with standard errors stratified by type of establishment and geographical setting, and clustered by location and establishment. The standard 95 percent confidence interval was used for all statistical tests. Significant results were flagged at the 95 percent confidence level (*) and at the 99 percent confidence level (**). In the case of multiple group comparisons, significant differences between specific pairs of groups were located by examining post-hoc tests. Since reporting post-hoc tests for each pair of groups would make reporting too cumbersome, the specific group differences driving significant results were only mentioned in the body of the report.

Significant differences for percentages are tested using the Pearson chi-square homogeneity test or the adjusted likelihood ratio statistic[29]. In the case of variables with multiple response categories,

[29] The chi-square test is indicated when no more than 20% of the expected counts are less than 5 and none is less than 1. When these conditions are not met, the adjusted likelihood ratio statistic is used.

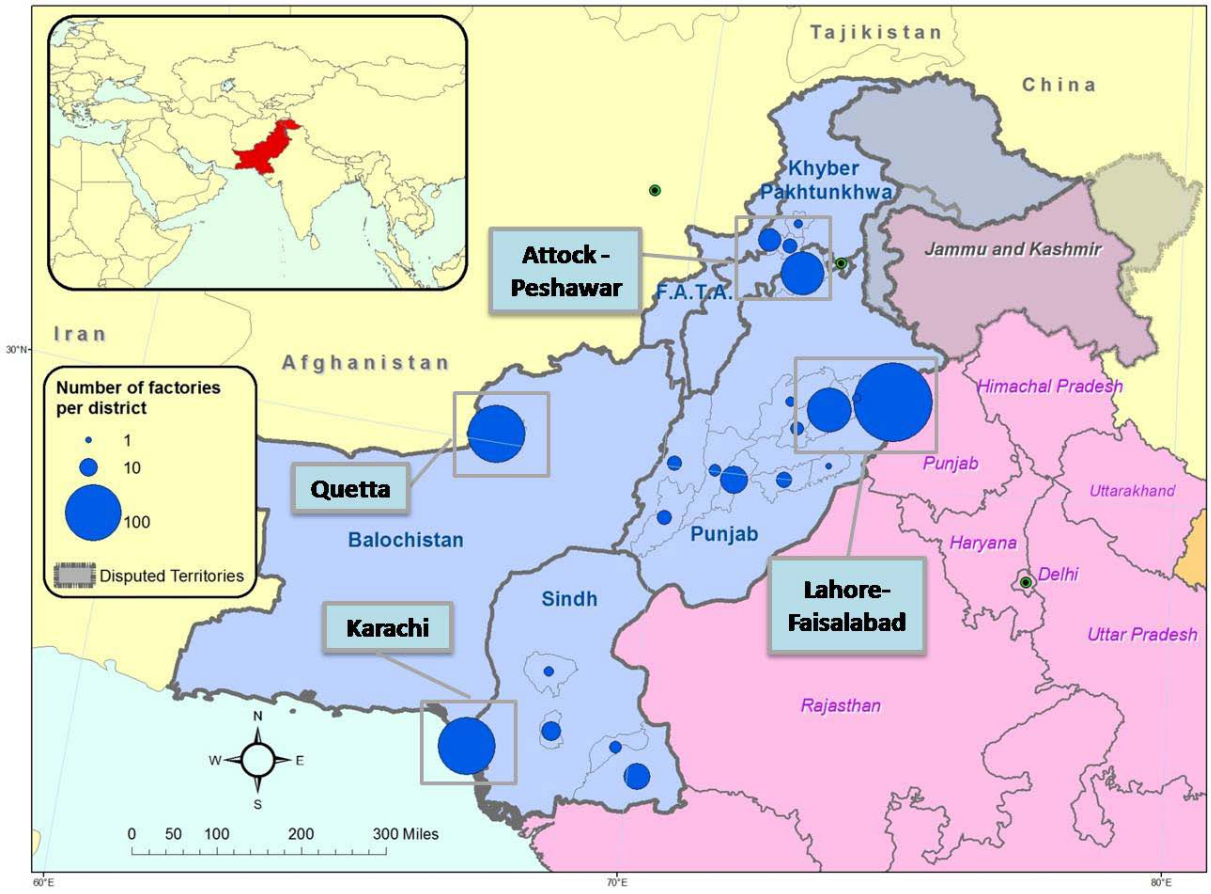
significant differences between specific cells were located by examining the adjusted standardized residuals (ASRs). Since reporting ASRs for each cell would make tables too cumbersome, significant differences between cells were only mentioned in the analytical text accompanying the tables. In the case of continuous variables (shown in tables with their median or average values), significance was tested using Analysis of Variance (ANOVA). The *p*-value referred in those cases to the *F* statistic.

4.1. THE CARPET INDUSTRY OF PAKISTAN

Carpet factories and carpet households (HHs) were found in all four provinces, and carpet HHs were found in all districts of Punjab province. The industry was concentrated in six geographical clusters (see Figure 3 for carpet factories and Figure 4 for carpet households).

- The cluster with the most establishments was the districts around Lahore (Punjab).
- The other clusters were the Attock district (Punjab), Karachi and Tharparkar districts (Sindh), Peshawar and Noshera (Khyber Pakhtunkhwa), and Quetta (Balochistan).

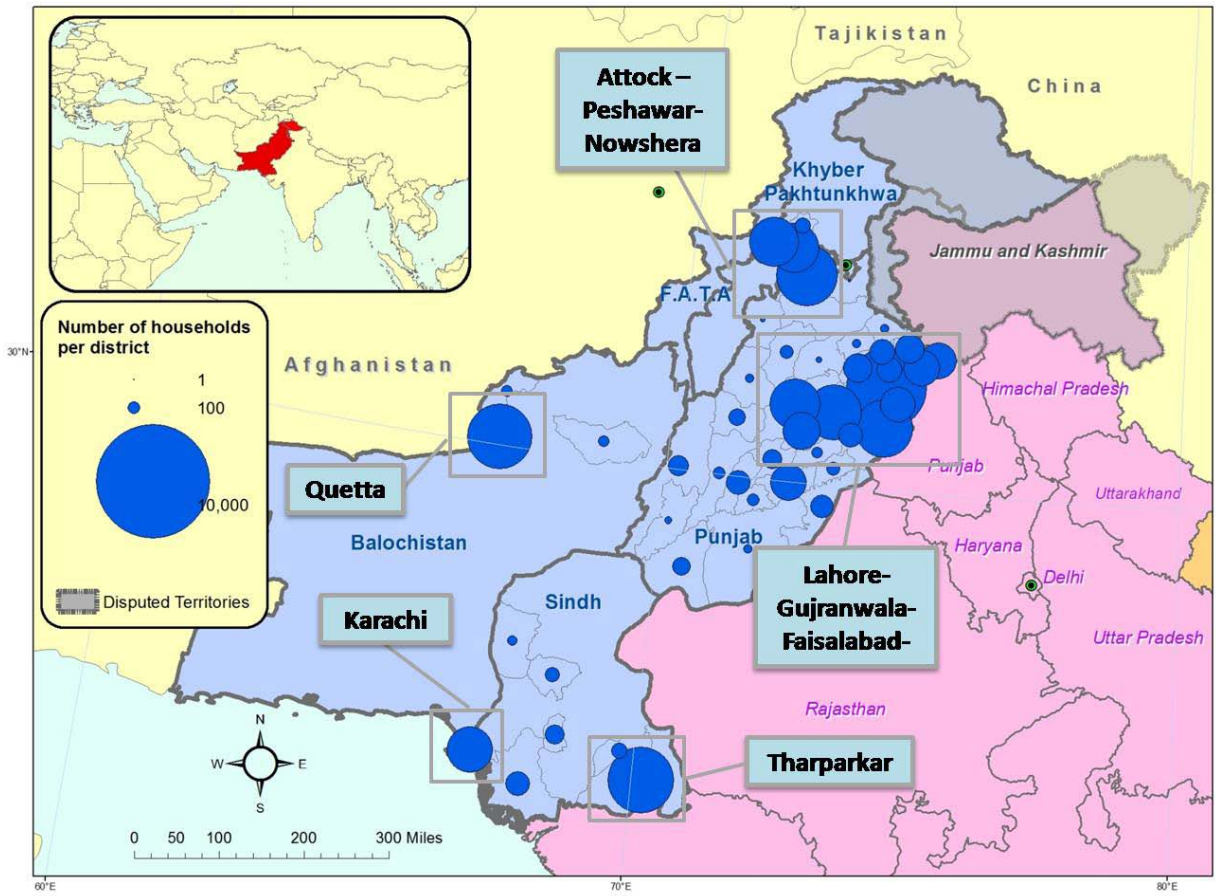
Figure 3. Regional Distribution of Factory-Based Carpet Industry Activities in Pakistan



Source: Sampling frame developed for the factory-based PC study.

Disclaimer: The above map did not reflect a position by ILAB or ICF on the legal status of any country or territory or the delimitation of any frontiers.

Figure 4. Regional Distribution of Household-Based Carpet Industry Activities in Pakistan



Source: Sampling frame developed for the household-based PC study.
Disclaimer: The above map did not reflect a position by ILAB or ICF on the legal status of any country or territory or the delimitation of any frontiers.

4.2. Number and Prevalence of Child Carpet Workers

Based on the surveys of carpet HHs and factories, the study estimated that there were:

- 40,012 carpet establishments (HHs and factories) in Pakistan.[30]
  - Almost all (98.4 percent) were HHs.
- 105,915 total usual workers in the carpet industry in Pakistan.
  - The great majority (91.7 percent) of all carpet workers were HH-based.
- 33,413 usual child carpet workers in the carpet industry in Pakistan.[31]
  - Almost all (96.3 percent) child carpet workers were HH-based.
- The prevalence[32] of children in the industry work force was 31.5 percent (see Table 5).[33]

[30] All of the results in this report express weighted survey data and refer to the situation that existed in 2009 during the surveys.
[31] The current workforce consisted of 26,298 children and 97,044 total workers. The prevalence of children in the current workforce was 27.1 percent.

- Children were much less prevalent (14.0 percent) in the factory workforce.

Table 5. Prevalence of Children Working in the Carpet Industry in Pakistan

	Total	Households	Factories
Total Estimated Number of Establishments	40,012 (100 percent)	39,366 (98.4 percent)	646 (1.6 percent)
Total Estimated N of Carpet Workers	105,915 (100 percent)	97,100 (91.7 percent)	8,815 (8.3 percent)
Total Estimated N of child carpet workers	33,413 (100 percent)	32,181 (96.3 percent)	1,232 (3.7 percent)
Industry Prevalence of Child Workers (%)	31.5 percent	33.1 percent	14.0 percent

Source: Pakistan PC household child survey (June-December 2009), Pakistan PC Factory worker survey (April-July 2009).

4.2.1. Geographic Distribution of Child Carpet Workers

Three-fourths (73.8 percent) of child carpet workers lived in rural areas. Half of the children were in Punjab province, and one-fourth were in Sindh (see Table 6). Of the remainder, two-thirds were in Quetta (Balochistan), and one-third in Khyber Pakhtunkhwa.

Table 6: Estimated Population of Children Working in the Carpet Industry by Province, Setting, and Establishment

	Total		Households		Factories	
	N	%	N	%	N	%
Province						
Punjab	16,551	49.5%	16,383	50.9%	167	13.6%
Sindh	8,434	25.2%	8,184	25.4%	250	20.3%
Khyber Pakhtunkhwa	3,312	9.9%	3,268	10.2%	43	3.5%
Balochistan	5,116	15.3%	4,345	13.5%	771	62.6%
Total	33,413	100%	32,181	100%	1,232	100%
Setting						
Urban	8,756	26.2%	7,842	24.4%	914	74.2%
Rural	24,657	73.8%	24,339	75.6%	318	25.8%
Total	33,413	100%	32,181	100%	1,232	100%

Base: Children who worked in the carpet industry in the last 12 months.
Source: Pakistan PC household child survey (June-December 2009), Pakistan PC Factory worker survey (April-July 2009).

[32]Prevalence and incidence were sometimes considered synonyms, but the two terms had distinct meanings in epidemiology, where prevalence was the number of existing cases (divided by) the population at risk, and incidence was the number of new cases (of some condition) during some period (divided by) the population at risk during that period.

[33] This report consistently refers to the usual workforce (people who worked in the last 12 months) instead of the current (those who worked in the last 7 days) workforce. The composition of the two carpet industry workforces in Pakistan was similar, but the usual workforce was consistently larger.

A very small proportion (only 3.7 percent) of child carpet workers were factory-based, and three-fourths of those children worked in urban areas. Most factory-based child carpet workers were in the large clusters of factories established by Afghan refugees in Quetta (Balochistan). Even though fewer than one-third of all carpet factories were large (11 or more employees), four-fifths (79.6 percent) of the factory-based child carpet workers were found in those large factories (see Table 7). Almost all the rest of the factory-based children were found in medium sized (six to ten employees) factories.

Table 7: Estimated Population of Children Working in Carpet Factories by Factory Size in Pakistan

Factory Size (Number of Employees)	Factories		child carpet workers	
	N	%	N	%
Small (5 or fewer workers)	256	39.7%	17	1.4%
Medium (6 to 10 employees)	201	31.2%	235	19.1%
Large (11 or more employees)	188	29.1%	980	79.6%
Total	646	100%	1,232	100%

Base: Children who worked in carpet factories in the last 12 months.
Source: Pakistan PC Factory worker survey (April-July 2009).

4.3. Characteristics of Children Working in the Carpet Industry in Pakistan

4.3.1. Socio-Demographic Characteristics of Child Carpet Workers

The most significant demographic difference between the child carpet workers in carpet HHs and factories was that girls were more than half (54.8 percent) of the HH-based child carpet workers, but only one-fifth (21.9 percent) of the work force in the carpet factories. The HH-based child carpet workers contained a higher proportion of the oldest (14-17) and the youngest (5-8) children, while the factory-based had a higher proportion of the child carpet workers aged 9-13. The greater proportion (11.0 percent) of HH-based child carpet workers younger than nine years of age showed how many of the youngest children were working in the family setting.

Table 8. Demographic Features of Children Working in the Carpet Industry in Pakistan

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	33,413	32,181	1,232	
Sex of child carpet workers (%)				
Male	46.4	45.2	78.1	*<.01***
Female	53.6	54.8	21.9	
Age of child carpet workers (%)				
5–8 years	10.9	11.0	6.9	*<.05**
9–13 years	39.3	38.9	49.7	
14–17 years	49.9	50.1	43.4	
Median Age	13	14	13	*.37*

Base: Children who worked in the carpet industry in the past 12 months.
Source: Pakistan PC household child survey (June-December 2009), Pakistan PC Factory worker survey (April-July 2009).

4.3.2. Educational Characteristics of Child Carpet Workers

One indication of child labor is when children do not attend or are not allowed to attend school. At the time of the survey, only one-fourth (24.2 percent) of the children working in the carpet industry were attending school. Current attendance rates were similar for household and factory-based children, but a significantly greater proportion of factory-based children had attended school in the past, and a significantly greater proportion of the HH-based child carpet workers had never attended school.[34]

Table 9. School Attendance Status for Child Carpet Workers in Pakistan

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	34,799	33,604 [1]	1,194	
School Attendance Status				
Currently attending	24.2%	24.1%	26.8%	*<.01***
Not attending but attended in the past	14.4%	14.1%	21.7%	
Never attended	59.1%	59.4%	51.5%	
Don't Know	2.3%	2.3%	0.0%	

Base: Children who worked in the carpet industry in the past 12 months. School attendance information missing for 11 Factory Children (weighted N = 37) and 6 HH-Children (weighted N = 156).
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Survey (June-December 2009)
[1]Note: Information on past attendance was not collected from HH-based child workers, so data from household informants was used instead. The Weighted N reflects a different estimate of child workers when using data from household informants.

[34] Information on past school attendance for HH-based child carpet workers came from adult HH interviews.

Children in Pakistan were expected to enter primary school when they became six years old and were expected to complete secondary education (12th grade) when they were 16-17 years old. Using those parameters, the study found that only one-seventh (15.3 percent) of the child carpet workers who were attending school were in the grade that corresponded with their age. The median age-grade delay was two years for HH-based child carpet workers and three years for the factory-based. However, when asked about their age relative to the age of their classmates, three-fourths of the HH-based child carpet workers reported that they were the same age.[35]

Child carpet workers were administered standardized numeracy and literacy tests.[36] In the literacy test, children were asked to read letters of the alphabet, words, sentences, and texts of progressive difficulty (see Table 44). HH-based and factory-based child workers had high levels of illiteracy. One-fourth (27.5 percent) of the child carpet workers could not even recognize letters: another two-fifths (39.2 percent) could read only letters; and a total of three-fourths (74.3 percent) could not read a simple sentence. The proportion that could read at the highest level (able to read the harder text with comprehension) was higher for HH-based child carpet workers (15.6 percent vs. 9.1 percent for factory-based child carpet workers).

In the numeracy test, children were asked to recognize numbers and then solve simple problems of addition and subtraction. Three-fifths of child carpet workers (61.5 percent) could not perform either simple addition or subtraction, and only one-fourth (22.9 percent) could do both addition and subtraction. Factory-based children did significantly better in the numeracy test.

One-third (35.4 percent) of the child carpet workers attending school reported that work interfered with their studies, mostly because the children felt tired at the end of the day or did not have sufficient time left for school. Two-thirds (65.4 percent) mentioned that they missed school for work, and more of the HH-based child carpet workers (24.9 percent vs. 13.2 percent among factory-based child carpet workers) reported missing school for work once a week or more (see Table 45). One-fourth (27.3 percent) of the HH-based child carpet workers who attended school reported that chores interfered with their studies, mostly because they felt tired in the classroom, had to leave school sometimes, or did not have enough time to study (see Table 67).

The main reason child carpet workers reported for not attending school was that they or their families could not afford schooling. Although this was the main reason for both HH and factory-based children, it was reported much more often by HH-based children (75.2 vs. 35.9 percent) In Pakistan, the family usually had to pay tuition fees and buy a school uniform, books, and other learning materials, even for primary education in public schools. The other reasons that were

[35] Factory-based children were not asked this question.

[36] The tests, developed for the Annual Status of Education Report (ASER) in India had been used in annual national surveys since 2005 and had been translated into Urdu. More information on: http://asercentre.org/asersurvey.php

mentioned often were not being interested in school, helping with HH chores, no time for school, and in order to work (see Table 10), all of them reported more often by factory-based children.

Table 10. Reasons for Not Attending School by Child Carpet Workers Who Were Not Currently Attending School

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	24,837	24,005	832	
"Why are you not currently attending school?"				
Cannot afford schooling	73.9%	75.2%	35.9%	*<.01***
Not interested in school	9.2%	8.9%	17.9%	*<.01***
Helping in HH chores	8.1%	7.7%	17.0%	*<.05**
In order to work	6.0%	5.7%	14.6%	*<.01***
No time for school	4.2%	3.8%	15.4%	*<.01***
School not available	4.0%	4.1%	1.2%	*.06*
School too far	3.3%	3.4%	0.0%	*.09*
Poor performance in school	1.0%	1.0%	1.0%	*1.0*
Family/health-related problems	0.8%	0.8%	2.6%	*.08*
Too young for school	0.7%	0.7%	0.8%	*.92*
School not safe	0.4%	0.4%	0.8%	*.58*
Taking care of children in HH	0.4%	0.4%	0.0%	*.64*
Death in family	0.3%	0.3%	0.8%	*.50*
Illness, injury or disability	0.2%	0.2%	0.0%	*.71*
Often tired at school	0.1%	0.1%	1.0%	*.15*
Extended absence from school	0.1%	0.1%	0.0%	*.79*
Taking care of sick HH member	0.1%	0.1%	0.0%	*.79*
Attendance not regular	0.1%	0.1%	0.0%	*.79*
Other	4.7%	4.4%	13.5%	*<.01***
Refused	1.4%	1.4%	3.0%	*.33*

Base: Children who worked in the carpet industry in the past 12 months and were not currently attending school. Information missing for 6 HH children (Weighted N = 160) and 9 factory children (Weighted N = 43).
Note: Multiple response items, totals may add to more than 100 percent.
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

4.3.3. Health Characteristics of Child Carpet Workers

An important indication that children are engaged in hazardous work is when the children are disproportionately ill or injured, especially if they note that the illnesses or injuries were work-related. A significantly greater proportion of the factory-based child carpet workers reported being sick at least once in the last week, last month, and last 12 months (see Table 46). Most illnesses were slightly more prevalent among factory-based children. The most common illness by far was fever (generic), which was reported by one-fifth of the HH-based and almost one-third of the factory-based children. After fever, the most commonly reported illnesses were

diarrhea, stomach problems, malaria, and vomiting. Although respiratory problems associated with dust and lint were noted as important by previous studies of carpet weaving, only a very small proportion of child carpet workers reported having breathing problems (see, for example, Tamang & Frederick, 2006; ILO, 2002).

Work-related injuries were infrequent and much less common than illnesses, but a significantly greater proportion of the factory-based child carpet workers reported being injured during the last month and last 12 months (see Table 47). The most common injuries that were reported (injury or swelling of hands, cuts/wounds, and injuries to eyes and abdomens) were consistent with previous research on occupational diseases in the carpet industry (see, for example, Akida 2007a and 2007b).

Only half of the child carpet workers who were ill or injured during the past 12 months were taken to a medical clinic, health post, or hospital (see Table 62). The most common reason for not going that was reported, particularly among HH-based child carpet workers, was lack of money. Half of the child carpet workers who received treatment were confined to a medical clinic or hospital, and three-fourths were treated by a doctor. In half of the cases, prescription drugs were the treatment, although local herbs were also popular (See Table 63 and Table 64).

4.3.4. Psychosocial Well-Being of Child Carpet Workers

The subjective sense of personal well-being (PWI) of the child carpet workers was measured using a standardized test that contained two summary measures: an overall satisfaction with life (happiness) and a composite index (PWI) score.[37] A general normative range for the PWI score for non-western populations was 60-70 (Lau, Cummins & McPherson, 2004). The average PWI score for child carpet workers was 62.4 for their level of personal well-being, which was within the benchmark range (see Table 48). Factory-based child carpet workers scored their quality of life slightly higher than the HH-based on all dimensions, and there was a significant difference in the health domain, which was surprising since a greater proportion of factory-based children had reported illnesses and injuries (see previous section).

[37] The Personal Well-Being Index (PWI) was originally developed in Australia, validated in several countries and languages, and used in the child labor study of the cocoa industry in Ghana and Cote d'Ivoire (see Cummins & Lau, 2005). The test contained items corresponding to seven quality of life domains: standard of living, health, life achievement, personal relationships, personal safety, community-connectedness, and future security. The test also provided a composite measure (the Personal Well-being Index) from aggregating and averaging each domain score. For scoring and interpreting guidelines, the full PWI-SC manual was available from the Australian Centre on Quality of Life, Deakin University, on: http://acqol.deakin.edu.au/instruments/PWI/PWI-school.pdf

4.4. Characteristics of Children's Entry into the Carpet Industry

The study looked at when the children started working (their entry into the industry's workforce) because indications that working children were being exploited would include the child not making voluntarily the decision to start working, the child being pressured to work, the involvement of third parties (such as labor contractors or creditors) in the decision or in making the arrangements, and any linkage between family debt and the child's working.

4.4.1. Reasons Why Children Work

When child carpet workers were asked about the main reason they worked, the great majority (84.5 percent) reported that their main reason for working was to supplement family income. This reason was reported most often among HH-based children (85.3 percent vs. 69.7 percent among factory-based children), but it was clearly the main reason for most children in both groups (see Table 11). The other reasons selected by both HH-based and factory-based child carpet workers were helping with the family enterprise and repaying an outstanding family debt. More of the factory-based also mentioned not being able to afford school fees.

Table 11. Reasons to Work among Child Carpet Workers in Pakistan

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	25,307	24,086	1,221	
"What is the main reason you work?"				
To supplement family income	84.5%	85.3%	69.7%	
To help in household enterprise	5.5%	5.3%	7.9%	
To pay outstanding family debt	5.2%	5.2%	4.6%	
Cannot afford school fees	1.2%	1.0%	5.7%	<.01**
To learn new skill	0.7%	0.7%	1.5%	
For personal expenses, food, clothing	0.4%	0.3%	2.4%	
Others	0.3%	0.1%	2.9%	
DK/NR	2.4%	2.2%	5.4%	

Base: Children who worked in the carpet industry in the past 12 months. Information missing for 251 HH Children (weighted N =8,096) and three Factory Children (weighted N =10).
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

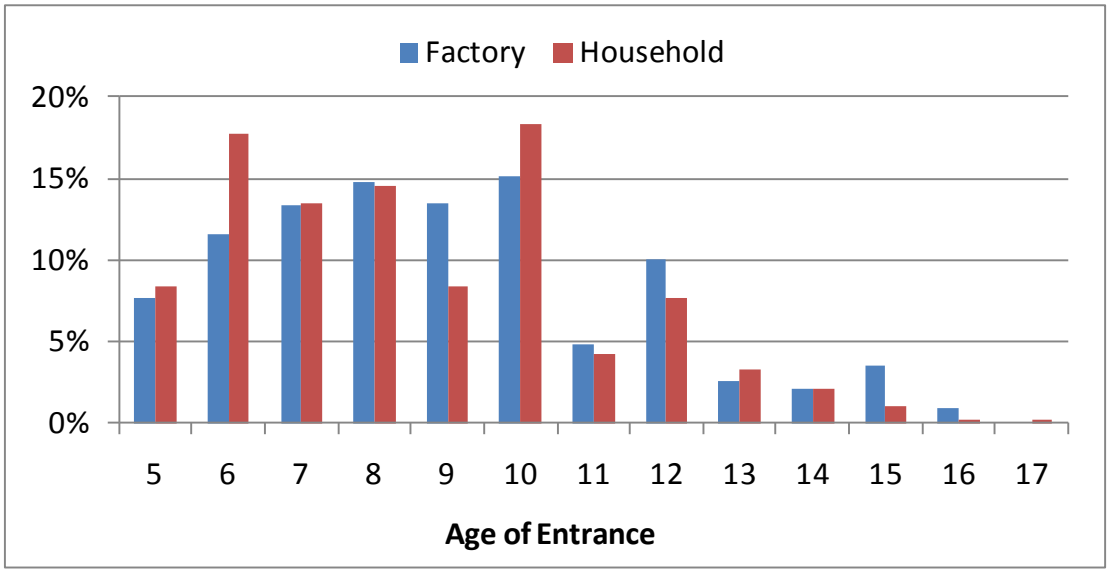
Working to repay outstanding family debt indicates possible bonded labor, so the study looked at the characteristics of the HH-based and factory-based child carpet workers who reported that their main reason to work was to repay outstanding family debt. All those children were living with their parents. Three-quarters (73.9 percent) of the HH-based and 100 percent of the factory-based who said that their reason to work was to repay family debt also reported that they were

unable to leave their jobs even if they wanted to, primarily because they were still repaying debts (see Table 11).

4.4.2. Age When Children Began Working

The study examined whether children started working before they were old enough to be considered capable of making independent decisions. A majority of the children working in the carpet industry in Pakistan began carpet-related work activities before they were nine years old (see Figure 5). The median starting age was eight years old for HH-based and nine years old for factory-based child carpet workers.[38]

Figure 5. Age When Child Carpet Workers Began Engaging in Carpet Activities in Pakistan



Base: Children (5-17) interviewed in the PC study who had worked in the carpet industry in the last 12 months and provided a valid response.
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

4.4.3. Voluntary and Forced Migration When Entering the Workforce

The study examined each child's migration status because indications that child trafficking was occurring included the child migrating to work (labor migration), a third party (labor contractor) being involved in the decision to move and/or organizing the move, and the parents receiving money or repaying a debt in exchange for the child's move to work.

[38] Two percent of the children reported starting to work before they were five years old. Those reports were dismissed as probably invalid. If they were accepted, that would lower the median age.

In terms of their migration status and origin, there were significant differences between the HH-based and factory-based child carpet workers. Almost all (95.0 percent) of the HH-based child carpet workers in Pakistan were born where they were surveyed, but almost one-fifth (17.5 percent) of the factory-based children were born in another country (see Table 49). The great majority (88.5 percent) of the children born elsewhere were from Afghanistan and had come with their parents as refugees.

The great majority of the child carpet workers who had migrated to the place where they were surveyed were living and working in HHs with their parents. Only half of the migrant child carpet workers reported migrating voluntarily, but this was not perceived as an indication of forced labor because the great majority of both HH-based and factory-based children reported that their parents had made the decision to migrate (see Table 50). Almost no one reported that a third party, such as a labor contractor, had made the decision. There were mixed responses when the migrant children were asked the main reason for migrating to the place where they were surveyed (see Table 12). The most common response was that they moved with their family, while others confirmed that they came as refugees.

Table 12. Purpose of Migration among Migrant Child Carpet Workers in Pakistan

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	1,750	1,537	213	
"What was the main reason you came here?"				
Job transfer or found a job	4.2%	4.2%	4.6%	
Looking for a job	16.9%	16.2%	21.8%	
To be closer to school	0.0%	0.0%	0.0%	
Marriage or divorce	0.0%	0.0%	0.0%	*.51*
Moved with family	40.2%	40.8%	36.0%	
Came as a refugee	8.6%	9.8%	0.0%	
Other (Specify)	14.9%	13.5%	24.9%	
DK/NR	15.2%	15.6%	12.6%	
Indicators of Organized Movement				
"Did you have a job waiting for you when you arrived at this town/locality?" ("Yes")	11.3%	10.6%	17.0%	*.50*
"Was a labor contractor/recruiter involved in finding your job?" ("Yes")	17.1%	16.2%	24.0%	*.39*
"Did anyone receive money/anything else/repay a debt in exchange for your move?" ("Yes")	2.3%	1.8%	5.7%	*.37*

Base: Children who worked in the carpet industry in the past 12 months and were born elsewhere.
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

One-fifth of the HH-based and one-fourth of the factory-based migrant child carpet workers qualified as labor migrants because they reported moving for work-related reasons (looking for a

job, job transfer, or found a job). There also were indications that the movement of some of the child carpet workers had been organized. One-tenth said a job was waiting for them when they arrived. A greater proportion reported that a labor contractor had been involved in finding the job, and a small proportion of the migrant children reported that someone had received money (or repaid a debt) in exchange for the child's move.

There might have been some misinformation or possibly deceit in the way that migrant children were recruited to work. One-fourth of the migrant child carpet workers reported that their jobs had not lived up to their expectations, mostly because what the children earned was different from what the children had expected (see Table 51).

4.5. Characteristics of Children's Work in the Carpet Industry

The study looked at the nature of children's work and working conditions because indications that working children were being exploited would include the work being hazardous, the compensation being inadequate, or the child suffering in the workplace for other reasons.

4.5.1. Children's Specific Work-Related Activities in the Carpet Industry

The team started with a wide scope that allowed the possibility to find children involved in many activities in the carpet industry, but almost all HH-based and the great majority of factory-based child carpet workers in Pakistan had one primary task -- weaving (hand-knotting) carpets (see Table 52). The second most common activity for both HH-based and factory-based child carpet workers was hand-looming carpets, another technique to produce carpets that was relatively uncommon in Pakistan. Factory-based (and HH-based to a lesser degree) children became involved to a much smaller extent in a range of other activities. Factory-based child carpet workers, especially the older ones, were involved in washing carpets and other carpet-finishing activities, and a small proportion of HH-based children's work was spinning wool (see Table 52). The almost total concentration on carpet production overwhelmed any significant age or gender differences in terms of the carpet-related tasks that children performed (see Table 57).

4.5.2. Seasonal Variation in Children's Work in the Carpet Industry

The great majority of both HH-based and factory-based child carpet workers reported that they worked 12 months of the year. There was little, if any, seasonality (see Figure 6). The factory managers were also questioned about seasonal variation. Three-fifths of the factory managers reported that work in the factory-based carpet industry did not follow a seasonal pattern (see Figure 7). One-third of the factory managers reported that there was seasonal variation, but they

did not consistently agree on which months were high and low employment. June, July, and August were mentioned as months of both high and low employment.

4.5.3. Weekly and Daily Hours of Work by Child Carpet Workers

The study examined when and how long the children worked because indications that children were exploited at work included their working too many hours or working at inappropriate times. Almost every child carpet worker worked at least six days a week, and two-thirds of the HH-based children had worked every day of the last seven days (See Figure 8).[39] Friday, the Muslim day of worship, was the only day when a significant proportion (one-fourth) of children had not worked.

Child carpet workers worked long hours every day they worked; the median number was nine hours of work per day (see Table 13). Both in factories and HHs, girls worked slightly longer than boys, and older children worked slightly longer than the younger.[40] Pakistan's Employment of Children Act (ECA) established maximum working hours at six per day, and three-fourths of the child carpet workers worked more than that.

Even child carpet workers who were currently attending school worked long hours. In addition to the time they had to spend in school-related activities, those children worked a median of six hours per day, with two-fifths (42.3 percent) working longer than the six hours established by the ECA.

Table 13. Hours Worked Per Day by Child Carpet Workers Who Worked in Last Three Days by Setting and by School Attendance

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	22,407	21,225	1,182	
Hours worked (All child carpet workers) [1]				
Total working 6 hours or less	24.3%	24.5	20.8%	*.52*
Total working more than 6 hours	75.7%	75.5%	79.2%	
Median hours worked	9 hours	9 hours	10 hours	*.45*

[39] Questions regarding the number of days worked during the week were answered only by the current workers, who had worked during the last week. The project focused only on the current workers and the past seven days when the children's recollections would be more accurate and precise. Questions regarding the specific hours worked during the work day were asked only about the last three days to ensure more precise and accurate information.

[40] The estimated numbers of days and hours worked were generally in line with previous ILO assessments (Nasir, 2004: AKIDA 2001, 2007a, 2007b)

Hours worked (Child carpet workers who were currently attending school) [2]				
Weighted N=	5,968	5,648	320	
Total working 6 hours or less	57.7%	57.4%	62.8%	*.60*
Total working more than 6 hours	42.3%	42.6%	37.2%	
Median hours worked	6 hours	6 hours	6 hours	*.49*

[1] Base: Children who worked in the last three days. Work hours included carpet and non-carpet work. Information missing for 1 HH child (weighted N = 26).
[2] Base: Children who worked in the last three days and were currently attending school. Work hours included carpet and non-carpet work. Information missing for 1 HH child (weighted N = 26).
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009).

Pakistan's ECA also prohibits children from working from 7:00 p.m. to 8:00 a.m. (night-time). A significantly greater proportion (74.6 vs. 52.7 percent) of the factory-based child carpet workers had worked during those prohibited hours at least once during the last three days, primarily because those children started working before 8 a.m. (see Table 14).

Table 14. Work at Night Among Children Who Worked in the Last Three Days in Pakistan

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	22,407	21,225	1,182	
Work at Night				
Not working at night	46.1%	47.3%	25.4%	*<.01***
Finished working after 19:00 at least once in the last three days	11.9%	12.2%	6.6%	
Started working before 08:00 at least once in the last three days	42%	40.5%	68.0%	

Base: Children who worked in the last three days. Work included carpet and non-carpet work.
Note: Night hours of 19:00 to 08:00, based on Pakistan 1991 Employment of Children Act.
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

There was a significant difference between the HH-based and factory-based child carpet workers in terms of break time. Pakistan's ECA stipulated that children should have a one-hour break after three consecutive hours of work. Children working a median of nine hours a day would have a median of three hours of break a day, which is what the HH-based child carpet workers received[41]. One-fifth (20.3 percent) of the factory-based children reported that they had no break from work, and the median was only one hour of break per day (see Table 15).

[41] This figure must however be interpreted with caution given the large proportion of children that could not report the number of hours spent on breaks. More than one-fourth (28.6 percent) of HH-based child carpet workers did not know the time spent on breaks or did not provide a response. These DK/NR values were excluded from the computation of the median.

Table 15. Break Time among Children Who Worked in the Last 3 Days in Pakistan

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	25,783	24,557	1,225	
Combining all breaks during a day, how many hours are spent on breaks and not working?"				
None	3.1%	2.3%	20.3%	
Some time but less than 2 hours	29.9%	27.5%	79.7%	
3-4 hours	16.8%	17.6%	0.0%	<.01**
5-6 hours	10.4%	10.9%	0.0%	
More than 6 hours	11.9%	12.5%	0.0%	
DK/NR	27.9%	29.3%	0.0%	
Median Number of Hours	3 hr.	3 hr.	1 hr.	<.01**

Base: Children who worked in the last 3 days. Information missing for one Household Child (weighted N = 28).
Note: Night hours of 19:00 to 08:00, based on Pakistan 1991 Employment of Children Act.
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009).

4.5.4. Children's Environmental Working Conditions in the Carpet Industry

The study examined the children's working environment because indications that the children were being exploited included hazardous work, which by international standards was work that was "likely to harm the health, safety or morals of children" (see ILO C182 in 1.1). Hazardous working conditions existed when children were exposed to dangerous agents or risky processes at work. Quantifying health and safety hazards is one of the main challenges in child labor research. Those hazards were measured in this study using worksite observations and worker self-reports. Those measures were able to identify potentially hazardous elements or situations but could not determine if the elements or situations existed at levels that were sufficient to represent actual health hazards.

The survey teams observed and subjectively evaluated conditions in carpet factories (see Figure 9). Two-thirds of the factories were considered to be somewhat clean with the air quality being a little dusty. One-third of the factories were judged to have poor air quality, ranging from being dirty to having air that was hard to breathe. Almost one-third were congested and had inadequate lighting. Safety measures to protect workers were not observed in any factory.

The majority of child carpet workers complained about their environmental working conditions (see Table 16). The major conditions that were reported by HH-based child carpet workers included working in rooms with smoke/dust/flames, extreme temperatures, inadequate lighting, and insufficient ventilation. The factory-based child carpet workers also complained about those conditions, and a significantly greater proportion of the factory-based children complained about their exposure to loud noises and viral agents and that they sometimes worked at heights.

Traditional Persian hand-knotting

Comb and cutter for hand-knotting

Carpet factory - Afghan Camp (Sindh)

The children's major tasks (weaving/hand-knotting and, to a much lesser extent, hand-looming, carpets) involved no machinery and only a few tools (see Table 16).[42] This study considered the scissors, needles, cutters, and knives to be sharp and potentially dangerous tools, and a significantly greater proportion of the HH-based child carpet workers reported using those tools at work.[43] When asked for their subjective opinion, more than two-fifths of both the HH-based and factory-based child carpet workers reported that their work was physically difficult.

Table 16. Workplace Conditions and Tools Used by Child Carpet Workers in Pakistan

Workplace Hazards	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	25,307	24,086	1,221	
Chemical Agents				
Smoke/dust/flames	53.9%	53.5%	63.1%	*.11*
Insecticides/paints/fumes/odor	5.9%	5.7%	9.7%	*.11*
Chemical solvents/petrol/diesel/kerosene	1.1%	1.0%	2.7%	*.17*
Ammonia, oxygen or other gases	2.3%	2.1%	4.9%	*.12*
Other chemical hazards	0.4%	0.3%	1.3%	*.17*
Physical Agents				
Loud noise (from machine/people)	16.5%	15.2%	42.8%	*<.01***
Dangerous tools	12.3%	12.3%	13.1%	*.78*
Heights	3.1%	2.7%	9.8%	*<.01***
Extreme temperatures	32.3%	32.3%	32.1%	*.96*
Slip, trip, or falling hazards	5.2%	5.0%	8.9%	*.06*
Insufficient ventilation	20.6%	20.4%	24.0%	*.37*
Dark/in rooms with inadequate lighting	31.3%	31.6%	24.1%	*.15*
Ultraviolet or x-rays	0.2%	0.1%	2.3%	*<.05**

[42] The most common tools included scissors to cut thread, a comb to pack the warp, and rods and sticks to compress and keep the thread in place. Sometimes additional cutters and needles were needed to correct weaving mistakes.

[43] Aside from the loom, the most common tools were also used by the household-based children who worked in other industries.

Workplace Hazards	Total	Children Working in Households	Children Working in Factories	p-value
Underground or in tunnels	0.7%	0.5%	3.1%	*.07*
Other physical hazards	0.8%	0.7%	1.8%	*.10*
Biological Agents				
Viral	9.4%	8.8%	21.1%	*<.01***
Bacterial	7.6%	7.5%	9.6%	*.37*
Fungal	2.9%	2.9%	2.2%	*.64*
Parasitical	2.3%	2.3%	3.9%	*.29*
Other biological hazards	2.1%	2.2%	0.4%	*<.05**
Work with Heavy Loads				
Usually	8.5%	8.4%	10.4%	*.12*
Sometimes	22.6%	22.0%	33.8%	
No	66.9%	67.4%	55.8%	
DK/NR	2.1%	2.2%	0.0%	
Work with Dangerous Tools				
Scissor	40.8%	41.6%	24.8%	*<.01***
Comb	28.0%	28.6%	15.8%	*<.01***
Cutter	18.8%	19.1%	14.4%	.15
Needles	10.9%	11.2%	4.4%	*<.05***
Knife	10.8%	11.2%	3.9%	*<.05***

Base: Children who worked in the carpet industry in the past 12 months. Information missing for 251 HH-based child carpet workers (Weighted N = 8,096) and 6 Factory-based child carpet workers (Weighted N = 24).Source: Pakistan PC household child survey (June-December 2009), Pakistan PC Factory worker survey (April-July 2009).
Note: Multiple response items, so totals may exceed 100 percent.

Work is less hazardous if the children receive training and are adequately supervised. There were significant differences between HH-based and factory-based child carpet workers in this regard. The great majority (91.5 percent) of factory-based but only two-thirds (67.7 percent) of the HH-based child carpet workers had received training in how to use their tools. A slightly greater proportion of factory-based child carpet workers were supervised by an adult at work (see Table 53).

Other hazardous working conditions included the child being severely punished and being sexually abused. There were significant differences between HH-based and factory-based child carpet workers in terms of being reprimanded and punished and possibly being sexually abused. One-fourth (25.1 percent) of the factory-based child carpet workers reported being reprimanded or punished at work, compared to only one-eighth (13.1 percent) of the HH-based child carpet workers (see Table 17). The factory-based children were usually reprimanded by an employer or supervisor, while the HH-based children were usually reprimanded by their parents.

A small proportion (3.8 percent) of the factory-based child carpet workers reported being punished to the extent of being physically injured, and almost double that proportion (6.8 percent) reported being touched inappropriately at work, which suggested possible sexual abuse (see Table 17). The sample base for pursuing the possible abuse was quite small, so the results should only be expressed qualitatively. Most reported perpetrators were authority figures in the workplace (managers, employers, or supervisors), although parents were also mentioned. A significantly smaller proportion of HH-based child carpet workers reported being punished to the extent of being physically injured or being touched inappropriately at work. The reported perpetrator of inappropriate touches for HH-based children was typically a stranger.

Table 17. Punishment and Potential Abuse for Child Carpet Workers in Pakistan

Exposure to Punishment/Abuse	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	25,337	24,116	1,221	
Punishment and Potential Abuse				
"Are you reprimanded or punished at work?" ("Yes")	13.7%	13.1%	25.1%	<.01**
"Have you been punished to the extent that you were physically injured?" ("Yes")	0.9%	0.8%	3.8%	<.01**
"Have you ever been touched in an inappropriate manner while you were working? ("Yes")	1.1%	0.8%	6.8%	<.01**

Base: Children who worked in the carpet industry in the past 12 months. Information missing for 250 HH-based child carpet workers (Weighted N = 8,065) and 3 Factory-based child carpet workers (Weighted N = 10).

Source: Pakistan PC household child survey (June-December 2009), Pakistan PC Factory worker survey (April-July 2009).

Work that harms the morals of children is also considered hazardous, and another aspect of the workplace environment is the potential for permitting or enabling the child carpet workers to observe and engage in behaviors that are considered socially and culturally immoral or unhealthy (see Table 54). The most prevalent of those factors for HH-based child carpet workers were observing children and youths stealing, fighting, and smoking, followed by children and youths abusing drugs.

4.5.5. What Children Earned by Working in the Carpet Industry

The study examined how children were compensated for working because indications that the children were exploited at work included their not being paid, being paid less than other workers, not earning enough to support themselves, or having difficulties collecting their payments. An indication that children were in bonded labor would be their earnings being used to repay debts. Additionally, children whose earnings were controlled by their employers and reportedly sent to

their parents were vulnerable to being cheated out of their earnings and at greater risk of bonded labor.

As compensation for working, the great majority of child carpet workers received cash and, to a much lesser extent, shelter, food, and clothing, and a small proportion reported that they were learning new skills. HH-based child carpet workers reported earning a median of 400 rupees per week (5 USD), which was less than the median of 500 rupees earned by the factory-based children. One significant difference was that a small proportion (6.4 percent) of HH-based child carpet workers (vs. hardly any factory-based children) reported that they received nothing for their work (see Table 55).

Minimum wage laws[44] were first decreed in Pakistan in 1992, after which the minimum wage had been raised progressively to reach 6,000 rupees per month. HH-based child carpet workers reported earning a median of 400 rupees per week (5 USD), with factory-based children earning slightly more (500 rupees per week). To put that in context, the median estimated cash value of all earnings (including cash and in kind) for adult workers in factory settings was triple that much (1,500 rupees or 19 USD per week). Wages earned by child carpet workers in Pakistan were clearly below those earned by adult workers doing similar tasks and were also below the minimum wage in Pakistan.

There were a variety of ways for workers to be paid. A significantly greater proportion of the factory-based child carpet workers were paid by the month and upon completion of a task, while a significantly greater proportion of HH-based children were paid on a piecework basis (see Table 55). There also were significant differences in terms of the child carpet workers receiving sick benefits while working. One-third (31.8 percent) of the factory-based child carpet workers (compared to only 9.9 percent of the HH-based) reported that their employers would bear some or all of the expenses if the child became ill or injured during work (see Table 56).

4.5.6. Transfers, Remittances, and Expenses

There were significant differences between HH-based and factory-based child carpet workers in terms of the children's earnings being transferred to the parents or remaining with the children. The "employers" of HH-based child carpet workers were usually the parents or other family members. Asking those HH-based children whether their employers had given the children's earnings to their parents was really asking about an intra-family distribution, i.e., whether the parents had kept all or part of the children's earnings. The child carpet workers who were not

[44] Minimum wage established in 2008. Minimum wages were raised to 7,000 rupees as of May 1, 2010. (See 2010 Pakistan Labour Policy http://www.lmis.gov.pk/LPP.pdf)

working for or living with their parents were being asked about an actual transfer of money from the employer to the parents, who may have lived nearby or far away.

Table 18. Recipient of Payment for Child Carpet Workers in Pakistan

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	24,789	23,562	1,227	
"Do you or your employer give part or all earning/benefits to parents/guardian?"[1]				
Yes, all given directly through the employer	53.1%	53.6%	43.8%	*<.01***
Yes, I give all by myself	19.3%	18.8%	29.3%	
Yes, part given through the employer	6.5%	6.7%	1.7%	
Yes, I give part by myself	7.7%	8.0%	2.7%	
No, none is given to parents or relatives	5.0%	4.4%	17.9%	
DK/NR	8.3%	8.5%	4.6%	
Remittances [2]				
"In the past 12 months, did you send any money to your parents/family?" ("Yes")	27.2%	24.1%	49.5%	*.05*
"Did someone else send any money to your parents/family in past 12 months?" ("Yes")	10.0%	10.2%	9.3%	*.89*

[1]Base: Children who worked in the carpet industry in the past 12 months and received something in exchange for work. Information missing for 3 HH-based child carpet workers (Weighted N = 92).
[2]Base: Children who worked in the carpet industry in the past 12 months and were born elsewhere.
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

A significantly greater proportion of HH-based child carpet workers reported that the employer had given all (53.6 percent) or some (6.7 percent) of their earnings directly to the parents (see Table 18). A significantly greater proportion of the factory-based children reported that they controlled their earnings and gave all (29.3 percent) or none (17.9 percent) of their earnings to their parents.

Because of the greater potential for trafficking when children migrate to work, the study analyzed the small minority of child carpet workers who were born elsewhere. Half of the factory-based and one-fourth of the HH-based reported sending cash remittances to their parents or family during the past 12 months. Another one-tenth of HH-based and factory-based child carpet workers reported that someone else had sent money to the parents, which might indicate payments related to bonded labor.

Most child carpet workers spend the money they earn on food and clothing. However, in addition to the proportion of children transferring their money to their parents, there were also significant differences between HH-based and factory-based child carpet workers in how they spent any

money that they kept. There were indications that the child carpet workers in factories were more self-reliant and received less support from their families (see Table 19). Two-thirds (62.5 percent) of the factory-based but fewer than half (44.1 percent) of the HH-based reported buying food or clothing, and a slightly greater proportion of the factory workers also paid rent, while a greater proportion of the HH-based saved some of their earnings. Congruent with the earlier mention that some HH-based children did not receive anything for working, a significantly greater proportion (4.6 percent) of the HH-based reported that they did not earn any cash to spend.

Table 19. Use of Money Earned by Child Carpet Workers in Pakistan

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	24,334	23,117	1,217	
"What do you do with any money you earn?"				
Buy school material	9.2%	9.1%	12.4%	*.28*
Buy food or clothing	45.0%	44.1%	62.5%	*<.01***
Buy more goods to sell	3.7%	3.7%	3.7%	*.98*
Expend in amusements	16.2%	16.5%	10.7%	*.16*
Pay rent	3.0%	2.8%	6.2%	*<.05**
Save	7.4%	7.6%	3.0%	*<.01***
Others	15.2%	15.4%	12.3%	*.42*
Do not earn cash	4.4%	4.6%	0.5%	*<.01***
DK/NR	9.1%	9.1%	9.0%	*.99*

Base: Children who worked in the carpet industry in the past 12 months and received something in exchange for work. Information missing for 17 HH-based child carpet workers (Weighted N = 475) and 3 Factory-based child carpet workers (Weighted N = 10).
Note: Multiple response items, so totals may exceed 100 percent.
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

4.5.7. Children's Ability to Leave Work in the Carpet Industry

The study looked at whether children were able to stop working and leave the workplace (their exit from the industry's workforce) because indications that working children were being exploited and forced to work would include the children reporting that they could not leave their job and when the reasons why they could not leave included the threat of being punished or the need to repay debts.

Table 20. Indicators of Ability to Leave Job by Child Carpet Workers in Pakistan

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	33,403	32,181	1,221	
Indicators of vulnerability				
Child not working for parents	-	10.3%	-	-
Child was not living with parents or spouse	8.3%	8.3%	6.0%	*.62*
Child was born elsewhere	5.2%	4.8%	17.3%	*<.01***
Ability to leave job				
Child was unable to leave job if he/she wanted	42.8%	42.2%	57.5%	*<.01***
"Why are you unable to leave this job?"				
Still paying off a debt	4.1%	3.9%	9.8%	*<.01***
Boss threatened harm if try to leave	0.2%	0.2%	0.3%	
Parents would punish	18.7%	18.2%	30.7%	
No other work available	12.6%	12.7%	9.5%	
Not enough money to leave	4.8%	4.8%	5.2%	
Wouldn't know where to go	1.4%	1.4%	0.3%	
Other	0.2%	0.2%	0.8%	
Refused	0.8%	0.8%	0.5%	

Base: Children who worked in the carpet industry in the past 12 months. Information missing for 3 Factory-based child carpet workers (Weighted N = 10).
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

Two-thirds (42.8 percent) of child carpet workers reported that they were unable to leave their job even if they wanted to leave (see Table 20).[45] The proportion saying that they were unable to leave was significantly greater among factory-based child carpet workers (57.5 percent vs. 42.2 percent of the HH-based). One-third (30.7 percent) of the factory-based (vs. only 18.2 percent of the HH-based) said that the main reason for being unable to leave their jobs was that their parents would punish them. That did not indicate forced or bonded labor, but did show that many child carpet workers continued to work because of parental pressure. There was an indication of bonded labor because one-tenth (9.8 percent) of the factory-based children (vs. only 3.9 percent of the HH-based) said that they could not leave because they were still repaying a debt. All of the children who reported not being able to leave because of repaying a debt were living with their parents.

4.6. Comparative Perspective of Child Carpet Workers

[45] Some reasons why the children reported not being able to leave, such as not being able to find another job, not having enough money, or not knowing where to go did not indicate forced or bonded labor.

The target population of this study -- child carpet workers – has been described. Now it is important to place those children in perspective. The environment where the HH-based carpet industry was located in Pakistan was the relevant environment for almost all of the children working in the carpet industry in Pakistan because 96.3 percent of child carpet workers were based in carpet HHs.[46] Only some HHs in each sampled area were carpet HHs. How did the carpet HHs compare with their neighbors, and how did the living and working conditions of the child carpet workers in those carpet HHs compare with the conditions of other working children in the same areas? The study achieved that perspective by sampling reference (non-carpet) HHs in the same local areas (three-fourths of which were rural) where the study sampled carpet HHs. The sampled carpet HHs were representative of all carpet HHs in Pakistan, but the sampled non-carpet HHs represented only the areas where carpet HHs were located.

4.6.1. Household Poverty and Indebtedness

4.6.1.1. Household Poverty

The sampled areas were characterized by rural poverty. Few carpet and non-carpet HHs owned agricultural land, and fewer than one-third owned any livestock (see Table 21). Land and livestock were very significant assets for rural residents, and three-fourths of the landless carpet HHs and an almost equal proportion of the landless non-carpet HHs were rural. Their landlessness was an important measure of poverty and low social standing.

Carpet HHs were relatively worse off than non-carpet HHs. Carpet HHs owned fewer other durable goods than non-carpet HHs, with the obvious exception of carpet looms. Half of the carpet HHs reported difficulty finding money to buy clothes, and an additional one-fifth were even poorer, not having enough money to buy their food. A slightly smaller proportion of non-carpet HHs reported the same difficulties, and more of the non-carpet HHs reported being able to save money or buy expensive goods.

Table 21. Socio-Economic Status of Carpet and Non-Carpet HHs in Pakistan

HH Socio-economic Indicators	Carpet HH	Non-Carpet HH	p-value
Weighted N=	39,313	39,337	
Self-reported economic status			
We don't have enough money for food	18.0%	12.0%	*<.01***
We have enough money for food, but buying clothes is difficult	48.4%	42.5%	
We have enough money for food/clothes & can save, but not to buy expensive goods	21.0%	25.1%	

[46] In the HH survey, an adult informant (the head of HH or the most knowledgeable member) in each HH and all children (5-17 years old) were questioned about the children's work. The reports from the adults and children were similar. This study preferred and reports the data from the children reporting their own personal work patterns and conditions.

HH Socio-economic Indicators	Carpet HH	Non-Carpet HH	p-value
We can afford to buy certain expensive goods such as a TV set/refrigerator	7.2%	12.5%	
We can afford to buy whatever we want	0.6%	2.4%	
DK/NR	4.8%	5.6%	
HH assets (% of HH that own each asset)			
Agricultural land	7.1%	10.3%	*<.05**
Livestock or cattle	28.7%	28.5%	*.06*
Refrigerator	11.2%	25.8%	*<.01***
Motorbike	6.2%	15.3%	*<.01***
Mobile Telephone	50.4%	60.9%	*<.01***
Loom for carpets	34.3%	1.8%	*<.01***

Base: Households interviewed for the PC HH survey. Information missing for 2 Carpet HHs (Weighted N = 52) and 1 Non-carpet HH (Weighted N = 28).
Source: Pakistan PC HH survey (Dec. 2008-April 2009)

4.6.1.2. Household Indebtedness

One-fifth of both sets of HHs (22.3 percent of carpet HHs) had acquired some debt and reported similar reasons to acquire debts: a ceremony or celebration, purchasing a domestic appliance, purchasing or improving the house, or expanding a family business (see Table 60). Five percent of the indebted carpet and non-carpet HHs had acquired the debt to pay off another debt, which was a sign of debt distress and an indication of possible debt bondage.

Half (48.3 percent) of the indebted carpet HHs would not say how much they owed. Those that did respond reported that the median family debt was 3,000 rupees (38 USD, see Table 37), but 9.0 percent of those HHs reported that the family owed more than 5,000 rupees (63 USD).[47] The report on bonded labor in Pakistan had noted that larger debts (more than 5,000 rupees) had more serious consequences because high fees and interest rates sometimes resulted in the debts accumulating and leading to bonded-labor conditions (Nasir, 2004).

Two-fifths of both sets of HHs reported that the last lender was a local money lender, followed by a family member and then a store where goods were purchased (see Table 37). Only one in every 15 carpet HHs had borrowed from an employer, an indication of possible bonded labor.

In both sets of HHs, two-thirds of those that acquired debt reported difficulties in the last 12 months in repaying debt. Both sets reported than an "unexpected expense" was the main reason that made it difficult, followed by lower than expected agricultural production and the injury or illness of HH members. The only significant difference was that carpet HHs also reported "lower

[47] The dollar amount was rounded. There was no comparison with non-carpet HHs because of the high proportion of respondents who refused to provide the information or ignored the question and the insufficient sample size.

than expected income from enterprise" (possibly referring to the carpet industry), which suggested that carpet HHs might be suffering from the ongoing downturn in the carpet industry.

4.6.1.3. Repayment of Household Debts and Child Labor

The carpet HHs reported possible consequences for not repaying debts (see Table 39).[48] The most commonly reported were losing personal assets (noted by one-third of the respondents) and accumulating fees/debt (one-fourth). Possible indicators of forced or bonded labor included threats from the creditor (18.6 percent of respondents) and providing labor to the creditor (6.3 percent).

There was a link between the indebtedness of a small percentage of carpet HHs and the use of child labor to repay those debts. Adults in the HHs that had acquired debt and had difficulty repaying it were asked if any HH member was currently providing labor to repay any debt. Fewer than three percent of carpet HHs reported providing labor to the lender to repay outstanding debt, but, when asked to identify which member of the HH provided that bonded labor, a very small number (four cases unweighted) of carpet HHs reported that a child had provided the labor. That represented an estimated weighted total of 80 children (14-17 years of age) from the carpet HHs.

4.6.2. Socio-Demographic Characteristics

4.6.2.1. Socio-Demographic Characteristics of Households

Almost all the HHs were headed by married Muslim men, and two-thirds of the other adults (excluding the heads) were women (see Table 22), but there were a number of significant differences. Carpet HHs were larger with one more child. The heads of carpet HHs were older, and a greater proportion were women and migrants. Although the majority of adults (including heads) in both sets of HHs had never attended school, a significantly greater percentage of heads and other adults in carpet HHs had never attended. Two-thirds of the other adults (excluding heads of HHs) in carpet HHs had worked in the last 12 months, compared to only one-third of the other adults in the non-carpet HHs.

[48] The sample size of non-carpet HHs that had acquired debt and had difficulty repaying was insufficient.

Table 22. Socio-Demographic Characteristics of Carpet and Non-Carpet Households in Pakistan

HH Socio-Demographic Indicators	Carpet HHs	Non-Carpet HHs	p-value
Weighted N=	39,366	39,366	
HH Demographics[1]			
Setting (% rural)	78.3%	69.2%	*<.01***
Number of HH members (median)	7.0	6.0	*<.01***
Number of HH members below 18 (median)	3.0	2.0	*<.01***
Head of HH Demographics[1]			
Sex (% Male)	94.5%	97.7%	*<.01***
Median Age	45.0	40.0	*<.01***
Religion (% Muslim)	89.9%	90.1%	*.78*
Marital Status (% Married)	93.6%	95.7%	*<.05**
Education level (% never attended school)	83.8%	70.4%	*<.01***
Migration status (% born elsewhere)	26.8%	18.3%	*<.01***
Work Status (% worked in last 12 months)	85.9%	91.2%	*<.01***
Demographics of Other Adult HH Members [2]			
Weighted N=	91,856	79,295	
Sex (% Male)	36.8%	33.2%	*<.01***
Median Age	26.0	28.0	*<.01***
Education level (% never attended school)	76.9%	67.3%	*<.01***
Work Status (% worked in last 12 months)	63.9%	33.1%	*<.01***
Child HH Member Demographics[3]			
Weighted N=	108,660	96,868	
Sex (% Male)	52.3%	54.9%	*<.05**
Median Age	12.0	11.0	*<.01***
Education level (% never attended school)	51.7%	44.6%	*<.01***
Work Status (% worked in last 12 months)	34.5%	11.0%	*<.01***

Source: Pakistan PC HH survey (Dec. 2008-April 2009)

[1]Base: Households interviewed for the PC HH survey.

[2]Base: Adult household members (18 years or older, excluding Head of HH) in households interviewed for the PC HH survey.

[3]Base: Child household members (5 to 17 years of age) in households interviewed for the PC HH survey.

4.6.2.2. Socio-Demographic Characteristics of Working Children

Children in carpet HHs were significantly older, and a greater proportion had never attended school and had worked during the past 12 months. One-third (34.6 percent) of the children in carpet HHs had worked during the past 12 months vs. only one-tenth (11.0 percent) of the children in non-carpet HHs (see Table 23).

Table 23. Demographic Characteristics of Children in Carpet and Non-Carpet HHs in Pakistan

Socio-Demographic Indicators	Carpet HHs			Non-carpet HHs		p-value
	Child carpet workers	Other child workers	Non-working children	Other child workers	Non-working children	
Weighted N=	32,181	3,870	72,841	6,238	90,609	
Sex						
Male	45.2%	77.6%	53.6%	69.2%	53.4%	<.01**
Female	54.8%	22.4%	46.4%	30.8%	46.6%	
Age						
5-8	11.0%	3.0%	34.8%	2.9%	32.9%	<.01**
9-13	38.9%	18.6%	39.4%	24.1%	40.2%	
14-17	50.1%	78.4%	25.8%	72.9%	26.9%	
Median Age	14.0	15.0	10.0	15.0	10.0	<.01**
Education status						
Currently attending school [1]	24.7%	14.1%	57.5%	17.9%	57.6%	<.01**
Health status						
Ill in the past 12 months	31.4%	41.4%	35.9%	41.8%	34.8%	<.01**
Injured in the past 12 months [2]	8.7%	15.4%	6.7%	12.7%	7.1%	<.05*
Migration status						
Born elsewhere? (% 'Yes')	4.8%	2.9%	4.1%	1.9%	1.8%	<.01**
Country of origin (%Afghanistan)	4.2%	2.8%	3.5%	1.5%	1.4%	<.01**

Base: Children interviewed in the PC Household Child Survey.
[1] Information missing for 12 children (Weighted N = 345).
[2] Information missing for 569 children (Weighted N = 15,836).
Source: PC Household Child Survey (June-December 2009).

The great majority (89.3 percent) of working children in carpet HHs worked in the carpet industry (see Table 23), and the study focused on only two groups of working children – child carpet workers and children in non-carpet HHs who worked in other industries, mainly as laborers in the construction and retail trade sectors (see Table 40). Because non-carpet HHs had fewer children and fewer of those worked, the study sampled five times as many child carpet workers (n=32,181) as children in non-carpet HHs who worked in other industries (n=6,238).

The clearest difference was gender. Although there were slightly more boys than girls in both sets of HHs, more than half (54.8 percent) of the child carpet workers were girls, compared to fewer than one-third of the working children in non-carpet HHs (see Table 23).[49]

[49] This report does not analyze the children in carpet HHs who worked in other industries, but their socio-demographic characteristics were very similar to the working children in non-carpet HHs. They were primarily the older boys.

4.6.3. Characteristics of the Children's Work

4.6.3.1. Reasons for Working

The great majority of working children in both sets of HHs reported that their main reason to work was to supplement family income. Labor migration was not important for either group. Very few had migrated, and most of the migrants had come as refugees. Working to repay outstanding family debt was mentioned by a greater proportion of child carpet workers (see Table 11).

4.6.3.2. Time Devoted to Work and Chores

The great majority of both groups worked 12 months of the year and seven days a week (see Table 24). The median number of hours worked a day by both groups was around nine, and three-fourths of both groups worked more than six hours a day.

In addition to their economic work, child carpet workers spent four hours per week on unpaid HH chores. A slightly greater proportion of child carpet workers spent time doing HH chores (see Table 41). The significant differences in time spent (four vs. three hours) and the types of chores were probably due to the preponderance of girls among the child carpet workers. Girls in each group spent more hours than boys on HH chores. The overall median number of hours per week was low and did not appear to add significantly to the girls' workloads.

Table 24. Months, Days, and Hours Worked by Children Working in the Carpet Industry and Other Industries

	Child carpet workers (Carpet HH)	Other child workers (Comparison HH)	p-value
Weighted N=	32,181	6,238	
Months Worked[1]			
Median months worked per year	12.0	12.0	*.09*
Proportion working 12 months per year	92.4%	96.5%	*<.05**
Days Worked[2]			
Weighted N=	21,842	5,137	
Median days worked per week	7.0	7.0	*.06*
Proportion working 7 days per week	69.2%	64.8%	*.35*
Hours Worked[3]			
Weighted N=	21,225	4,896	
Median hours per day	9:20	9:00	*.41*
Proportion working more than 6 hours per day	75.5%	74.8%	*.87*
Working at night	52.7%	45.0%	*.12*

[1]Base: Children who worked in the last 12 months.
[2]Base: Children who worked in the last seven days. Information missing for 111 HH-based Child carpet workers (Weighted N = 3,267) and 18 Other Child Workers (Weighted N = 486).
[3]Base: Children who worked in the last three days.
Source: Pakistan PC Household Child Survey (June-December 2009)

4.6.3.3. The Workplaces

Studies of child labor generally assume that working children are more likely to be exploited at workplaces that are distant from the social protection of the children's home and family. The great majority (92.7 percent) of child carpet workers were working in their own family households with only a few going to work at an employer's house or other locations (see Table 42).[50] Only one-third of the children from non-carpet HHs worked at home; the rest worked in diverse places, such as a shop, market, kiosk, factory, or employer's home, or moved from place to place.

4.6.3.4. Working Conditions

In spite of the fact that almost all child carpet workers were working in their family homes, a greater proportion of child carpet workers than children working in other industries complained about being exposed to unhealthy environmental conditions in their workplaces. A slightly higher proportion of children working in other industries reported being exposed to loud noise and chemical solvents/petrol/diesel/kerosene and sometimes working with heavy loads. A slightly higher proportion of child carpet workers were unsupervised when they were working. Both sets of working children reported similar low levels of psychological abuse and very low levels of physical and possible sexual abuse.

4.6.3.5. Physical Health and Psychosocial Well-Being

Child carpet workers reported being sick and injured less often over the last 12 months than children working in other industries, but there were no large differences in the prevalence of any specific illnesses. There was a greater prevalence of most types of injuries among children working in other industries. In terms of mental health, both sets of children had similar scores for their personal well-being.[51]

[50] There were a small number of cases (0.6 percent of all responses) of child carpet workers who reported performing carpet-related work in a carpet factory at some point during the last seven days. Those children may have been double-counted by the household and factory surveys, but the study decided to ignore that effect given the small number of cases.
[51] Personal Well-Being Index (PWI) scores

4.6.3.6. Earnings from Work

Knowing that almost all child carpet workers worked in their family homes (vs. one-third of children from non-carpet HHs) helped explain the differences in the earnings children received from working. Child carpet workers earned only two-thirds as much as the children working in other industries (median weekly incomes of 400 and 630 rupees, respectively). A greater proportion of working children from non-carpet HHs maintained control of their earnings, and fewer reported problems with their payments being late or withheld. Only one-fourth of the working children from non-carpet HHs reported that all their earnings were given to their parents directly through the employer, compared to over half of the child carpet workers.

4.6.3.7. Ability to leave work

More (42.2 percent) of the child carpet workers (vs. only one-fourth of the children working in other industries) reported being unable to leave their job if they wanted to leave. Fewer than five percent (4.1 percent) of child carpet workers (and a smaller proportion of other working children) reported being unable to leave because of the menace of a penalty from a third-party.

4.6.4. Summarizing the Comparison

The sampled areas were representative of all areas in Pakistan where carpet HHs were located. Three-fourths of the areas were characterized by rural poverty, the great majority of all HHs being landless and three-fourths not owning any livestock. Carpet HHs were relatively poorer than other local HHs. Both sets reported similar levels of debt and similar characteristics of their indebtedness and difficulty repaying debts. There was a link between the indebtedness of a small percentage of carpet HHs and the use of child labor to repay those debts.

Carpet HHs were slightly larger (one more child) than non-carpet HHs, and the heads of carpet HHs were older and more likely to be women and migrants. A greater proportion of the adults and children in carpet HHs had never attended school and had worked during the past 12 months. One-third of the children in carpet HHs worked, almost all of them in the carpet industry. The majority of child carpet workers were girls, and almost all worked at home. Only one-tenth of the children in non-carpet HHs worked; they were primarily older boys, and most worked outside the home as laborers in construction and retail trade. Almost all the working children from both sets of HHs reported that they worked to supplement their families' income, and they worked fulltime – nine hours a day, seven days a week, 12 months a year.

4.7. MEASURING UNACCEPTABLE WORK (CHILD LABOR)

This section addresses another objective -- Produce reliable, statistically sound, and nationally representative estimates of the number and prevalence of working children who were engaged in unacceptable work (child labor). By unacceptable work, the study meant that the nature of the work and/or the working conditions exploited and/or abused working children. The prevalence meant the percentage of child carpet workers who were engaged in that unacceptable work (see 3.2.3). This section presents the resulting estimates. A more detailed description of the methodology used to develop these measures and the specific crosswalks used to compute them is in Appendix C.

This study looked to international conventions for guidance in identifying unacceptable kinds of work and working conditions. In general, international and Pakistani standards agreed. Pakistan had ratified many ILO conventions and the UN Convention on the Rights of a Child (UNCRC), and Pakistan had passed legislation that was based on or adapted international standards. However, the international and Pakistani standards differed in terms of the minimum age to work (15 vs. 14 years), the age of a child and the minimum age to be engaged in hazardous work (under 18 vs. under 14 years), and the establishments that were regulated.

This study relied on international standards whenever there were differences between the two sets of standards and utilized Pakistani standards when they defined specific issues that were not defined by international standards, such as listing specific occupations as hazardous and setting the acceptable number of hours to work, etc.

4.7.1. Hazardous Work

The study examined the nature of the work (whether it was defined as inherently hazardous), the characteristics of the working conditions and workplace, and the medical histories of the working children. The international conventions did not identify specific industries as being hazardous, but Pakistan's Employment of Children Act (ECA) prohibited children from working in certain occupations and processes because they were hazardous and specifically identified and listed carpet weaving and wool processing among those prohibited processes. Based on the nature of the work being identified as hazardous, all of the children working in the carpet industry in Pakistan were in a situation of child labor.

4.7.1.1. Hazardous Work (International Standards)

By international standards, the category of child carpet worker encompasses all persons under 18 years of age who were working in the carpet industry. This study was based on international standards. Therefore, this study estimates that:

- 33,413 children were working in the carpet industry when the survey was conducted, and all of those child carpet workers were in child labor conditions due to hazardous work (see Table 68 for operational definition).

4.7.1.2. Hazardous Work (Pakistani Standards)

By Pakistani standards, only persons under 14 were prohibited from being employed in hazardous work. Also, family-based workplaces were exempted from regulation, and workshops (sheds) with fewer than 10 workers were not regulated. Only factories, which were defined as any enterprise with ten or more workers, were regulated by labor laws.

- Half (50.1 percent) of all child carpet workers and more than half (56.6 percent) of the factory-based child carpet workers were below 14, legally defined by Pakistan as children and prohibited from working in scheduled occupations, such as carpet weaving and wool processing.

- Of the factory-based children, 43.4 percent were below 14 and working in enterprises with more than 10 workers (legally factories) in obvious breach of Pakistani law (see Table 25). This group of children working in illegal conditions by Pakistani standards represented 1.6 percent of the total population of child carpet workers in Pakistan.

Table 25. Distribution of Factory-Based Child Carpet Workers by Age and Factory Size

	Factory Size (Number of Workers)				p-value
	1-10 Workers	11-20 Workers	Over 20 Workers	Total	
Weighted N =	252	772	208	1,232	
Age of Child Carpet Workers					
5-13 Years of Age	60.0%	59.1%	43.4%	56.6%	
14-17 Years of Age	40.0%	40.9%	56.6%	43.4%	*.34*
Total	100%	100%	100%	100%	

Base: Children who worked in carpet factories in the last 12 months.
Source: Pakistan PC Factory worker survey (April-July 2009).

4.7.1.3. Indications of Hazardous Work (Working Conditions)

ILO Recommendation 190 (amending ILO Convention 182) described many specific hazards. The study prepared a list of specific hazards derived from Recommendation 190 and asked the working children to report whether their working environments contained those hazards. The research teams observed that three-fourths of the factories had dust and particles and one-third of the factories had poor air quality, and the great majority of the child carpet workers reported that their working environments featured many of the listed hazards (see Table 16). More than half of

the HH-based child carpet workers reported dusty workplaces. One-fifth mentioned insufficient ventilation. More than 40 percent said their work was physically difficult. One-third reported extreme temperatures and inadequate lighting. One-fifth reported carrying heavy loads. There were sharp tools, and more than one-fourth of the child carpet workers had never received training to use their tools. The same proportion was never supervised at work by an adult, and the research teams had not observed any safety measures at any factory. Other hazardous conditions were more serious but were reported by smaller proportions of the child carpet workers. Those conditions included being punished to the extent of being injured and being touched inappropriately.

The study also examined children's medical histories to learn whether working children showed signs that they were disproportionately injured and if the children noted that injuries were work-related. Although not many child carpet workers reported work-related injuries, there was a measurable amount of work-related injuries, including injuries to or swelling of the hands (3.6 percent) and eye injuries (1.4 percent).

Based on the reported working conditions and prevalence of work-related injuries, this study estimates that all child carpet workers showed indications of being in hazardous working conditions (see Table 70 for operational definition).

4.7.2. Indications of Excessive Work

The project analyzed the burden that carpet work represented for child carpet workers by looking at the number of hours they dedicated to carpet-related activities per week. Table 26 shows the proportion of children working a relatively few hours (1-13 hours), a moderate number of hours (14 - 42 hours) and a large number of hours (43 hours or more) per week for different age groups (See Appendix C for rationale for these working hours breakdowns).

Table 26. Weekly Working Hours in Carpet-related Activities by Child Carpet Workers in Pakistan

	Total	Children Working in Households	Children Working in Factories	p-value
Children 5-11 years				
Weighted N=	6,574	6,214	360	
1 -13 hours	18.6%	19.7%	0.0%	
14 - 42 hours	28.7%	27.9%	41.4%	<.05*
43 hours or more	52.7%	52.4%	58.6%	
Median	48:43 Hours	48:00 Hours	54:00 Hours	.26
Children 12-13 years				
Weighted N=	5,404	5,104	301	
1 -13 hours	15.8%	16.6%	2.1%	<.05*

	Total	Children Working in Households	Children Working in Factories	p-value
14 - 42 hours	21.0%	20.9%	23.3%	
43 hours or more	63.2%	62.5%	74.6%	
Median	56:00 Hours	56:00 Hours	60:00 Hours	.34
Children 14-15 years				
Weighted N=	7,329	6,992	337	
1 -13 hours	17.6%	18.4%	0.0%	
14 - 42 hours	17.7%	18.1%	8.9%	*<.01***
43 hours or more	64.8%	63.5%	91.1%	
Median	63:00 Hours	63:00 Hours	63:00 Hours	*<.01***
Children 16-17 years				
Weighted N=	6,590	6,409	181	
1 -13 hours	15.8%	16.2%	0.0%	
14 - 42 hours	18.5%	18.6%	14.7%	.06
43 hours or more	65.7%	65.2%	85.3%	
Median	60:00 Hours	60:00 Hours	58:00 Hours	.35
Total (Children 5-17 years)				
Weighted N=	26,298	25,109	1,188	
1 -13 hours	17.1%	17.9%	0.5%	
14 - 42 hours	21.4%	21.3%	23.2%	*<.01***
43 hours or more	61.5%	60.8%	76.3%	
Median	56:00 Hours	56:00 Hours	60:00 Hours	*<.05***

Base: Children who had worked in carpet-related activities in the last seven days in factories and households.
Source: Carpet Project Pakistan PC Household and Factory Surveys (May 2009-September 2010)
Note: Subcategories for children of unknown age are omitted from the table due to insufficient sample size (n<30). Those children are however included in the Total (Children 5-17).

Most (61.5 percent) child carpet workers worked more than 43 hours per week on carpet related activities, with a median of 56 hours per week. Although both HH-based and factory-based child carpet workers worked long hours, factory-based child carpet workers worked significantly longer hours than HH-based child carpet workers, with a median of 60 hours per week, compared to 56 hours among HH-based child carpet workers. Nearly four-fifths (76.3 percent) of factory-based child carpet workers worked 43 hours or more per week. These patterns are similar for each of the age sub-groups examined. The proportion of household-based child carpet workers working less than 14 hours per week was significantly greater for all age groups.

The hours dedicated to carpet activities only provided a partial picture of a child's total workload, which may include other economic work and a significant amount of household chores. The amount of work that was permissible for different age groups also varied. In order to address these issues, the project developed a measure that indicated the existence and prevalence

of child labor based on equating each child's total work load with the child's age and the standards for an appropriate workload. The total work load included the time that HH-based children spent performing unpaid household services. Child labor existed when the child worked an excessive number of hours (see Table 27 for operational definition).

Table 27. Measuring Excessive Work

	Economic Work		Combination of Work	
	Work	Child Labor	Work	Child Labor
Children under-12 (5-11 years)	<1 hour	1 or more	<28 hours	28 or more
Children under-14 (12-13 years)	<14 hours	14 or more	<35	35 or more
Children under-16 (14-15 years)	<43	43 hours or more	<43	43 hours or more
Children under-18 (16-17 years)	<43	43 hours or more		

Note: The criteria for measuring excessive work were developed by the Research on Children Working in the Carpet Industry in India, Nepal, and Pakistan project, 2007-2012.

The result revealed that,

- Four-fifths (81.1 percent) of the current child carpet workers in Pakistan showed indications of being in child labor because of working excessive hours (see Table 28).
- 100 percent of the youngest (aged 5-11 years) current workers showed indications of working excessive hours.[52]
- Almost all (94.7 percent) of the children working in factories showed indications of working excessive hours, compared with four-fifths (80.4 percent) of the HH-based child carpet workers.

Table 28. Indications of Excessive Work by Child Carpet Workers in Pakistan

	Total No. of Child Carpet Workers in Pakistan	Children Working in Households	Children Working in Factories	p-value
Weighted N=	26,298	25,109	1,188	
Proportion Working Excessive Hours by Age				
Children under-12 (5-11 years)	100 %	100 %	100 %	-
Children under-14 (12-13 years)	85.8 %	85.0%	97.9%	*<.01***
Children under-16 (14-15 years)	70.0 %	69.0%	91.1%	*<.01***
Children under-18 (16-17 years)	71.3 %	70.9%	85.3%	*.10*
Children under-18 (years unknown)	68.8 %	68.3%	X	-
Total child carpet workers	81.1 %	80.4%	94.7%	*<.01***

Base: Children who had worked in carpet-related activities in the last seven days in factories and households. Insufficient sample size (n<30) for children of unknown age.
Source: Carpet Project Pakistan PC Household and Factory Surveys (May 2009-September 2010)

[52] Children under 12 were considered to have worked excessive hours if they worked one hour per week or more.

4.7.3. Indications of Child Trafficking

The study developed a set of variables that would indicate the existence of child trafficking in the carpet industry in India (See Appendix C). The set of indicators addressed another specific question that the study was designed to answer: To what extent were children trafficked into these situations?

One key factor was the amount of movement of children for work purposes. Child trafficking required work-related movement from one place to another location. The study did not find much of that movement.

The study identified a number of factors that might indicate the existence of child trafficking. Trafficking required that the child moved from one place to another for the purpose of work, so a key variable was the number of children working in the carpet industry who were labor migrants. Some (5.2 percent) child carpet workers were migrants, and one-fifth (21.1 percent) of those 1,750 migrant children reported that they had come for work-related reasons and, thus, would qualify as labor migrants. The great majority (88.5 percent) of the migrant children had come with their parents as refugees from Afghanistan. Those moves were families fleeing armed conflict and not for the purpose of exploiting the children. A larger proportion of the children (16.2 percent of the HH-based and 24.0 percent of the factory-based) noted that a labor contractor was involved in finding them their jobs, which was an indicator of trafficking (see Table 12 and Table 49). Two other important indicators were reported by only small proportions of migrant children; 0.3 percent reported that a third party (perhaps a labor contractor) had made the decision about moving, and 2.3 percent reported that someone had received money or other benefit or repaid a debt in exchange for the child's move.

4.7.4. Indications of Forced or Bonded Labor

The study identified a number of variables that were critical to understanding two other forms of unacceptable work: forced labor and bonded labor. The study focused on factors that might indicate whether the behavior of some child carpet workers was involuntary (not the result of their independent free choice) or coerced with the menace of some penalty. The ILO guidelines to the study of forced labor noted three stages where forced labor might be identified: (1) when a person entered the workforce, (2) when the person was working, and (3) when the person was leaving (or trying to leave) the workforce. Following those guidelines, the study looked for evidence or indications that children were forced or coerced to start working or to continue working and/or whether children could not stop working and leave the workplace due to force, coercion, or outstanding debts.

One possible indicator was the age of the child carpet worker when the child started working. Was he or she too young to be considered capable of making an independent voluntary decision? The median starting age was eight years old for HH-based child carpet workers and nine years old for the factory-based (see 4.4.2). That was too young for those children to be independently making the decision to start working. Those children were living with their parents, which meant that the parents probably made the decision. Parental and family pressure on children to work in the family setting did not qualify as forced labor. Coercion must be applied by a third party (not the child's parents) to be considered an indication of forced labor (see ILO, 2011:17).

Another important factor was family poverty and indebtedness, which might indicate that the family was trapped in indebtedness and had to repay debt with labor (bonded labor). If the entire family was forced to work, then the child also would be in forced or bonded labor. In its guidelines on forced labor, the ILO noted that, "If a child is working as a direct consequence of his or her parents being in a situation of forced labour, then the child is also considered to be in forced labour."

Family poverty and indebtedness were obviously important in influencing children's entry into the carpet industry workforce, as the majority of the children cited helping their families as their main reason to start working. Two-thirds (66.4 percent) of the carpet HHs were so poor that they had difficulty buying the food or clothing that they needed. One-fifth (22.3 percent) of carpet HHs were in debt, and two-thirds (68.2 percent) of those indebted carpet HHs reported difficulty in repaying their outstanding debts (see Table 37 and Table 38). Most of the consequences for not repaying debts -- losing personal and business assets (including money, goods, land, etc.) and accumulating more debt and higher interest rates – indicated that those HHs would never be able to emerge from perpetual debt (debt bondage) to their creditors. Other consequences included threats from the creditors and repaying the debt by providing labor to the creditor, which would be bonded labor, and a very small number of carpet HHs admitted that they had a child provide that bonded labor (see Table 39).

A strong indication of possible bonded labor was that 5.2 percent of child carpet workers reported they were working to repay outstanding family debt (see Table 11). All of the child carpet workers for whom that was the main reason to work were living with their parents, and three-quarters (73.9 percent) of the HH-based and 100 percent of the factory-based child carpet workers for whom that was the main reason to work also reported that they were unable to leave their jobs, primarily because they were still repaying debts.

Another indication of possible forced or bonded labor was the responses when child carpet workers were asked about their ability to stop working; 57.5 percent of the factory-based and 42.2 percent of the HH-based child carpet workers reported that they were unable to leave their jobs even if they wanted to leave (see Table 20). A stronger indication was that 9.9 percent of the

factory-based and 3.9 percent of the HH-based carpet child workers said that they could not leave because they were still repaying a debt, which was an indication of bonded labor. A majority of those children worked for their parents, and coercion must be applied by a third party (other than the child's parents) to be considered an indication of forced labor. However, coercion might have been applied by a third party indirectly. If the parents were forced to labor, which was why they pressured the child, then the child also was in forced or bonded labor (see ILO, 2011, p.17).

Because of the potential link between outstanding family debt and the possibility of forced or bonded labor, the study examined more in depth two small groups of child carpet workers who were characterized most closely with indebtedness:

- 1,310 child carpet workers who stated that their main reason to start working was to repay outstanding family debts; 95.7 percent of those children were HH-based.
- 1,367 child carpet workers who stated that they could not leave their job because they were still repaying debts; 91.1 percent of those children were HH-based,

Closer examination revealed that the two groups were interdependent. Many children belonged to both groups; they started to work because of debt and could not stop because of debt. Those child carpet workers appeared to be bonded to their jobs because of debts. In fact, the findings were highly indicative that their entire families might be in forced or bonded labor.

Three-quarters (73.9 percent) of the HH-based and all of the factory-based child carpet workers whose main reason to start working was to repay outstanding family debt reported that they were unable to leave their jobs, primarily because they were still repaying outstanding debts (see Table 29).[53] All of those child carpet workers were living with their parents; none were migrants, and no labor contractors had been involved in finding jobs for them.

Two-thirds (66.5 percent) of HH-based, but a minority of factory-based, children who reported not being able to leave their jobs because they were still repaying family debts also reported that their main reason to start working was to repay outstanding debts (see Table 29).[54]

[53] There was a very small sample base for the child carpet workers in factories whose main reason to work was to repay outstanding debt, so the results should only be expressed qualitatively.

[54] There was a very small sample base for the child carpet workers in factories who could not leave their jobs because they were still repaying outstanding family debts, so the results should only be expressed qualitatively.

Table 29. Analysis of Two Groups of Indebted Child Carpet Workers

	Total	Children Working in Households	Children Working in Factories
Child carpet workers whose main reason to work was paying outstanding family debt [1]			
Weighted N=	1,310	1,254	56
Living with parents/spouse (%yes)	100%	100%	X
Migrant status (%born elsewhere)	0.0%	0.0%	X
Labor contractor involved in finding job (%yes)	0.0%	0.0%	X
Unable to leave job (%yes)	75.0%	73.9%	X
Reason unable to leave job – Still Paying off debt	64.4%	63.4%	X
Reason unable to leave job – Parents would punish	4.9%	4.7%	X
Reason unable to leave job – No other work available	2.3%	2.2%	X
Reason unable to leave job – Not enough money to leave	3.4%	3.6%	X
Child carpet workers who couldn't leave their job because they were still paying off debt [2]			
Weighted N=	1,367	1,246	121
Living with parents/spouse (%Yes)	100%	100%	100%
Migrant status (%born elsewhere)	3.5%	3.9%	0.0%
Labor contractor involved in finding job (%yes)	0.0%	0.0%	0.0%
Main reason to work – To supplement family income	35.9%	33.5%	60.3%
Main reason to work – To pay outstanding family debt	64.1%	66.5%	39.7%

[1] Base: Children who worked in carpet-related activities in the last 12 months and were "working to pay outstanding family debt". Insufficient sample size (n<30) for Factory-based children.

[2] Base: Children who worked in carpet-related activities in the last 12 months and could not leave their work because they were "still paying off debt".

Source: Pakistan PC household child survey (June-December 2009), Pakistan PC Factory worker survey (April-July 2009).

At the beginning of the research, the study had assumed that the most obvious indication of forced or bonded labor would be when a child carpet worker reported that he or she could not leave the job because the employer would punish or harm the child if he or she tried to leave. That was reported by only a very small proportion of the child carpet workers in Pakistan. What emerged from the study was the strong indication that forced or bonded labor among children working in the carpet industry in Pakistan was not found in isolated migrant children working away from their families, but was found in children living and working with their families and probably involved the entire family.

DISCUSSION

5.1. CONTRIBUTIONS

A primary contribution of this study was the production of reliable, statistically sound, nationally representative, and current estimates of the number and prevalence of children working in the carpet industry.

Another contribution of this study was expanding the definition and scope of the carpet industry. Earlier work had focused on carpet weaving, and earlier reports of child labor had looked at children working in factories, but the most recent and comparable research (ILO rapid assessments 2001-2007) had focused only on carpet weaving in households. This study examined the workforce involved in a range of 16 activities that included supply chain processing of the wool as well as producing and finishing the carpets (see Table 3). Based on that expanded definition, the study developed a sampling frame and then conducted surveys that encompassed factories and households that were engaged in the carpet industry in all four provinces of Pakistan. The importance of Afghan refugees to the Pakistani carpet industry was also brought out by this study.

Another primary contribution of this study was identifying and measuring the existence and extent of forms of unacceptable work (child labor). That work is discussed extensively in section 4.7 and in Appendix C.

The study also contributed significantly to the knowledge base and understanding of the children working in the carpet industry and their families by placing them in perspective and comparing them with other households in their same areas. This also established benchmark data to assist any future research and action programs with those families or in those areas.

5.2. SIZE OF THE CARPET INDUSTRY IN PAKISTAN IN 2009-2010

5.2.1. Comparing Study Findings with Previous Research

The estimates that emerged from this study revealed that the carpet industry in Pakistan still employed 33,413 children, but the number of establishments and the number and prevalence of children working in the industry during the period of research (2009-2010) were much smaller than earlier estimates (see Table 30).

The studies that were conducted for the ILO in Punjab (2001), Sindh (2006), and Khyber Pakhtunkhwa (2006) produced much larger estimates of 240,293 child carpet workers and 130,451 carpet households (AKIDA, 2001, 2007a, 2007b). The total differences in estimates

between those studies and this study were even larger because this study included all four provinces, carpet factories, and wool-processing (supply chain) activities, while the ILO studies were only of three provinces (not including Balochistan), only covered carpet weavers and helpers, and did not cover factories (sheds).

Table 30. Child Labor Estimates in Pakistan's Carpet Industry, 1992-2006

Year	Source	No.	Prevalence	Age
1992	CIWCE and UNICEF	900,000	90 percent	5-17
1992	UNICEF	1 million	67 percent	5-17
1994	BLLF, as cited in USDOL	500,000	-	-
1994	PCMEA	120,000	8 percent	5-14
1996	Silvers, citing UNICEF	500,000-1 million	90 percent	4-14
2001-2006	AKIDA and ILO – Punjab, Sindh, and Khyber Pakhtunkhwa	240,300	-	5-17
2009	ICF	33,413	31.5 percent	5-17

Note: The BLLF statistic refers specifically to bonded child labor in the carpet industry.

In turn, the ILO estimates were much smaller than the estimates from the early 1990s. UNICEF had presented two estimates: 900,000 child carpet workers, representing 90 percent of the industry's one million workers, and one million child carpet workers, representing two-thirds of a total workforce of 1.5 million. The BLLF had estimated that there were 500,000 bonded child laborers in the carpet industry.

5.2.2. Three Possible Causes for the Differences

This study was designed to estimate the status of the carpet industry in Pakistan at the time of the research and was not designed to test possible historic or economic reasons for the significant differences that emerged. However, two factors were readily apparent that had impacted the size of the industry workforce. One factor was an obvious decline in the entire carpet industry in Pakistan. The second factor was an obvious loss of many Afghan refugees, who were an important component of the industry workforce in Pakistan. Finally the ILO-IPEC Carpet Projects was a third factor that could explain the reduced prevalence of children in the industry.

5.2.2.1. Decline in the Carpet Industry in Pakistan

The decline in the size or the entire national industry was noted earlier in this report (see 2.2). The Trade Development Authority of Pakistan and the PCMEA had documented the decline in the volume and value of carpet exports during the last decade (see Figure 1). The 2004 ILO report on bonded labor (Nasir, 2004) had noted the decline in Punjab, which was significant

because Punjab was known to be the most important location for the industry. In terms of the industry totals from the three provincial studies for ILO, Punjab held two-thirds (63.2 percent) of the child carpet workers and three-fourths (73.0 percent) of the carpet households.

The ICF research team first noticed the smaller size of the industry during the in-country qualitative research. The decline was confirmed during the development of the sampling frame in Punjab when initial inquiries revealed a large overall drop in carpet activities from the level that had been observed during AKIDA's 2001 rapid assessment for ILO.

The study is only able to speculate about the probable drivers of that trend in the national industry. Interviews with key informants in the national industry pointed to a number of factors. They included the worldwide crisis in the hand-made carpet industry that had been caused by bad publicity about child labor. The industry in Pakistan also had confronted intense competition in the international market from other countries with cheaper labor. Within the country, the industry had been losing in the competition for skilled workers because of the relatively unattractive wages paid to weavers when compared to wages received in other higher-paying occupations in Pakistan. More recently, there had been the effects of the global economic downturn. It is possible that the Pakistan Government and ILO programs to increase primary education and vocational training have affected the total size of the industry workforce.

5.2.2.2. Repatriation of Afghan Refugees

Another important factor became quickly apparent; the ongoing repatriation of Afghan refugees had greatly reduced the number of carpet households and child carpet workers in the province of Khyber Pakhtunkwa (formerly Northwest Frontier Province, or NWFP) and in Pakistan as a whole. Afghan refugees had been an important part of Pakistan's carpet industry workforce. The ILO study in Khyber Pakhtunkhwa had estimated that there were more than 40,000 child carpet workers in that province in 2006. That study also estimated that almost all of the carpet weaving occurred in refugee camps and was done by Afghans (AKIDA 2007b).

When this study developed the sampling frames, those frames only estimated the number of carpet households in each primary sampling unit (PSU). When the survey started to collect data, the team realized that some selected PSUs had fewer carpet households than expected. That was most dramatically apparent in two PSUs (Noshera and Peshawar) in Khyber Pakhtunkhwa. The cause for that significant change was the repatriation of Afghan refugees from refugee camps in those PSUs. The original estimates of carpet households had been obtained from rather reliable camp records, but more than 270,000 Afghan refugees returned to Afghanistan during 2008, followed by another 50,000 in the first half of 2009.

5.2.2.1. ILO-IPEC Carpets Project

Another potential factor is the impact that the ILO-IPEC Carpets Project may have had on the prevalence of children in the carpet industry. Any such effect was however speculative, as there was no objective evidence of the impact of this project on the prevalence of children in the carpet workforce. According to ILO-IPEC[55], 15,248 children were withdrawn and 3,626 prevented from entering the industry in Phase II of the project (from 2002 to 2007). The project also established a child labor monitoring system, provided financial assistance to the families of former child laborers and implemented multiple awareness activities, including an increase in overall awareness by carpet manufacturers. Further strengthening of child labor monitoring efforts was expected in Phase III of the project (2009-2012).
These activities should have had a relatively neutral impact on the overall size of the workforce, but they may have encouraged the substitution of child carpet workers with adult workers, and so they could explain the reduced prevalence of children in the industry.

5.3. TRENDS IN THE INDUSTRY

A question about whether more or less child labor should be anticipated in the carpet industry in Pakistan in the future involved speculation about future economic trends. However, the project was able to collect information about trends in production technology and the use of labor that might predict future trends in child labor in the carpet industry.

5.3.1. Changes in Consumers' Tastes

In many private discussions, carpet exporters complained about a factor that had affected their sales and, in India, was affecting the technology of producing carpets, a technological shift that might occur (quickly or eventually) in Pakistan. Carpet exporters believed that many western consumers were no longer looking for a permanent carpet that had historic and craft value and was very durable. The exporters stated that western consumers were looking for disposable carpets that fit a current color and decorating scheme. When the consumer decided to switch color schemes in a room, everything that did not match that color (including handmade carpets) would be discarded. For that reason, the consumers were looking for cheaper carpets and did not care that they were also less durable.

[55] See http://www.ilo.org/legacy/english/regions/asro/newdelhi/ipec/responses/pakistan/p2.htm

5.3.2. Changes in Production Technology and Children's Work

The traditional technology for producing handmade carpets is weaving on a hand loom. The most durable technique is called hand-knotting because it involves the weaver tying knots in the thread after every pass. Weaving carpets, especially hand-knotting, is a slow process due to the labor that was involved. Children are utilized in many activities during the production of carpets from the wool processing through to the final finishing, but children are most commonly used to weave (or hand-knot) carpets.

Household-based carpet production is well-suited for hand-knotted carpets. The household receives an order for a carpet and, over weeks or months, produces the carpet. The members of the household fit the weaving in with other household tasks, and children, for example, may go to school and still put in some hours weaving during non-school hours. As long as carpets are being produced by weaving or hand-knotting, there will be a ready use for child labor in the household.

Exporters in India have shifted much of their production to other techniques such as tufting and hand-looming, which produce less durable carpets much quicker. These technologies fit better with factory-based production in which the workers work full workdays. Tufting frames are much cheaper than the traditional looms used for weaving and can fit anywhere. The hand-looms are large and relatively expensive, and manufacturers locate them in factory settings.

Manufacturers in Pakistan have not made a major shift away from hand-knotting, although the study did record some hand-looming. A shift would probably cause many changes in the demand for labor.[56] Both techniques are primarily factory-based; factory-based production is faster; and quality control is easier in a factory setting. If production in Pakistan shifts away from hand-knotting, that would also entail shifting away from household-based production and a consequent drop in the use of child labor in households to produce carpets.

[56] The researchers did not observe any tufting or hand-looming in Pakistan. They did observe both techniques in India. No children were observed with hand-looming, but some children were involved in tufting.

5.4. REMAINING QUESTIONS

The study produced results that answered almost all of the research questions (see 4.1.2.1). Three questions remained for which the survey data had not provided specific or definitive answers.

5.4.1. Were there particular educational barriers that made children more vulnerable to working in the carpet industry?

The study did not collect any evidence or reporting of any particular educational barriers that were specifically related to the carpet industry. The cost of schooling was the most commonly reported reason why children were not attending school (see Table 10). In Pakistan, the family usually had to pay tuition fees and buy a school uniform, books, and other learning materials, even for primary education in public schools. To place that cost in perspective, more than half of the carpet households had difficulties buying the necessary food and clothing (see Table 21).

Three-fourths (73.9 percent) of the household-based child carpet workers cited the cost of schooling as the reason for not attending. Only 35.9 percent of the factory-based child workers who were not attending school reported that the main reason was not being able to afford school. The other reasons reported by household-based and factory-based children were: not interested in school, helping with household chores, no time for school, and in order to work (see Table 10).

5.4.2. What particular aspects of the carpet industry encouraged or discouraged the use of children? Were there aspects of the carpet industry that led to greater exploitation of children?

Given that the industry has hazardous work and, thus, all children working in the industry were exploited, the two questions call for the same answer. The aspects that encourage employing children are the household basis of the industry and the wages paid to child workers.

The particular aspect of the carpet industry in Pakistan that primarily encouraged the use of children and, thus, increased the extent of child labor was that the industry was predominantly household-based, which also meant family-based. Dispersing the production of thread and carpets among rural and urban households permitted or encouraged more families to put their children to work. The ECA explicitly excluded family-run enterprises and did not cover workshops that employed too few workers to qualify as factories. That eliminated the influence of Governmental labor laws and regulation and encouraged the use of children.

The household-based carpet-weaving (and wool-processing) enterprise was well-suited for very poor households that did not own physical assets, such as land or livestock. The carpet industry

did not require that the household had any physical assets or start-up capital other than some inexpensive common tools and did not require that the members of the household go elsewhere to work. Most of the looms in households were not owned by the households but were on loan from the contractor or exporter, and the exporter or contractor brought everything that was needed (appropriate amounts of correctly dyed thread and the design) to the household. Other common home-based income-generating activities for children, such as herding livestock or farming, required that the household owned land or livestock or had its children work for other households.

The only input needed from the household was work, which meant that the children would be encouraged to work to contribute economically to the household. The household base in Pakistan allowed rural and urban families the opportunity to employ their children at home. Especially in a Moslem society such as Pakistan where women were restricted from going out to work, that encouraged families to employ their daughters to generate or supplement the household income.

The industry did not require investments in expensive machinery, which allowed the industry to respond to increased market demand by simply putting more workers (or more households) to work. When the industry expanded, all it really required was more labor, and that simple need led to greater exploitation of children.

The other aspect was the low wage paid to child carpet workers. This was documented by another study (the Labor Demand Study) that was conducted in Pakistan by the carpet research project. The conclusion from the Labor Demand Study was that "carpet establishments behave like perfectly-competitive profit-maximizing businesses." Child wages in the carpet industry were lower than adult wages, and lower child wages in a competitive labor market explained the use of children in the carpet industry: "… A doubling of adult wages doubles the employment of children under 15."

5.5. STRENGTHS OF STUDY

The PC Study in Pakistan benefited from the substantial qualitative field research done by the PD/PI at the onset of the project. The six weeks of in-country exploratory research provided helpful inputs to inform the design, sampling strategy, and instruments used in the PC Study. It also helped provide the adequate context to interpret the findings of the quantitative surveys.

An additional strength of this study was the use of standardized scales to assess critical child-level outcomes, including literacy, numeracy and psychosocial well-being. These scales provided field tested and validated instruments that could be used to obtain objective scores and, in some cases, also normative data to assess the relative standing of those scores.

Finally, the study was successfully conducted in all four provinces in spite of continued high insecurity and the sensitive subject matter. A major reason for the success was AKIDA's use of a network of research teams that were locally recruited throughout the country. The usual method called for training and deploying a single team of interviewers, which meant that the interviewers were often strangers in the areas that were surveyed. In a number of areas of high insecurity, such as refugee camps and other areas in Balochistan and Khyber Pakhtunkhwa, that would have been dangerous for the interviewers. The locally-recruited researchers were able to collect data where outsiders would not have been allowed.

5.6. LIMITATIONS OF STUDY

This study had some limitations resulting from the sensitivity of the topical areas and design and data collection challenges. Four limitations in particular merited mention.

The first limitation was inherent in the topics being studied (child labor, including its worst forms) and the potential economic impact of the research. Child labor, trafficking, forced and bonded labor, and hazardous work were legally prohibited and socially sensitive. International reports about the existence and prevalence of those practices therefore had severe repercussions on foreign markets in the past. For those reasons, gatekeepers and employers often tried to conceal child labor and prevent researchers from gaining access for interviewing and observation. The study utilized various methods, ranging from public presentations to revising the method of selecting the samples of factory workers, and was able to collect valid data, but it is certainly possible that the full extent of child labor was not revealed. For that reason, the study assumes that any bias in the data would be one-way, i.e., under-estimating the full extent of child labor.

The second limitation resulted from the complex and sensitive nature of some of the constructs and populations being measured. Concepts such as child labor, trafficking, and forced or bonded labor, which are essential to this study, were multi-faceted and appeared in different forms and contexts. As an example, the ILO's guidelines to estimate the forced labor of children (ILO, 2011) demanded a complex measurement framework, including multiple indicators of unfree recruitment, work and life under duress, and impossibility to leave. Forced labor was only one of a wide variety of topics related to the work of children that the study was designed to cover in a geographically and geopolitically diverse area. As a consequence, all of the topics could not be covered as exhaustively as possible.

The third limitation was that the population estimates derived from this study relied on the accuracy and completeness of the sampling frames that were used to select the final samples. No official comprehensive census of carpet establishments in Pakistan existed, so the project had to develop the two sampling frames used in this study expressly for the purposes of this research. The sampling frames were developed carefully on the basis of a wide array of inputs and involving a

diverse pool of experts and stakeholders, and the research team was confident that the sampling frames represented a good approximation to the true population, but the frames could not be expected to contain the entire population of carpet establishments with absolute certainty.

The fourth limitation resulted from missing data. This study was no different from most research in developing countries in that some degree of missing data was to be expected. Paper-assisted personal interviews were prone to human error when asking questions, implementing skip patterns, and recording answers. In the current study, most variables had some missing data, apparently due to random human error, which limited the potential for biases arising from missing data. However, missing data did affect the estimates of the population of current child workers (children who worked in the last seven days), which likely led to underestimating their true population size.

SUMMARY AND CONCLUSIONS

Summary

This is the final report of the Prevalence and Conditions (PC) Study of Pakistan, which was one of the studies conducted by the USDOL-funded "Research on Children Working in the Carpet Industry of India, Nepal, and Pakistan" project that was administered by ICF. The study had three objectives.

The first objective was to produce reliable, statistically sound, and nationally representative estimates of the prevalence of working children and child labor in the carpet industry in Pakistan. Based on its survey findings, the study estimated that:

- There were 33,413 children working in the carpet industry in Pakistan.
- Children constituted 31.5 percent of the carpet industry workforce in Pakistan.
- The project investigated further to determine the proportion of children in exploitative working conditions using other measures:
    - Based on the work being hazardous, all (100%) child carpet workers in Pakistan were considered to be in hazardous working conditions.
    - Based on hours of total work per week, 81.1 percent of child carpet workers showed indications of working excessive hours.
    - There also were strong indications of the existence of forced or bonded child labor that was related to family indebtedness.
    - 546 child carpet workers in carpet factories (43.4 percent of the factory-based child workers) were under 14 and working in breach of Pakistani law.

The second objective was to describe children's working conditions in the production process of the carpet industry in Pakistan.

- Almost all (96.3 percent) of the child carpet workers were in the household-based industry, and their main activity was hand-knotting carpets. Their median age was 14 years; a slight majority were girls; and they mostly worked in their own households.
- The areas of carpet households were characterized by rural poverty and indebtedness, and a small percentage of carpet households that could not repay their debts admitted that they used their children's labor to repay those debts.
- A majority (54.7 percent) of child carpet workers had never attended school. Only one in four were currently attending. Most cannot read a simple sentence (74.3 percent) or perform either simple addition or subtraction (61.5 percent).
- Only a few child carpet workers reported work-related injuries, including injury or swelling of hands (3.6 percent), eye injuries (1.4 percent), and cuts/wounds (0.8 percent).

- Most child carpet workers (84.5 percent) reported that they worked to supplement their families' income and worked fulltime – nine hours a day, seven days a week, 12 months a year.
- Child carpet workers earned a median of 400 rupees per week, less than one-third of the salary of an adult carpet worker. Most or all of their earnings were transferred to or kept by their parents.
- Most children were exposed to some hazardous agent or process in the workplace, including dust (53.9 percent), extreme temperatures (32.3 percent), inadequate lighting (31.3 percent), and insufficient ventilation (20.6 percent).

The third objective was to compare the working and living conditions of children working in the carpet industry and children working in other industries in Pakistan.

- Carpet households were relatively poorer than other local households.
- Adults and children in carpet households were less schooled.
- A much higher proportion of the adults and children in carpet households had worked during the past 12 months.
- The children in non-carpet households who worked in other industries were older than the child carpet workers and were primarily older boys who worked outside the home as laborers in construction and retail trade.
- Almost all the working children from both sets of households reported that they worked to supplement their families' income and worked a similar number of months, days, and hours.
- Child carpet workers earned less than other working children, and more of the child carpet workers reported that all of their earnings went to their parents.
- The working children from both sets of households reported hazardous agents/processes at their workplaces, but there were significant differences in the specific hazards that each set reported.

Conclusions

The study estimated that 33,413 children were working in the carpet industry in Pakistan at the time of the study in 2009-2010. All of those working children were in hazardous work, which is one of the worst forms of child labor. Four-fifths of the child carpet workers showed indications of working an excessive number of hours, and there were indications of possible forced and bonded labor conditions.

The study found fewer children working in the industry and the prevalence of children was less than previous estimates. The shrinking size and importance of the carpet industry in Pakistan during the past decade, which had been noted in previous studies and official reports, might

explain much of the difference. Also, the repatriation of many Afghan refugees had an effect. While the numbers were less than previously reported, there were still many children working in the carpet industry. Finally, the ILO-IPEC Carpets Project may have contributed to this reduction.

Family poverty and indebtedness were obviously important in influencing (possibly forcing or coercing) children's entry into the carpet industry workforce and children's inability to stop working. Household-based child carpet workers belonged to households that were on average poorer and less educated than other households in the same geographic areas. Those children also appeared to endure poorer working conditions than child workers in other local households.

Almost all children working in the carpet industry were working in households (96.3 percent), and 91.7 percent of the household-based child carpet workers were living with their family. Therefore, any discussion about children working in the carpet industry in Pakistan means looking primarily at the situation of children living and working in their own homes with their family. If those children were defined as being employed, their parents were their employers.

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APPENDIX A – THE RESEARCH TEAM

The Prevalence and Conditions (PC) Study was conducted between December 2008 and December 2009 by Macro International (ICF), which administered all contracts, monitored and secured the flow of all necessary funds, and obtained all necessary permissions and authorizations including human subjects' approval. ICF also supported the principal researcher with methodological design, questionnaire development, tabulation of data, and professional editing of the report. ICF had final reporting responsibilities to USDOL.

ICF executes its projects through a team structure placing the project director at the center of the project with authority to make all necessary decisions while providing an integrated team of qualified staff to plan and implement projects.

Dr. Art Hansen was the Principal Investigator/Project Director (PI/PD) for the project. He had led project teams over the last 20 years with a special focus on child labor and child welfare. He had conducted projects for a range of USG agencies including USDOL-ILAB as well as international donor agencies such as the UN.

Pablo Diego Rosell was the Research Consultant for the project. He had 9 years of experience conducting research studies and had worked in child labor data collection projects in multiple developing countries (Nigeria, Peru, Afghanistan, Haiti, Uganda, and Paraguay).

The Al-Khalil Institutional Development Association (AKIDA) was the implementing institution in Pakistan in charge of sampling frame development, data collection, fieldwork quality control, data processing, and data cleaning. AKIDA, a management consulting organization, brought relevant experience to the project, having conducted research for ILO-IPEC on child labor in the carpet industry in the provinces of Punjab, Sindh & Khyber Pakhtunkhwa (formerly NWFP) during 2001-2007. AKIDA was also key in providing access to a wide range of key public and private agencies and officials. AKIDA received data processing support from National Institutes of Population Studies (NIPS) staff with previous formal training from ICF on CSPro-based data processing for the Demographic and Health Survey.

APPENDIX B – ADDITIONAL DATA

Table 31: Household and Factory Sampling Frames.

Province/District	Household Frame		Factory Frame
	Number of PSUs (Village/Mohalla)	Estimated Number of Carpet Households	Number of Factories
Baluchistan	**14**	**3,462**	**104**
Killa Abdullah	1	95	-
Loralai	1	94	-
Quetta	11	3,273	104
Khyber Pakhtunkhwa	**20**	**3,925**	**24**
Mardan	11	188	2
Noshera	2	1,906	6
Peshawar	7	1,831	16
Punjab	**702**	**25,235**	**379**
Arifwala	-	-	1
Attock	7	2,940	60
Bahawalnagar	10	403	-
Bahawalpur	10	56	-
Bhakhar	4	58	-
Burewala	-	-	5
D.G KHAN	23	322	6
Faisalabad	20	2,371	62
Gujranwala	65	957	-
Gujrat	1	52	-
Hafizabad	20	633	-
Jhang	11	1,962	3
Kasur	39	2,571	-
Khanewal	4	267	-
Khushab	6	126	-
Lahore	26	920	200
Leiah	17	201	-
Lodhraan	7	99	-
Mandi Bahaudin	1	55	-
Mianwali	1	18	-
Multan	52	456	23
MuzaffarGarh	12	105	4
Nankanasahib	-	-	2
Narowal	91	2,000	-
Okara	12	422	-
Pakpattan	6	126	-

Province/District	Household Frame		Factory Frame
	Number of PSUs (Village/Mohalla)	Estimated Number of Carpet Households	Number of Factories
Rahimyar Khan	11	234	-
Rajanpur	3	39	6
Rawalpindi	1	2	-
Sahiwal	11	95	-
Sargodha	6	23	-
Sheikhupura	122	5,057	-
Sialkot	45	613	-
T.T.Singh	10	1,044	5
Vehari	48	1,008	2
Sindh	**215**	**6,062**	**145**
Afghan Basti	1	1,500	-
Dadu	3	75	-
Dhabeji	4	435	-
Hyderabad	15	281	11
Karachi	5	88	106
Nawab Shah	8	148	3
Tharparkar	169	3,353	21
Umerkot	10	182	4
Grand Total	**950**	**38,684**	**652**

Table 32: Original Household Frame Listings, Final Listings, and Final Samples by Province and District

Province/District	Original Frame		Final Listings	Final Sample	
	Total Carpet HHs	Carpet HHs in Sampled Locations	Carpet HHS in Sampled Locations	Carpet HHs	Non-Carpet HHs
Baluchistan	**3,462**	**2,516**	**4,590**	**113**	**117**
Quetta	3,273	2,516	4,590	113	117
Khyber Pakhtunkhwa	**3,925**	**3,415**	**380**	**165**	**140**
Noshera	1,906	1,905	150	86	64
Peshawar	1,831	1,510	230	79	76
Punjab	**25,235**	**5,759**	**4,124**	**983**	**985**
Attock	2,940	2,240	2240	111	110
Bahawalnagar	403	45	16	16	16
DG Khan	322	6	40	28	32
Faisalabad	2,371	1021	370	90	90
Gujranwala	957	15	45	35	30
Hafizabad	633	104	104	31	29
Jhang	1,962	429	70	63	65
Kasur	2,571	283	145	95	92

Province/District	Original Frame		Final Listings	Final Sample	
	Total Carpet HHs	Carpet HHs in Sampled Locations	Carpet HHS in Sampled Locations	Carpet HHs	Non-Carpet HHs
Lahore	920	71	82	53	58
Multan	456	100	100	28	32
Narowal	2,000	105	120	89	91
Okara	422	49	35	30	32
Sheikhupura	5,057	522	452	189	192
Sialkot	613	19	75	35	26
Toba Tek Singh	1,044	746	180	60	60
Vehari	1,008	4	50	30	30
Sindh	**6,062**	**2,157**	**4,997**	**245**	**249**
Afghan Basti	1,500	1,500	4,600	58	62
Dhabeji	435	435	100	36	35
Nawab Shah	148	47	30	30	30
Tharparkar	3,353	175	267	121	122
Grand Total	**38,684**	**13,847**	**14,091**	**1,506**	**1,491**

Table 33: Sample of HH-Based Children and Response Rates

Province/District	HH Roster		Children		Response Rate	
	Carpet	Non-Carpet	Carpet	Non-Carpet	Carpet	Non-Carpet
Punjab	**2,552**	**2,227**	**2,471**	**2,177**	**97%**	**98%**
Attock	221	189	217	188	98%	99%
D.G. Khan	88	46	87	43	99%	93%
Faisalabad	282	257	276	252	98%	98%
Jhang	149	121	146	121	98%	100%
Kasur	160	142	156	140	98%	99%
Lahore	117	174	83	161	71%	93%
Narowal	232	212	229	210	99%	99%
Sheikhupura	535	462	519	458	97%	99%
Toba Tek Singh	181	178	180	172	99%	97%
Vehari	92	66	91	66	99%	100%
Gujranwala	113	62	110	62	97%	100%
Sialkot	103	59	101	54	98%	92%
Hafizabad	61	61	60	56	98%	92%
Bahawalnagar	70	62	70	62	100%	100%
Okara	66	63	65	60	98%	95%
Multan	82	73	81	72	99%	99%
Sind	**782**	**784**	**696**	**719**	**89%**	**92%**
Karachi	234	257	187	218	80%	85%
Dhabeji	116	91	88	69	76%	76%

Province/District		HH Roster		Children		Response Rate	
		Carpet	Non-Carpet	Carpet	Non-Carpet	Carpet	Non-Carpet
	Tharparkar	345	349	335	347	97%	99%
	Nawabshah	87	87	86	85	99%	98%
Khyber Pakhtunkhwa		**404**	**316**	**367**	**287**	**91%**	**91%**
	Peshawar	231	170	216	151	94%	89%
	Nowshera	173	146	151	136	87%	93%
Baluchistan	**Quetta**	**379**	**336**	**302**	**301**	**80%**	**90%**
Total		**4,117**	**3,663**	**3,836**	**3,484**	**93%**	**95%**

Table 34: HH-Based Children's Non-Response by Gender, Age, School Attendance, and Carpet Work

		Household Interviews				Children Interviews			
		Carpet HHs		Non-Carpet HHs		Carpet HHs		Non-Carpet HHs	
		N	%	N	%	N	%	N	%
Gender	Males	2,143	52%	2,013	55%	1,993	52%	1,906	55%
	Females	1,974	48%	1,650	45%	1,843	48%	1,578	45%
Age	5-8	1,100	27%	1,161	32%	1,010	26%	1,080	31%
	9-13	1,571	38%	1,414	39%	1,478	39%	1,363	39%
	14-17	1,446	35%	1,088	30%	1,348	35%	1,041	30%
Attending School?	Yes	1,869	45%	2,023	55%	1,803	47%	1,975	57%
	No	2,186	53%	1,608	44%	2,030	53%	1,500	43%
	DK	43	1%	20	1%	0	0%	0	0%
	Refused	6	0.5%	0	0.3%	3	0.1%	9	0.3%
Carpet work 12 months	Yes	1,238	30%	5*	0.1%	903	24%	7*	0.2%
	No	2,879	70%	3,658	99.9%	2,933	76%	3,477	99.8%
Total		**4,117**	**100%**	**3,663**	**100%**	**3,836**	**100%**	**3,484**	**100%**

*Note that while the method used to identify carpet vs. non-carpet households was done at the aggregate level, 5 individual cases were identified as working in the carpet industry on the household roster and seven according to children's interviews, even though the adult informant had previously reported that no member of their household was involved in any carpet-related activities.

Table 35: Carpet Factory Frame and Sample

Province	Factory Sampling Frame			Factory Sample		
	Urban Frame	Rural Frame	Total Frame	Urban Sample	Rural Sample	Total sample
Baluchistan	94	10	104	20	3	23
Khyber Pakhtunkhwa	4	20	24	2	5	7
Punjab	300	79	379	101	24	125
Sindh	127	18	145	40	5	45
Grand Total	**525**	**127**	**652**	**163**	**37**	**200**

Table 36: Carpet Factory Worker Frame and Sample

Stratum/Province	Total Workers In Group A <= 20	Sampled Workers In Group A <=20	Total Workers In Group B >20	Sampled Workers In Group B >20	Total Sample Of Workers
Total Rural	**83**	**62**	**338**	**196**	**258**
Baluchistan	31	19	5	5	24
Khyber Pakhtunkhwa	8	8	17	16	24
Punjab	23	18	265	152	170
Sindh	21	17	51	23	40
Total Urban	**311**	**242**	**2,041**	**690**	**932**
Baluchistan	242	141	37	19	160
Khyber Pakhtunkhwa	5	5	9	9	14
Punjab	7	21	1,755	511	532
Sindh	57	75	240	151	226
Total Workers	**394**	**304**	**2,379**	**886**	**1,190**

Table 37. Household Debt of Carpet and Non-Carpet HHs

	Child Carpet Workers (Carpet HHs)	Other Child Workers (Non-Carpet HHs)	p-value
Weighted N=	32,155	6,238	
Household Debt Levels			
% with some HH member that has acquired any debt[1]	22.3%	20.7%	*.69*
Median HH debt (Rs.)[2]	3,000	X	-
"Who loaned money (last borrowed money) to anyone in the HH?" [2]			
Weighted N=	6,646	1,289	
Local money lender	39.7%	42.6%	.79
Family member	19.0%	18.8%	*.98*
Store from which purchases was made	8.9%	18.4%	*.26*
Employer	6.7%	1.7%	*.16*
Agent that purchases products produced in household business	5.6%	4.5%	*.79*
Individual from which purchase was made	5.5%	0.0%	*.24*
Bank/Finance company	1.2%	4.9%	*.25*
Cooperatives/Community organization	0.0%	2.0%	*.06*
Other	17.9%	7.0%	*.15*
DK/NR	0.0%	2.3%	*.06*

Source: Pakistan PC Household and Child Survey (June-December 2009).

[1]Base: Households of Child carpet workers and Other Working Children. Information missing for 1 HH-based Carpet Child Worker (Weighted N = 26).

[2]Base: Households of child carpet workers and Other Working Children that have acquired any debt. Information missing for 13 HH-based Child carpet workers (Weighted N = 536). Insufficient sample size available to estimate Median HH debt of Households of Other child workers, due to high number of DK/NR responses regarding HH debt.

Table 38. Distressed Debt among Carpet and Non-Carpet HHs

	Child Carpet Workers (Carpet HHs)	Other Child Workers (Non-Carpet HHs)	p-value
Weighted N=	7,182	1,289	
Difficulty paying off debt [1]			
"In the past 12 months has your household had any difficulty paying off debt?" (%'yes')	68.2%	65.2%	*.76*
"What made it difficult to pay off debt? [2]			
Weighted N=	4,820	840	
Unexpected expense	60.3%	66.2%	*.65*
Lower than expected income from enterprise	31.8%	6.9%	*<.05**
Agricultural production lower than expected	30.8%	21.8%	*.40*
HH member was injured/sick and couldn't work	23.0%	16.2%	*.46*
Lost job/ Left job	13.7%	0.0%	*.07*
Death in family	0.5%	0.0%	*<.05**
Others	3.2%	21.2%	*<.05**

Source: Pakistan PC Household and Child Survey (June-December 2009)

[1]Base: Households of Carpet Child Workers and Other Working Children that have acquired any debt.

[2]Base: Households of Carpet Child Workers and children working in other industries that have acquired any debt and had difficulty paying off debt. Information missing for 3 HH-based Carpet Child Workers (Weighted N = 76).

Table 39. Consequences of Not Repaying Debt for Carpet and Non-Carpet HHs

	Child Carpet Workers (Carpet HHs)	Other Child Workers (Non-Carpet HHs)	p-value
Weighted N=	3,752	719	
Difficulty paying off debt			
Loss of personal assets	31.0%	X	-
Accumulate fees/debt	26.3%	X	-
Threats from creditor	18.6%	X	-
Higher interest rate	12.4%	X	-
Loss of business assets/money	8.0%	X	-
Provide labor to creditor	6.3%	X	-
Provide goods to creditor	3.6%	X	-
Loss of land	2.8%	X	-
Loss of house	1.4%	X	-
Others	9.0%	X	-

Source: Pakistan PC Household and Child Survey (June-December 2009).

Base: Households of Child carpet workers and children working in other industries that have acquired any debt and had difficulty paying off debt. Information missing for 36 HH-based Child carpet workers (Weighted N = 1,144) and 4 Other Child Workers (Weighted N = 121).

Table 40. Types of Jobs of Children Working in the Carpet Industry and Other Industries

	Child Carpet Workers (Carpet HHs)	Other Child Workers (Non-Carpet HHs)	p-value
Weighted N=	32,181	6,238	
Types of job for income in last 12 months			
Laborer in the Carpet Industry	100%	0.0%	<.01**
Laborers in mining/construction/manufacturing & transport	0.5%	45.0%	
Trader workers (Food processing/wood work/garment/utility)	0.9%	38.4%	
Agricultural, forestry and fishery laborers	0.1%	7.5%	<.01**
Drivers and mobile plant operators	0.0%	3.1%	
Others	0.5%	6.0%	
Industry classification			
Carpet industry	100%	0.0%	<.01**
Construction	0.5%	45.4%	
Wholesale/retail trade; motor vehicle repair	1.0%	38.9%	
Agriculture, hunting and forestry	0.1%	6.1%	<.01**
Hotels and restaurants	0.0%	3.7%	
Others	0.1%	5.3%	

Base: Household-based children who worked in the last 12 months.

Source: Pakistan PC Household Child Survey (June-December 2009)

Table 41. Hours Spent on Household Chores by Children Working in the Carpet Industry and Other Industries

	Child Carpet Workers (Carpet HHs)	Other Child Workers (Non-Carpet HHs)	p-value
Weighted N=	25,109	5,623	
Percentage Performing Each Chore			
Cooking/ serving meals/washing dishes	37.2%	23.3%	<.01**
Cleaning the house, washing clothes etc.	43.0%	27.7%	<.01**
Shopping for HH goods	21.9%	30.9%	<.05*
Minor repairs on household items	7.2%	12.2%	.07
Taking care of old or sick family members	12.6%	13.3%	.57
Taking care of younger children	16.6%	13.1%	.31
Collecting wood/dung for cooking or heating	12.3%	13.1%	.80
Collecting fodder for livestock	7.4%	4.5%	.19
Collecting water for HH use	15.6%	23.5%	<.05*
Total doing any chores in last 7 days	76.0%	68.5%	.11
Median Hours per Week			
Total (All chores)	4.0	3.0	<.01**

Base: Children who were engaged in household chores in the past seven days (excluded children who did chores but did not provide the time spent per week).

Source: Pakistan PC Household Child Survey (June-December 2009)

Table 42. Work Locations of Children Working in the Carpet Industry and Other Industries

	Child Carpet Workers (Carpet HHs)	Other Child Workers (Non-Carpet HHs)	p-value
Weighted N=	21,757	5,084	
"Where did you do your carpet/other work on (each day of the week)?"			
At family dwelling	92.7%	30.5%	<.01**
Employer's house	5.6%	6.8%	.61
Formal office	0.0%	0.0%	-
Factory	0.6%	10.0%	<.01**
Shop/market/kiosk	2.0%	28.2%	<.01**
In village	0.1%	7.4%	<.01**
Different places (mobile)	0.0%	12.7%	<.01**
Others	0.8%	5.8%	<.01**
DK/NR	0.2%	1.6%	<.05*

Base: Aggregated multiple responses for each day of the week from children who worked in the last seven days. Information missing for 114 HH-based Child carpet workers (Weighted N = 3,353) and 20 HH-based and children working in other industries (Weighted N = 539).

Note: Multiple response items, so totals may exceed 100 percent.

Source: Pakistan PC Household Child Survey (June-December 2009)

Table 43. School Progress for Child Carpet Workers by Setting

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	7,792	7,472	320	
"Are most of your classmates of the same age as you are?"				
Most are older	-	13.5%	-	-
Most are younger	-	11.9%	-	-
Same age	-	72.1%	-	-
DK/NR	-	2.5%	-	-
Age-Grade Delay				
Median Age-Grade Delay (Years)	2.0	2.0	3.0	<.05*

Base: Children who worked in the carpet industry in the past 12 months, were currently attending school and provided valid age and education level information. The factory-based children were not asked this question. Exact age or grade information necessary to compute age-grade delay missing for 13 HH Children (weighted N= 451).

Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

Table 44. Literacy and Numeracy of Child Carpet Workers by Setting

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	33,403	32,181	1,221	
Maximum reading ability level				
Nothing	27.5%	27.7%	23.2%	
Letters	39.2%	39.1%	41.4%	
Words	5.0%	4.8%	10.2%	
Level I Text as a set of words	2.6%	2.6%	1.5%	*<.05**
Level I Text with comprehension	0.2%	0.2%	1.0%	
Level II Text as a set of words	9.9%	9.7%	13.7%	
Level II Text with comprehension	15.5%	15.8%	9.1%	
Numeracy level				
Cannot do addition or subtraction	61.5%	62.4%	36.7%	
Can only do addition problem	12.6%	12.1%	24.5%	*<.01***
Can only do subtraction problem	2.7%	2.6%	6.8%	
Can do both addition & subtraction	23.2%	22.9%	32.0%	

Base: Children who worked in the carpet industry in the past 12 months. Literacy and Numeracy data missing for 3 Factory Children (weighted N = 10).

Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

Table 45. Work Interfering with Education for Child Carpet Workers by Setting

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	8,243	7,923	320	
Work Interference in Education[1]				
Does your work interfere with your studies? (%"yes")	35.4%	35.6%	30.6%	*.38*
"How does your work interfere with your studies?" [2]				
Feel tired at the end of day	51.7%	50.7%	X	-
Insufficient time available for school	39.5%	40.3%	X	-
Feel tired in classroom	14.0%	14.3%	X	-
Low school marks	18.2%	18.6%	X	-
Miss classes	13.1%	13.2%	X	-
Arrive late to school	5.5%	5.7%	X	-
Others	1.1%	1.2%	X	-
"How often do you miss school for work?" [1]				
Very often (Once a week or more)	24.4%	24.9%	13.2%	
Sometimes (2-4 times a year)	27.1%	27.3%	22.4%	*.16*
1-2 times a year	10.3%	9.9%	20.7%	
Never	34.6%	34.3%	42.0%	

	Total	Children Working in Households	Children Working in Factories	p-value
DK/NR	3.6%	3.7%	1.6%	

[1] Base: Children who worked in the carpet industry in the past 12 months and were currently attending school.

[2] Base: Children who worked in the carpet industry in the past 12 months, were currently attending school, and reported that their work interfered with their studies. Insufficient sample base (n<30) for children in carpet factories. Information missing for one HH child (weighted N = 26).

Note: Multiple response items, so totals may exceed 100 percent.

Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

Table 46. Illnesses among Child Carpet Workers by Setting

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	33,398	32,181	1,216	
"When was the last time you were sick?"[1]				
In the past 7 days	5.1%	4.9%	9.2%	*<.01***
In the past 1 month (cumulative)	14.2%	13.7%	27.1%	*<.01***
In the past 12 months (cumulative)	32.0%	31.4%	48.2%	*<.01***
Longer ago	33.6%	33.7%	30.1%	
DK/NR	34.5%	34.9%	21.8%	
"What illnesses have you had in the past 12 months?" [2]				
Diarrhea	3.3%	3.2%	7.2%	*<.05**
Vomiting	3.2%	3.2%	1.7%	*.17*
Other stomach problems	4.4%	4.2%	7.2%	*.10*
Fever	21.8%	21.5%	29.0%	*<.05**
Malaria	3.2%	3.2%	4.1%	*.76*
Typhoid fever	1.1%	1.1%	0.9%	*.76*
Anemia	0.3%	0.3%	0.5%	*.64*
Cholera	0.6%	0.6%	1.0%	*.55*
Eye problems	2.1%	2.1%	3.4%	*.23*
Breathing problems	2.2%	2.2%	2.4%	*.83*
Severe headaches	3.8%	3.8%	4.9%	*.51*
Tooth aches	1.3%	1.3%	1.2%	*.84*
Muscle aches	2.1%	2.0%	3.6%	*.16*
Ear aches	1.1%	1.0%	1.3%	*.73*
Jaundice	0.3%	0.3%	1.2%	*.11*
Skin problems	3.9%	3.9%	3.1%	*.61*
Other illness	1.1%	1.0%	4.6%	*<.01***

[1] Base: Children who worked in the carpet industry in the past 12 months. Information on illnesses missing for four factory children (weighted N =15).

[2] Base: Children who worked in the carpet industry in the past 12 months. Information on illnesses missing for three HH children (weighted N = 122) and for 8 factory children (weighted N =39).

Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009).

Table 47. Injuries among Child Carpet Workers by Setting

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	32,427	31,249	1,178	
"When was the last time you were injured?" [1]				
In the past 7 days	3.1%	3.0%	5.9%	*.06*
In the past 1 month (cumulative)	5.4%	5.1%	13.8%	*<.01***
In the past 12 months (cumulative)	9.0%	8.7%	18.3%	*<.01***
Longer ago	4.6%	4.5%	5.7%	
Never	85.9%	86.3%	75.7%	
DK/NR	0.5%	0.5%	0.4%	
Work-related injuries in the past 12 months (most recent injury) [2]				
Head injury	0.6%	0.6%	0.0%	*0.64*
Injury to ears or deafness	0.0%	0.0%	0.0%	-
Eye injury	1.4%	1.4%	0.7%	*0.33*
Injury to shoulder	0.5%	0.5%	0.4%	*0.86*
Injury to or swelling in hands	3.6%	3.7%	1.4%	*0.05*
Smoke or chemical damage to lungs	0.2%	0.2%	0.0%	*0.79*
Injury to abdomen	0.3%	0.3%	0.7%	*0.46*
Back strain/pain in back	0.4%	0.4%	0.3%	*0.86*
Injury to knees or legs	0.0%	0.0%	0.0%	-
Twisted ankle or legs	0.1%	0.1%	0.0%	*0.85*
Injury to feet or legs	0.4%	0.4%	0.3%	*0.84*
Heat stroke	0.0%	0.0%	0.0%	-
Burn from fire	0.0%	0.0%	0.0%	-
Chemical burn	0.0%	0.0%	0.0%	-
Cuts/wounds	0.8%	0.8%	0.7%	*0.79*
Other injuries	0.3%	0.3%	0.7%	*0.79*

[1] Base: Children who worked in the carpet industry in the past 12 months. Information missing for 31 HH Children (weighted N =934) and 16 Factory Children (weighted N =54).

[2] Base: Children who worked in the carpet industry in the past 12 months. Information missing for 123 HH Children (weighted N =3,622) and 60 Factory Children (weighted N =269).

Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009).

Table 48. Personal Well-Being of Child Carpet Workers by Setting

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	33,302	32,081	1,221	
"How happy are you about…" (Average)				
Standard of living ("The things you have like the money & things you own?")	66.6	66.5	68.2	*.51*
Health ("How healthy you are?")	65.3	65.1	69.5	*<.05**
Achievement ("The things you make or the things you learn?")	62.5	62.4	64.0	*.47*
Personal relationships ("Getting on with the people you know?")	64.2	64.1	66.2	*.32*
Personal safety ("How safe you feel?")	62.3	62.2	63.2	*.66*
Feeling part of the community ("Doing things outside your home?")	57.8	57.7	59.6	*.40*
Future security ("How things will be later on in your life?")	58.4	58.3	59.7	*.50*
Summary Scores (Average)				
How happy are you about your life as a whole?	60.1	59.8	68.1	*<.01***
Personal Well-Being Index Score	62.4	62.4	64.3	*.27*

Base: Children who worked in the carpet industry in the past 12 months. Information missing for four HH Children (weighted N =101) and three Factory Children (weighted N =10).

Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

Table 49. Migration Status of Child Carpet Workers in Pakistan by Setting

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	33,377	32,155	1,221	
"Were you born here or somewhere else?" [1]				
Born here	94.5%	95.0%	80.8%	*<.01***
Somewhere else	5.2%	4.8%	17.5%	
Refused	0.2%	0.2%	1.8%	
Country/District of Origin [2]				
Weighted N=	1,750	1,537	213	
Afghanistan	88.5%	88.1%	91.0%	*<.01***
Pakistan	10.4%	11.8%	0.0%	
Faisalabad	3.0%	3.4%	0.0%	*.60*
Narowal	1.7%	1.9%	0.0%	
Gujranwala	1.3%	1.5%	0.0%	
Dhabeji	2.9%	3.3%	0.0%	
Tharparkar	1.6%	1.8%	0.0%	
Peshawar	0.0%	0.0%	0.0%	
Quetta	0.0%	0.0%	0.0%	

	Total	Children Working in Households	Children Working in Factories	p-value
Don't know	0.0%	0.0%	0.0%	
Other Country	1.1%	0.0%	9.0%	*<.01***

[1]Base: Children who worked in the carpet industry in the past 12 months. Information missing for one HH Child (weighted N = 26) and three Factory Children (weighted N =10).

[2]Base: Children who worked in the carpet industry in the past 12 months and were born elsewhere.

Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

Table 50. Decision to Migrate for Child Carpet Workers by Setting

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	1,750	1,537	213	
"Did you come here of your own wish?"				
Yes	53.4%	51.5%	67.3%	
No	22.3%	22.0%	24.2%	*.13*
DK/NR	24.3%	26.5%	8.6%	
"Who made the decision that you would move here?"				
Father	80.4%	80.0%	83.2%	.66
Mother	59.5%	62.3%	39.9%	.12
Spouse	0.2%	0.0%	1.7%	*.06*
Self	5.2%	5.1%	6.5%	.76
Other relatives	1.9%	1.8%	2.2%	.87
Others	0.3%	0.0%	2.5%	.06
DK/NR	5.5%	6.0%	1.5%	.14

Base: Children who worked in the carpet industry in the past 12 months and were born elsewhere. Information on person making the decision to move missing for one Factory Child (weighted N = 4).

Note: Multiple response items, totals may add to more than 100 percent.

Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

Table 51. Deceptive Recruitment of Migrant Child Carpet Workers by Setting

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	1,750	1,537	213	
"Has this job lived up to your expectations?"				
Yes	53.4%	52.1%	63.1%	
No	25.7%	26.6%	19.5%	*.64*
DK/NR	20.9%	21.3%	17.3%	

Base: Children who worked in the carpet industry in the past 12 months and were born elsewhere.

Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

Table 52. Carpet-Related Activities Performed by Children in the Last 12 months by Setting

	Industry Total	Children in Households	Children in Factories	p-value
Weighted N=	33,413	32,181	1,232	
"When was the last time that you engaged in _____ (for at least for an hour)?"				
The following 16 activities comprised the industry's productive process that was studied.				
Separating wool according to its colors	1.1%	1.0%	1.9%	*.44*
Cleaning/washing wool or silk	0.2%	0.2%	1.2%	*.09*
Carding wool	0.5%	0.5%	0.5%	*.89*
Spinning wool to make thread	1.9%	1.9%	0.3%	*<.01***
Dyeing thread	0.0%	0.0%	0.0%	-
Balling thread	1.5%	1.6%	0.0%	*.32*
Plying many yarns (usually silk) into one	0.1%	0.1%	1.3%	*.07*
Mixing/joining many colored yarn into one	0.3%	0.3%	1.8%	*<.05**
Weaving carpets	95.2%	95.5%	87.9%	*<.01***
Tufting carpets	2.0%	2.0%	1.4%	*.50*
Hand looming carpets	7.7%	7.6%	9.8%	*.47*
Washing carpets	0.9%	0.7%	5.8%	*<.01***
Trimming carpets	0.5%	0.4%	2.5%	*.10*
Stretching carpets	1.5%	1.4%	2.2%	*.52*
Repairing errors/assuring rows are straight	1.3%	1.3%	2.9%	*.13*
Transporting/packing carpets	0.2%	0.2%	0.0%	*.70*
Children were usually asked about three other trade-related tasks that fell outside the productive process.				
Buying or selling wool for use in carpets	0.9%	0.9%	0.8%	*.92*
Buying/selling silk/synthetic silk for use in carpet	0.2%	0.2%	0.0%	*.70*
Buying & selling completed carpets	0.0%	0.0%	0.5%	*<.05**

Base: Children who worked in the carpet industry in the past 12 months.

Source: Pakistan PC household child survey (June-December 2009), Pakistan PC Factory worker survey (April-July 2009).

Table 53. Protective Measures for Child Carpet Workers by Setting

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	25,307	24,086	1,221	
"Is there an adult present at the time of work for supervision?" [1]				
Yes, always	21.3%	20.9%	30.0%	*<.05**
Yes, sometimes	45.2%	45.1%	46.1%	
No	27.7%	28.1%	18.2%	
DK/NR	5.9%	5.9%	5.6%	

"Have you received any training that prepared you to use these tools?" [2]				
Yes	68.0%	67.4%	91.5%	<.01**
No	27.1%	27.7%	5.9%	
DK/NR	4.8%	4.9%	2.6%	

[1] Base: Children who worked in the carpet industry in the past 12 months. Information missing for 251 HH-based child carpet workers (Weighted N = 8,096) and 3 Factory-based child carpet workers (Weighted N = 10).

[2] Base: Children who worked in the carpet industry in the past 12 months and used any tools for work. Information missing for 14 Factory-based child carpet workers (Weighted N = 61).

Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

Table 54. Socially Unhealthy Environmental Conditions of Household-Based Child Carpet Workers

Exposure to Corruption	Children Working in Households
Weighted N=	24,086
("How frequently do you see the following activities in your community or at your place of work?")	
Children & youths abusing drugs	
Always or often	11.1%
Sometimes	5.0%
Rarely or never	73.6%
Children & youths stealing/fighting	
Always or often	18.1%
Sometimes	14.3%
Rarely or never	57.7%
People selling drugs	
Always or often	3.0%
Sometimes	1.8%
Rarely or never	83.4%
Prostitution	
Always or often	1.5%
Sometimes	0.9%
Rarely or never	85.3%
Children & youths drinking	
Always or often	2.3%
Sometimes	2.1%
Rarely or never	83.3%
Children & youths smoking	
Always or often	18.3%
Sometimes	9.3%
Rarely or never	63.3%

Base: Children who worked in the carpet industry in the past 12 months. Information missing for 251 HH-Child carpet workers.

Source: Pakistan PC household child survey (June-December 2009).

Table 55. Mode of Payment for Child Carpet Workers by Setting

	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	26,416	25,185	1,232	
"What do you get in exchange for your work?" [1]				
Cash	84.5%	84.2%	91.4%	*.08*
New skills	7.7%	8.0%	1.9%	*<.05**
Education	1.7%	1.6%	3.5%	*.12*
Shelter, Food, clothing	7.4%	7.3%	9.4%	*.57*
Medical assistance	2.0%	2.0%	1.7%	*.87*
Nothing	6.2%	6.4%	0.4%	*<.01***
Other	0.4%	0.4%	0.8%	*.52*
DK/NR	2.2%	2.2%	2.7%	*.76*
"How are your pay/benefits determined?" [2]				
Days worked	11.4%	11.4%	12.0%	.90
Weeks worked	20.8%	20.9%	18.0%	.56
Every two weeks worked	5.7%	5.9%	2.7%	*<.05**
Every month worked	22.4%	20.4%	58.6%	*<.01***
Piecework	24.6%	25.2%	12.9%	*<.05**
Per weight of the wool/yarn	2.0%	2.1%	0.0%	.42
Upon completion of a task	1.2%	0.8%	7.4%	*<.01***
Other	3.2%	3.1%	4.2%	.59
DK/NR	13.0%	13.6%	2.1%	*<.01***
Weekly Earnings[2]				
Median Weekly Earnings (Pakistani Rupees)	400	400	500	*.58*

[1] Base: Children who worked in the carpet industry in the past 12 months. Information missing for 211 HH-child carpet workers (Weighted N = 6,997).

[2] Base: Children who worked in the carpet industry in the past 12 months and received something in exchange for work. Information missing for 42 HH-based child carpet workers (Weighted N = 1,172) and 5 child carpet workers in carpet factories (Weighted N = 35).

Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009).

Table 56. Sick Benefits for Child Carpet Workers by Setting

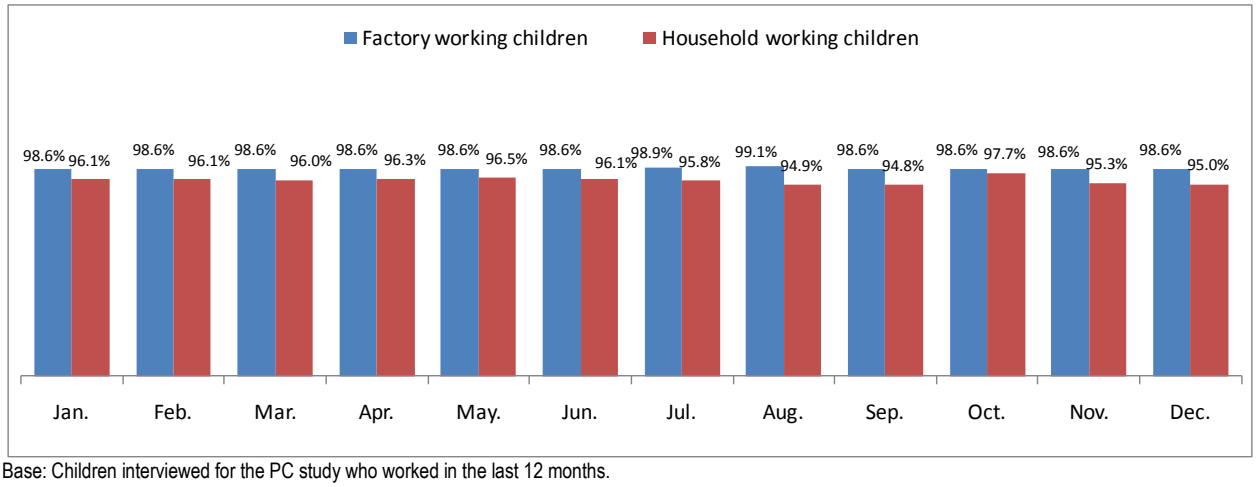
	Total	Children Working in Households	Children Working in Factories	p-value
Weighted N=	26,500	25,268	1,232	
"If you become ill/injured during work, how much expenses your employer bear?"				
All expenses	3.8%	3.7%	6.4%	*<.01***
Some expenses	7.1%	6.2%	25.4%	
None	75.0%	75.8%	58.2%	
N/A (usually work in family business)	6.7%	7.0%	0.3%	

	Total	Children Working in Households	Children Working in Factories	p-value
DK/NR	7.4%	7.3%	9.7%	

Base: Children who worked in the carpet industry in the past 12 months. Information missing for 208 HH-based child carpet workers (Weighted N = 6,913).

Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

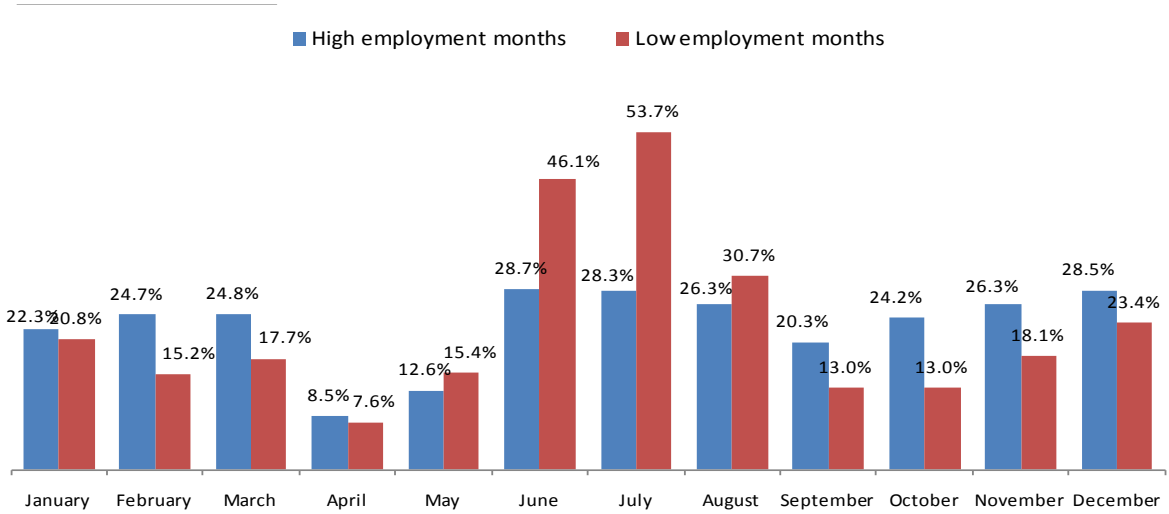
Figure 6. Work Seasonality: Percent of Child Carpet Workers Reporting Working Each Month by Setting



Base: Children interviewed for the PC study who worked in the last 12 months.

Source: Pakistan PC Factory worker interviews (Jul.-Dec. 2009), Pakistan PC Household Child Survey (June-December 2009)

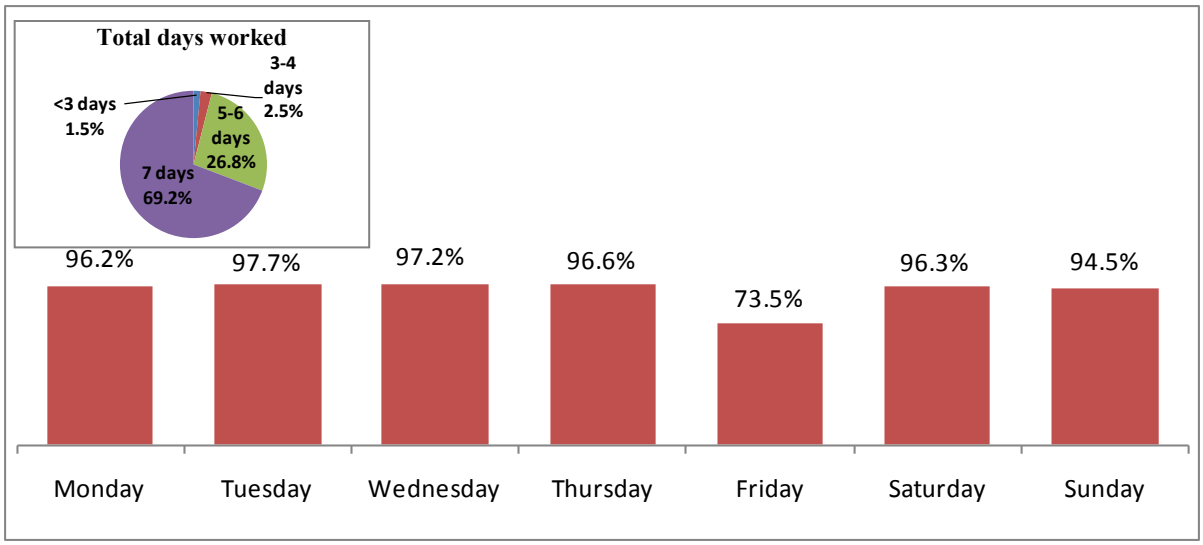
Figure 7. Work Seasonality: Percent of Factory Managers Reporting Months of Low and High Employment



Base: Factories with work seasonality ("Do not employ the same number of workers every month", n=49 for high employment months, n=39 for low employment months).

Source: Pakistan PC Factory Manager Interviews (April-July 2009)

Figure 8. Days Worked: Percent of Child Carpet Workers Reporting Performing Carpet Activities by Day and Total Number of Days Worked in Last Week

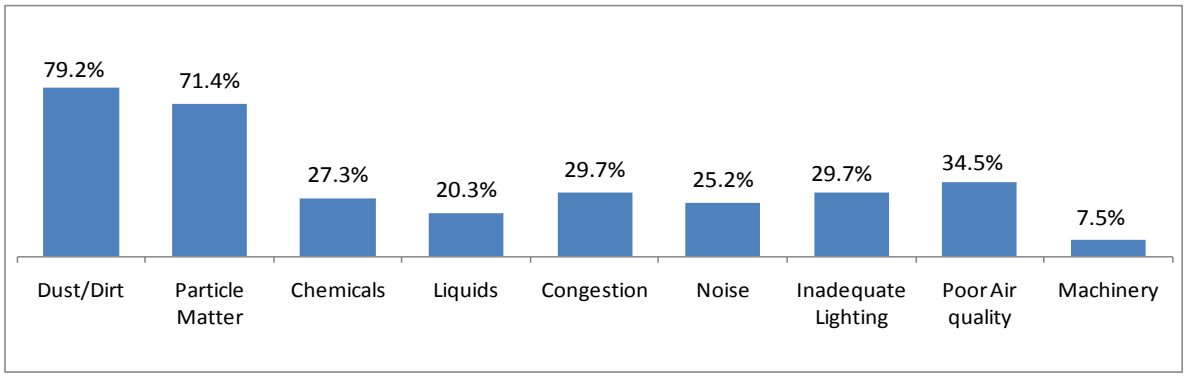


Base: Children who worked in the carpet industry in the last seven days.

Source: Pakistan PC Household Child Survey (June-December 2009)

Note: Data were unavailable for factory-based children.

Figure 9. Physical Environmental Hazardous Conditions Observed in Carpet Factories



Base: Factories observed for the PC study.

Note: Multiple response items, so totals may exceed 100 percent.

Source: Pakistan PC Factory observation (April-July 2009)

Table 57: Carpet-Related Activities Performed by Child Carpet Workers in the Last 12 Months by Setting and Age

"When was the last time that you engaged in _____ (for at least for an hour)?"	Factories			p-value	Households			p-value	Total			p-value
	5-8	9-13	14-17		5-8	9-13	14-17		5-8	9-13	14-17	
Weighted N=	85	613	535		3,548	12,510	16,123		3,633	13,123	16,658	
Buying or selling wool for use in carpets	Insufficient Sample Size	0.0%	1.9%	*.36*	0.7%	0.7%	1.2%	*.79*	0.7%	0.7%	1.2%	*.73*
Buying/selling silk/synthetic silk for use in carpet		0.0%	0.0%	-	0.7%	0.3%	0.0%	*.22*	0.7%	0.3%	0.0%	*.22*
Separating wool according to its colors		0.0%	4.4%	*.07*	3.6%	0.4%	1.0%	*.17*	3.5%	0.4%	1.1%	*.15*
Cleaning/washing wool or silk		0.0%	2.8%	*.09*	1.8%	0.0%	0.0%	*<.01***	1.8%	0.0%	0.1%	*<.01***
Carding wool		0.0%	1.2%	*.33*	0.0%	0.7%	0.4%	*.61*	0.0%	0.7%	0.4%	*.62*
Spinning wool to make thread		0.0%	0.0%	-	0.0%	2.3%	2.1%	*.19*	0.1%	2.2%	2.0%	*.09*
Dyeing thread		0.0%	0.0%	-	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	-
Balling thread		0.0%	0.0%	-	0.9%	0.2%	2.7%	*<.01***	0.9%	0.2%	2.6%	*<.01***
Plying many yarns (usually silk) into one		0.0%	2.9%	*.12*	0.9%	0.0%	0.0%	*.08*	0.9%	0.0%	0.1%	*.08*
Mixing/joining many colored yarn into one		0.0%	4.2%	*.06*	0.9%	0.0%	0.3%	*.18*	0.9%	0.0%	0.5%	*.11*
Weaving carpets		86.4%	87.6%	*.47*	95.1%	96.0%	95.2%	*.81*	95.2%	95.6%	95.0%	*.90*
Tufting carpets		0.5%	2.5%	*.29*	0.0%	2.5%	2.1%	*.10*	0.0%	2.4%	2.1%	*.10*
Hand looming carpets		11.9%	9.0%	*.54*	5.7%	8.6%	7.3%	*.53*	5.6%	8.7%	7.4%	*.45*
Washing carpets		3.2%	9.7%	*.18*	0.9%	0.4%	0.9%	*.56*	0.8%	0.5%	1.1%	*.46*
Trimming carpets		1.7%	3.8%	*.36*	0.0%	0.0%	0.7%	*.23*	0.0%	0.1%	0.8%	*.16*
Stretching carpets		0.6%	4.4%	*.12*	0.9%	0.7%	2.1%	*.17*	0.9%	0.7%	2.2%	*.13*
Repairing errors/assuring rows are straight		0.6%	5.9%	*<.05**	0.8%	0.8%	1.8%	*.33*	0.8%	0.7%	1.9%	*.23*
Transporting/packing carpets		0.0%	0.0%	-	0.9%	0.0%	0.2%	*.21*	0.9%	0.0%	0.2%	*.21*
Buying & selling completed carpets		0.0%	1.0%	*.54*	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	*.66*

Base: Children interviewed for the PC study who performed at least one carpet-related activity in the last 12 months. Insufficient sample base (n<30) for the 5-8 age group in factories.
Note: Multiple response items, totals may not add up to 100%.
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009).

Table 58: Median Number of Hours per Week Spent on Household Chores by HH-Based Working Children by Gender and Type of Work

	Child Carpet Workers in Carpet HHs			p-value	Working children in Non-Carpet HHs			p-value
	Male	Female	Total		Male	Female	Total	
Weighted N=	9,962	11,455	21,417		3,823	1,625	5,448	
Cooking/ serving meals/washing dishes	0	0	0	*<.01***	0	2	0	*<.01***
Cleaning the house, washing clothes etc.	0	1	0	*<.01***	0	3	0	*<.01***
Shopping for HH goods	0	0	0	*<.01***	0	0	0	*<.05**
Minor repairs on household items	0	0	0	*<.05**	0	0	0	*<.05**
Taking care of old or sick family members	0	0	0	*<.01***	0	0	0	*.12*
Taking care of younger children	0	0	0	*<.01***	0	0	0	*.14*
Collecting wood/dung for cooking or heating	0	0	0	*<.01***	0	0	0	*<.05**
Collecting fodder for livestock	0	0	0	*<.01***	0	0	0	*.36*
Collecting water for HH use	0	0	0	*<.01***	0	0	0	*.05*
Total (All chores)	1	6	3	*<.01***	1	8	3	*<.01***

Base: Children interviewed for the Household Child Survey (excludes children who did chores but did not provide the time spent per week).
Source: Pakistan PC Household Child Survey (June-December 2009)

Table 59. Who Abused Child Carpet Workers by Setting

	Total	HH Carpet child worker	Factory Child Worker	p-value
Weighted N=	3,423	3,128	296	
"Who reprimands or punishes you?" [1]				
Employer/Work Supervisor	43.2%	39.2%	85.3%	*<.01***
Coworkers	6.9%	6.7%	8.9%	.63
Parents	55.4%	59.1%	15.7%	*<.01***
Other	3.6%	3.8%	1.5%	.33
DK/Refused	0.0%	0.0%	0.0%	-
"Who made you feel uncomfortable?" [2]	Insufficient Sample			-
Weighted N=	242	159	83	-

[1] Base: Children who were engaged in income generating or productive work in the past 12 months and were reprimanded at work.
[2] Base: Children who were engaged in income generating or productive work in the past 12 months and were touched inappropriately at work at work.
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

Table 60: Reason for Acquiring Debt by HHs with Children Working in Different Industries

	Carpet HHs with Carpet Child Workers	Non-Carpet HHs with Child Workers	p-value
Weighted N=	7,182	1,289	
"Why has anybody in this household borrowed that money (last debt)"			
Purchase house or to expand or improve existing house	15.8%	16.3%	*.86*
To celebrate festival, wedding or funeral of family member	15.2%	17.4%	
To purchase appliance for domestic use	12.0%	18.4%	
To expand family business	11.7%	10.6%	
To pay off another debt	4.6%	2.1%	
Purchase of land	3.3%	0.0%	
To go abroad	0.6%	0.0%	
To purchase a vehicle	0.0%	0.0%	
Other	36.8%	35.2%	
Total	100%	100%	

Base: Children interviewed for the IPC study whose households have acquired any debt.
Source: Pakistan PC Household Survey (June-December 2009), Pakistan PC Household Child Survey (June-December 2009)

Table 61: Suggestions to Improve Working Conditions by Child Carpet Workers by Setting

	Total	HH Child Carpet Worker	Factory Child Worker	p-value
Weighted N=	25,307	24,085	1,222	
"Which of the following conditions should be improved?"				
Pay/Wages	59.0%	60.4%	31.6%	*<.01***
Working hours	24.6%	24.2%	34.1%	*<.05**
Ventilation at place of work	15.9%	15.8%	18.8%	*.43*
Heat/Temperature	14.3%	14.5%	10.3%	*.29*
Time for breaks	11.1%	10.7%	19.2%	*<.05**
Workspace	10.5%	10.5%	10.7%	*.95*
Days of work	9.0%	8.8%	13.5%	*.09*
Illumination at place of work	8.5%	8.5%	10.2%	*.47*
Drinking water to workers	5.7%	5.6%	8.2%	*.24*
Verbal abuse to workers	4.9%	4.9%	4.9%	*.99*
Noise from people/machines	4.6%	4.6%	6.2%	*.37*
Physical abuse to workers	1.9%	1.8%	3.4%	*.17*
Foul odor/unsanitary surroundings	1.7%	1.7%	1.7%	*.98*
Chemical exposure	0.2%	0.2%	0.6%	*.40*
Others	0.3%	0.2%	1.4%	*.08*

Base: Children who were engaged in income generating or productive work in the past 12 months and had any suggestions for improvement.
Note: Multiple response items, totals may not add up to 100%.
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

Table 62: Medical Assistance and Reasons for Not Receiving Medical Assistance by Setting

	Total	HH Carpet Child Worker	Factory Child Worker	p-value
Weighted N=	11,621	10,965	656	
Were you taken to a medical clinic/HP/hospital for any injuries or sickness? (% "Yes")[1]	54.0%	55.0%	37.4%	*<.01***
"What was the reason you were not taken to a health facility?" [2]				
Weighted N=	4,142	3,807	335	
Lack of money	54.8%	56.6%	33.6%	*<.01***
Not necessary	35.9%	36.3%	30.4%	*.46*
Local treatment at home	13.8%	13.5%	17.2%	*.56*
Went to local healer	10.6%	11.6%	0.0%	*.07*
Too far away	3.8%	3.6%	5.2%	*.69*
Took care of injury in village or home	3.6%	3.6%	4.1%	*.89*
Self-medication	3.6%	2.9%	11.1%	*.09*
Others	1.0%	0.8%	2.1%	*.54*
DK/NR	10.1%	9.6%	16.2%	*.23*

[1]Base: Children interviewed in the PC study who were sick or injured in the last 12 months
[2]Base: Children interviewed in the PC study who were sick or injured in the last 12 months and did not receive medical treatment. Information missing for 8 factory-based child carpet workers (Weighted N = 39).
Note: Multiple response items, totals may not add up to 100%.
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

Table 63: Location and Administration of Medical Treatment to Child Carpet Workers by Setting

"Where were you treated? Who administered the treatment?"	Total	HH Child Carpet worker	Factory Child Worker	p-value
Weighted N=	6,281	6,036	245	
Place in the health facility where treated				
In first-aid/preliminary examination room	17.4%	17.5%	15.0%	*.44*
In out-patient department	22.4%	21.9%	33.8%	
Confinement to medical clinic or hospital	53.9%	54.4%	42.3%	
Emergency room	1.5%	1.5%	1.4%	
Other	4.8%	4.7%	7.5%	
Person who administered the treatment				
Doctor	77.5%	77.6%	75.3%	*.59*
Other health practitioner	10.8%	11.1%	4.3%	
Self	2.4%	2.3%	5.2%	
Parents/Relatives	7.6%	7.3%	13.9%	
Local healers	1.3%	1.3%	1.3%	
DK/NR	0.4%	0.4%	0.0%	

Base: Children interviewed in the PC study who were sick or injured in the last 12 months and received medical treatment.
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009).

Table 64: Type of Medical Treatment Administered to Child Carpet Workers by Setting

"What type of treatment were you administered?"	Total	HH Carpet child worker	Factory Child Worker	p-value
Weighted N=	6,276	6,036	241	
Antiseptic and bandage	14.9%	14.8%	15.9%	*.85*
Local herbs	39.3%	39.3%	38.3%	*.91*
Prescription drugs	48.6%	48.9%	39.4%	*.28*
Bought drugs without prescription	3.1%	3.1%	3.4%	*.91*
Stitches	3.9%	3.9%	2.2%	*.54*
Surgery	0.5%	0.5%	0.0%	*.77*
Other	2.3%	2.3%	3.7%	*.59*
DK/NR	1.4%	1.5%	0.0%	*.56*

Base: Children interviewed in the PC study who were sick or injured in the last 12 months and received medical treatment.
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009).

Table 65: School Attendance by Child Carpet Workers by Gender and Setting

"Are you currently attending school?" ("Yes")	Total	HH Child Carpet Worker	Factory Child Worker	p-value
Weighted N=	33,283	32,089	1,194	
Male	31.2%	31.3%	29.9%	*.81*
Female	19.2%	19.3%	15.7%	.65
Total	24.70%	24.60%	26.80%	.68

Base: Children interviewed for the PC study. School attendance information missing for 11 Factory Children (weighted N = 37) and 3 HH-Children (weighted N = 93).
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

Table 66: School Attendance by Child Carpet Workers by Age and Setting

"Are you currently attending school?" ("Yes")	Total	HH Child Carpet Worker	Factory Child Worker	p-value
Weighted N=	33,283	32,089	1,194	
5-8	26.3%	26.1%	34.4%	*.40*
9-13	30.7%	30.4%	37.3%	*.30*
14-17	19.8%	20.0%	13.3%	*.14*
Total	24.8%	24.7%	26.8%	*.68*

Base: Children interviewed for the PC study.
School attendance information missing for 11 Factory Children (weighted N = 37) and 3 HH-Children (weighted N = 93).
Source: Pakistan PC Factory worker survey (April-July 2009), Pakistan PC Household Child Survey (June-December 2009)

Table 67: Chores Interfering with HH-Based Working Children's Education by Type of Work

	HH Carpet child worker	Other child worker	p-value
Weighted N=	5,085	938	
Do your chores interfere with your studies? (%"yes") [1]	27.3%	13.1%	*.11*
How do your chores interfere with your studies? [2]			
Feel tired in classroom	27.7%	Insufficient Sample Base	-
Have to leave school sometimes	25.6%		
Not enough time to study	22.7%		
Too tired to study at home	8.7%		
Arrive late at school	4.1%		
Other	4.7%		
DK/NR	6.5%		

[1] Base: HH Children who were currently attending school and perform household chores..
[2] Base: HH Children who were currently attending school, perform household chores and report that chores affect their studies. Insufficient sample base (n<30) for other working children.
Note: Multiple response items, totals may not add up to 100%. Source: Pakistan PC Household Child Survey (June-December 2009)

APPENDIX C – MEASURES TO INDICATE CHILD LABOR

One of the study's objectives was to produce reliable, statistically sound, and nationally representative estimates of the number and prevalence of working children who were engaged in unacceptable work (child labor). By unacceptable work, the study meant that the nature of the work and/or the working conditions exploited and/or abused working children. The prevalence meant the percentage of child carpet workers who were engaged in that unacceptable work. In order to accomplish that objective, the study needed to identify and measure the kinds of work and working conditions that were unacceptable. The exploitation and abuse of working children take many forms and are often hidden from view.

C.1. Common International and National Standards

This study relied on international standards and looked to international conventions for guidance in identifying unacceptable kinds of work and working conditions. In general, international and Pakistani standards agreed. Pakistan had ratified many ILO conventions and the UN Convention on the Rights of a Child (UNCRC), and Pakistan had passed legislation that was based on or adapted international standards.[57] Both sets of standards agreed on the following:

- **Minimum working age.** Children should not be employed until they reach a certain age. This was the basis for ILO Convention 138 and was noted in the UNCRC and several Pakistani Acts, most recently in the 1991 Employment of Children Act (ECA).

- **Hazardous work.** Children should not be engaged in work that was likely to jeopardize their health, safety, or morals. This was noted in many Conventions, especially in the UNCRC and ILO Conventions 90 and 182. This was specifically noted in Pakistan's 1991 ECA and the 2004 Constitution.

- **Overwork or overtime**. Children should not work an excessive number of hours or at night and needed rest (breaks). This was noted in the UNCRC and ILO Convention 138 (Recommendation 146). Several Pakistani Acts, most recently the 1991 ECA, specifically limited the number of hours that a child could work and prohibited their working at night.

- **Forced and bonded labor.** Children should not be forced/coerced to work. This was the basis for ILO Conventions 29 and 105, and these forms of labor were specifically noted in the 1992 Bonded Labour System (Abolition) Act, and the 2004 Constitution.

[57] Pakistan ratified Convention 90 in 1951, Convention 29 in 1957, Convention 105 in 1960, the UNCRC in 1990, Convention 182 in 2001, and Convention 138 in 2006.

- **Child trafficking.** Children should not be trafficked into work. This was the basis for the Palermo Protocol and was noted in Pakistan's (2004) Constitution.

C.2. Differences between International and National Standards

Although the international and national standards agreed in general about the kinds of work and working conditions that were unacceptable for children, the two sets of standards differed in some specific details and in the implementation. The differences included the following:

- **The age of a child (14 vs. 18).** International standards defined a child as a person under 18 years of age, but Pakistan's 1991 ECA defined a child as a person under 14 years of age. For that reason, Pakistan's legal protection of children differed from international standards by not protecting children 15-17 years of age.

- **The minimum age to work (15 vs. 14).** International standards set the minimum age to work at no less than 15 years, although countries were permitted to initially specify 14 years. Pakistan's 1991 ECA set the minimum age at 14 years.

- **The minimum age to be engaged in hazardous work (14 vs. 18).** International standards set the minimum age to be engaged in any work that was likely to jeopardize the health, safety, or morals of young people at no less than 18 years, although countries were permitted to set that at 16 years with the condition that the workers' health, safety, and morals were fully protected and the workers received adequate training. Pakistan's 1991 ECA set the minimum age to be engaged in hazardous work at 14 years.

- **The establishments that are regulated.** International standards did not exclude any workplaces or establishments from regulation. Pakistan's 1991 ECA only regulated factories, defined as establishments employing at least 10 workers

C.3. Standards and Measures for this Study

C.3.1. Standards for this study

This study relied on international standards whenever there were differences between the two sets of standards. This study based its analysis on the following:

- A child was any person younger than 18 years of age.
- The minimum age to be engaged in hazardous work was 18 years of age.
- The measures of unacceptable work and working conditions were applied to all children (persons under 18) who were employed in the carpet industry, even when they were working in their own household with their family or in workshops (factories or sheds) of any size.

This study utilized Pakistani standards when they defined specific issues that were not defined by international standards. Examples included:

- Listing specific occupations that were hazardous.
- Limiting the specific number of hours that a child could work in a day (or hours or days in a week) and the hours of work before a child needed to rest (break time).
- Setting the specific nighttime hours when a child could not work.

This report presents estimates of the existence and prevalence of unacceptable work using both international and Pakistani standards to facilitate the comparison.

C.3.2. Measures and Indicators Developed by This Study

This study developed a set of measures to indicate the existence of two unacceptable forms of child work:

- Hazardous work
- Excessive work

The study also estimated the prevalence of those forms of unacceptable work, which was the number of children engaged in that form of unacceptable work divided by the number of children working in the carpet industry in Pakistan.

C.3.2.1. Measuring Hazardous Work

The study developed three measures which indicated the existence and prevalence of hazardous work. Two measures identified whether the work was defined as inherently hazardous by international and national standards. The other measure examined the characteristics of the working conditions and workplace and the medical histories of the working children.

- **Work Defined as Hazardous**

ILO convention 182 specifies that hazardous types of work "shall be determined by national laws or regulations or by the competent authority" (Article 4). To decide whether the work was defined as inherently hazardous, the study looked at Pakistani standards. Pakistan had defined on its 1991 ECA specific occupations as hazardous (including carpet weaving, wool cleaning, and the wool industry) and prohibited employing children to work in those occupations. If the occupation or industry was listed, it was hazardous work and, therefore, unacceptable work for children.

For each of the sampled children working in the carpet industry the following variables were examined:

i. National standards that defined occupations, processes, or industries as hazardous.
ii. Each child's age.
iii. Each child's working status. A child had to be working to be counted. This variable was included because non-working children had been interviewed in the household survey.

Although both Pakistani and the international standards agree that no children should be working in hazardous work, they disagree on who qualifies and is protected as a child. By international standards, children are all persons younger than 18 years of age, and the category of child carpet worker encompasses all persons under 18 years of age who are working in the carpet industry. The variable definition used to compute hazardous work according to international standards is presented in Table 68.

Table 68. Hazardous Work (International Standards): Variable Definition and Data Crosswalk

Indicator	Variable		Qualifying Codes	
Child is a usual child carpet worker	WOR	Child worked in carpet-related activities the last 12 months	1	Yes
Child's Age in Completed Years	AGE	Current age	1	5-11
			2	12-13
			3	14-15
			4	16-17
Child is in Hazardous Work (International Standards) if WOR = 1 & (AGE = 1 or AGE = 2 or AGE = 3 or AGE = 4)				

However, by Pakistani standards, as expressed by the 1991 ECA, children are all persons younger than 14 years of age, and only those children (under 14) were prohibited from working in processes that were listed as hazardous. Persons 15-17 years old were not considered to be children and were not covered and protected by the Child Labour Act. The variable definition and data crosswalk used to compute Hazardous Work according to Pakistani standards is presented in Table 69.

Table 69. Hazardous Work (Pakistani Standards): Variable Definition and Data Crosswalk

Indicator	Variable		Qualifying Codes	
Child is a usual child carpet worker	WOR	Child worked in carpet-related activities the last 12 months	1	Yes
Child's Age in Completed Years	AGE	Current age	1	5-11
			2	12-13
Child is in Hazardous Work (Pakistani Standards) if WOR = 1 & (AGE = 1 or AGE = 2)				

- **Working Conditions Reported as Hazardous**

In addition to specifying that hazardous types of work "shall be determined by national laws or regulations or by the competent authority" (Article 4), Recommendation No. 190 (ILO, 1999) specifies that particular consideration should be given to specific types of work. The third composite indicator of hazardous work involved (a) reviewing international conventions to learn which specific conditions were listed as being unacceptable, (b) developing a list of those conditions, and (c) interviewing working children to learn whether those conditions were present in their workplaces. The 1999 ILO Recommendation 190 supplemented Convention 182 and identified a number of specific hazardous characteristics of work (Part II), including:

- Work that exposes children to physical, psychological, or sexual abuse;
- Work underground, under water, at dangerous heights, and in confined spaces;
- Work with dangerous machinery, equipment, and tools, or which involves the manual handling or transport of heavy loads;
- Work in an unhealthy environment, which may, for example, expose children to hazardous substances, agents or processes, or to temperatures, noise levels, or vibrations damaging to their health; and
- Work under particularly difficult conditions such as work for long hours or during the night, or work where the child is unreasonably confined to the premises of the employer.

The physical environmental conditions of the children's work and workplaces were described in the results section, as well as whether the working children received any training or adult supervision. One of the main challenges that confronted any quantifiable research into hazardous child labor was how, or whether, to quantify the level or intensity of the health and safety threat posed by hazards. For many of those factors, the potential for causing harm varied depending on the level or quantity. Until they reached critical thresholds, many substances and conditions would not cause injuries or illnesses. This study did not collect information on the critical thresholds for hazardous substances and conditions. To decide whether the characteristics of the working conditions or workplace were hazardous, the study examined children's self-reports of the presence in their workplace of substances or conditions that were considered to be unacceptable by international standards. To decide whether the hazards had affected the children's health and safety, the study also examined children's reported history of injuries. More specifically, for each of the sampled children working in the carpet industry the following variables were examined:

i. Each child's age.
ii. Each child's working status. A child had to be working to be counted. This variable was included because the household survey had interviewed non-working children.

iii. International standards that legally defined which characteristics of working conditions or workplaces were hazardous for children of different ages.
iv. The characteristics of each working child's working conditions and workplace.
v. Evidence from each child's self-reported medical history to determine whether the child appeared to have suffered injury from working.

Each of these variables included multiple categories and values. The specific variable definition and data crosswalk used to compute the measure that indicated hazardous work based on the working conditions reported by children is presented in Table 70.

Table 70. Indications of Hazardous Work (Working Conditions): Variable Definition and Data Crosswalk

Indicator	Variable		Qualifying Codes	
Child's Age in Completed Years	AGE	Current age	1	5-11
			2	12-13
			3	14-15
			4	16-17
Child is a usual child carpet worker	WOR	Child worked in carpet-related activities the last 12 months	1	Yes
Work that exposes children to psychological abuse	PSY	Are you reprimanded or punished at work?	1	Yes
Work that exposes children to physical abuse	PHY	Have you ever been reprimanded, punished, or abused at work to the extent that you were physically injured?	1	Yes
Work that exposes children to sexual abuse	SEX	Have you ever been touched in an inappropriate manner or in a way that made you feel uncomfortable at work?	1	Yes
Work underground	UND	In the past 12 months, did you have to work in an environment with any…?	1	Work underground or in tunnels
Work at dangerous heights	HEI	In the past 12 months, did you have to work in an environment with any…?	2	Work at heights
Work with dangerous machinery, equipment, and tools	TOO	What are the tools or machinery that you use for your work?	1	Scissor
			3	Cutter
			4	Needle
			5	Knife
Work which involves the manual handling or transport of heavy loads	HEA	Do you have to carry heavy loads when you work?	1	Yes
Work in an unhealthy environment which may, for example, expose children to hazardous substances, agents or	SMO	In the past 12 months, did you have to work in an environment with any…?	3	Smoke or dust
	INS		4	Insecticides, paints, or fumes/odour from them
	CHE		5	Chemical solvents, petrol, diesel, kerosene, and mercury, or in areas with exposures form them

Indicator	Variable		Qualifying Codes	
processes, or to temperatures, noise levels, or vibrations damaging to their health	AMM		6	Ammonia, oxygen, or other gases
	NOI		7	Loud noise
	TEM		8	Extreme temperatures
	DAR		9	Dark or in rooms with inadequate lighting
	TO2		10	Dangerous tools
	VEN		11	Insufficient ventilation
	SLI		12	Slip, trip, or falling hazards
	XRA		13	Ultraviolet or x-rays
	VIR		14	Virus
	BAC		15	Bacteria
	FUN		16	Fungus
	PAR		17	Parasites
Work for long hours	HOU	Does child work for long hours?	1	Yes
Work during the night	NIG	Does child work at night?	1	Yes
Child suffered a work-related injury in the last 12 months	INJ	Child suffered a work-related injury in the last 12 months	1	Yes
Child is in Hazardous Work (Working Conditions) if WOR = 1 & (AGE = 1 or AGE = 2 or AGE = 3 or AGE = 4) & (PHY=1 or PSY=1 or SEX=1 or UND=1 or HEI=2 or TOO=1 or TOO=3 or TOO=4 or TOO=5 or HEA=1 or SMO=3 or INS=4 or CHE=5 or AMM=6 or NOI=7 or TEM=8 or DAR=9 or TO2=10 or VEN=11 or SLI=12 or XRA=13 or VIR=14 or BAC=15 or FUN=16 or PAR = 17 or HOU=1 or NIG=1 or INJ = 1)				

C.3.2.2. Measuring Excessive Work

This measure analyzed whether each child's work load was appropriate or excessive for that child's age. This measure included the issue of the minimum age to work and international standards about work and overwork.

ILO Convention 182 alluded to excessive work when cautioning against hazardous work. Recommendation 190 that supplemented Convention 182 was specific in citing "work under particularly difficult conditions such as work for long hours." The UN Convention on the Rights of the Child specifically cited the right of a child to rest, leisure, play, and recreational activities and generally restated the need to protect the child against economic exploitation and hazardous work and establish a minimum age for employment and regulation of the hours of employment. ILO Convention 32 noted that children 13-15 years of age should be doing only light work that would not harm their health or development and would not interfere with their attending school and then mentioned in general terms that the hours of work should be limited.

To measure each child's workload, the study collected data on the total hours of work during the last three days from all of the currently working child carpet workers (those who had worked

during the past seven days). Then, each child's total hours of work per week were matched with the child's age and compared with the standards that defined whether the work load was age-appropriate. The hours of work were for the total work load, which included for household-based child carpet workers the hours the child spent performing unpaid household services. The following standards were used to define what was excessive work for children of different ages.

- **Children 5-11:** Economic activities were excessive work if a child under-12 worked for 1 or more hours per week (7 days). Economic work for 1 hour during 7 days defined a child as economically active, and SIMPOC set the standard of 12 as the minimum age to be economically active. None of the countries specified children under-12 as the minimum age to work. Unpaid household services were excessive work if a child under-12 worked for 28 or more hours per week. This new standard was equivalent to an average maximum workload of 4 hours per day.

- **Children 12-13:** Economic activities were excessive work if a child under-14 worked for 14 or more hours per week, which was equivalent to an average maximum workload of 2 hours per day. This amount of economic work was the category of permissible light work permitted for children 12-14 in developing countries (and 13-15 elsewhere). The SIMPOC standard used under-15, but the project used under-14 because that is what the three countries used for light work. Unpaid household services were excessive work if a child under-14 worked for 28 or more hours per week. Any combination of economic activities and unpaid household services was excessive work if a child under-14 worked for 35 or more hours per week, which was equivalent to an average maximum workload of 5 hours per day. This standard was based on the thresholds shown in UCW studies and Edmonds' review (Edmonds, 2008; ILO-IPEC, 2004, 2007).

- **Children 14-17**. These are the oldest children based on the international standard age. Economic activities were excessive work if a child under-18 worked for 43 or more hours per week. Work for 43 hours exceeded the equivalent of an average maximum workload of 7 hours per day for a 6-day workweek or 6 hours per day for a 7-day workweek. Any combination of economic activities and unpaid household services was excessive work if a child under-18 worked for 43 or more hours per week.

The criteria used for the different age groups are summarized in Table 71.

Table 71. Measuring Excessive Work

	Economic Work		Combination of Work	
	Work	Child Labor	Work	Child Labor
Children under-12 (5-11 years)	<1 hour	1 or more	<28 hours	28 or more
Children under-14 (12-13 years)	<14 hours	14 or more	<35	35 or more
Children under-18 (14-17 years)	<43	43 hours or more	<43	43 hours or more

Note: The criteria for measuring excessive work were developed by the Research on Children Working in the Carpet Industry in India, Nepal, and Pakistan project, 2007-2012.

In order to create the measure that indicated excessive work, the following variables were examined for each of the sampled children working in the carpet industry:

i. Each child's age.
ii. Each child's working status. A child had to be working to be counted. This variable was included because the household survey had interviewed non-working children.
iii. Total number of hours that each child worked per week. For this, the project studied only the current workers (children who had worked at least once during the last seven days) to ensure that the children's recollection would be more accurate. The total hours of work included economic activities (children in employment) and, for household-based child carpet workers, unpaid household services (children in other productive activities).
iv. International standards that defined the minimum age to be employed and distinguished between acceptable versus excessive hours of work.

Each of these variables included multiple categories and values. The specific variable definition and data crosswalk used to compute the measure that indicated hazardous work based on the working conditions reported by children is presented in Table 72.

Table 72. Indications of Excessive Work: Variable Definition and Data Crosswalk

Indicator	Variable		Qualifying Codes	
Child is a current child carpet worker	WOR2	Child worked in carpet-related activities the last 7 days (*computed variable*)	1	Yes
Child's Age in Completed Years	AGE	Current age (*computed variable*)	1	5-11
			2	12-13
			3	14-15
			4	16-17
Number of hours spent on Market Work	MAR	Number of hours spent on Market Work	Continuous Variable	
Number of hours spent on the combination of HH chores and Market Work	COM	Number of hours spent on the combination of HH chores and Market Work	Continuous Variable	
Child is in Excessive Work if WOR2 = 1 & ((AGE = 1 & (MAR >= 1 hour or COM >=1 hours) or (AGE = 2 & (MAR >= 14 hours or COM >=35 hours) or ((AGE = 3 or Age = 4) & (MAR >= 43 hours or COM >=43 hours)))				

C.3.2.3. Measuring Child Trafficking

Trafficking was different than the other forms of unacceptable work because trafficking, which was the organized movement of children for the purpose of exploitation, preceded unacceptable work. The study analyzed multiple variables that were indicators of trafficking. Trafficking involved the movement (organized by a third party, neither the parents nor the child) of a child for the purpose of exploitation. The existence of trafficking depended on (a) whether the child moved from one place to another for the purpose of work, (b) whether the movement was organized by a third party (neither the child not the parents), (c) whether the child resulted in unacceptable work, and whether (d) the process of engaging the child into that work had been purposive with the intent to exploit the child.

Measuring trafficking was difficult. Trafficking consisted of the actors, transactions, and process of a person entering work and involved multiple locations (the child's origin, possible interim locations, and the workplace destination), multiple actors (the child, the child's parents or guardians, labor contractors, and possibly the employer), and often multiple transactions. In addition, the purpose of each transaction and the motivation of the actors were often unclear. The study analyzed multiple variables that were indicators of trafficking, including:

i. Each child's working status. A child had to be working in the carpet industry to be counted. This variable was included because non-working children and children working in other industries had been interviewed in the household survey.
ii. Each child's residential status (whether accompanied by parents or, if married, spouse). The study included this as a measure of vulnerability to exploitation and social isolation, or the lack of social (family) support.
iii. Each child's migration status (born locally or immigrated). Trafficking required that the child had moved from one place to another. Children who had immigrated might have been trafficked to the workplace and were more vulnerable to being trafficked because they were no longer enveloped in the social support at home.
iv. Each child's reason for immigration (whether job-related). Trafficking would not occur if the child moved for schooling or social (family, marriage, etc.) reasons.
v. Involvement of another party (not the child or the parents) in the decision to migrate. That indicated that the child had not made an independent decision to migrate, though the child and parents might have agreed with the decision that was made by someone else.
vi. Involvement of labor contractor in actual movement/migration. Someone else (a labor contractor) had organized the move/migration to work.
vii. Exploitive nature (child labor) of child's work or workplace. This variable was measured using the other measures of hazardous work and conditions, excessive work, and trafficking.

C.3.3.3 Indications of Other Unacceptable Forms of Child Work

This study did not collect sufficient information to create measures that indicated the existence of other forms of unacceptable work, including forced labor and bonded labor. However, the study identified variables that were critical to understand these two unacceptable forms and presented a descriptive analysis of these variables.

This study analyzed whether each working child had been forced/coerced in the past to start working and/or was being forced to continue work at the time of the research. One important factor was the age of the child carpet worker when he or she started working. At that time, was the child too young to be considered capable of making an independent voluntary decision?

The study asked each child carpet worker directly whether the child thought that he or she was able to leave their work if they so desired. Those who reported that they could not leave were asked the main reasons why they were unable to leave work. The most direct indications of forced/bonded labor were when child carpet workers reported that they could not leave because they were still repaying a debt and when they reported that their employer had threatened to harm them (a clear menace of punishment).

In most studies of forced labor, poverty and indebtedness were viewed as causing the child to leave home, often as forced or bonded labor, after which the child would be exploited and confined or restrained in a distant workplace. The research team started the study assuming that any children exhibiting three characteristics (having migrated, living unaccompanied by parents, and working in a factory) had increased vulnerability to coercion and exploitation by labor contractors and employers because those children would lack the protection and social support that would have been provided in their natal localities by the presence of parents and family. Therefore, the study assumed that those three characteristics could be used as filters that would identify the children most at risk of forced/bonded labor and child trafficking.

The study also focused on another factor – the family's poverty and indebtedness. Indications of the increased potential for forced/bonded labor included families being in debt and having difficulty repaying their debts. The study interviewed adult respondents in the carpet households for information about family poverty and indebtedness and how that might have affected children's participation in the industry workforce, including whether that might have played a part in coercing the children to work. Some carpet households reported that a household member had supplied labor to the lender to repay the outstanding debts. In most cases that household member who had provided the labor was an adult, but in some cases it was a child. When children working in the carpet industry were asked their reasons for working, did they report that they were working to repay outstanding family debts? Because of the close link between debt and the possibility of forced/bonded labor, the study analyzed whether the children who were

working to repay family debt were the same children who reported being unable to leave their job, especially those who could not leave because they were repaying a debt.

More specifically, the following variables were analyzed when discussing forced or bonded labor:

i. Each child's age.
ii. Each child's residential status (whether accompanied by parents or, if married, spouse).
iii. Each child's migration status (born locally or migrated).
iv. Financial status and indebtedness of the parents and family.
v. Cash advances paid to the parents or family.
vi. Family history of repaying debts by offering family labor.
vii. Involvement of another party (not the child or the parents) in the decision for the child to enter the workforce.
viii. Each child's self-reported ability to leave the work.
ix. If unable to leave the work, each child's reason for not being able to leave.

APPENDIX D – WEIGHTING

This study used a variety of sampling methodologies to design statistically and economically efficient samples for each of the populations surveyed. As a result, sampling designs departed from a Simple Random Sample, assigning different probabilities of selection to different population units. The following weights were developed to compensate for these unequal probabilities of selection.

Household Survey

PSUs were selected using a cluster sampling approach proportionally stratified by province and district, and drawn with probability proportional to the estimated number of carpet households in each location. 30 carpet households were to be sampled at random within each location. While the original sampling design assigned an equal probability of selection to every household and was therefore self-weighting, the final sample had to adjust to the number of carpet households available, and so in some locations fewer than 30 households were sampled. Since PPS sampling was only self-weighting when an equal number of households was selected in each cluster, weights were required to adjust for these departures from an epsem design. Also, the final number of carpet households turned out to be different than initially estimated in some locations. The total population of carpet households in Pakistan was re-estimated by applying an adjustment factor based on the difference between the expected and actual number of carpet households found. Weights were therefore developed to compensate for unequal selection probabilities as computed from the post-adjusted population estimates.

Since non-carpet HHs were only chosen as a benchmark for carpet HHs, their weight relative to the population of non-carpet HHs was not of interest, but only as a comparison to carpet HHs. In order to keep geographic factors constant, each carpet HH in the sample should be compared to the same number of non-carpet HHs within its community. The same weights were applied to non-carpet and carpet HHs, with an adjustment for sample size differences at the cluster level.

Finally, in the household surveys all children in a household were selected and so their probability of selection was equal to that of the household, except that 460 children (5.9 percent of the sample) identified in the HHs sampled could not be interviewed (281 in carpet households, or 6.8 percent of the sample of children in carpet households, and 179 in non-carpet households, or 4.9 percent of the sample of children in non-carpet households). This child non-response appeared to be randomly distributed across clusters, types of HHs and demographic groups (see Table 33 and Table 34), so children interviews were given a final weight adjustment by cluster and type of household to compensate for non-response.

Given the PPS methodology, weights were quite homogenous, as exemplified by the distribution of normalized weights[58]. Carpet households in Bilal Nangar, in Sindh province, were the main outlier, due to the proportionately highest level of child non-response (29 responding children out of a total of 42). These outliers had a relatively minor effect, and weights had an overall reduced effect on key demographic variables, such as gender and age.

Table 73: Descriptive Distribution of Normalized Weights

Min	Percentiles					Max	Mean
	5	25	50	75	95		
0.7977	0.8425	0.9111	0.9427	1.0168	1.3470	2.3930	1,0000

Table 74: Weighted and Unweighted Distribution of Children by Type of Household, Gender, and Age

	Unweighted		Weighted	
	Carpet Households	Non-Carpet Households	Carpet Households	Non-Carpet Households
Age				
5-8	26.3%	31.0%	26.6%	31.0%
9-13	38.5%	39.1%	38.5%	39.1%
14-17	35.1%	29.9%	34.9%	29.8%
Total	100%	100%	100%	100%
Gender				
Male	52.0%	54.7%	52.0%	54.5%
Female	48.0%	45.3%	48.0%	45.5%
Total	100%	100%	100%	100%

Factory survey

For the factory surveys there were two levels of selection:

a) Factories, including factory observations and factory manager surveys
b) Workers, including those apparently above 20 and those apparently below 20.

Factories were sampled using a proportionally stratified design by setting (urban/rural). This was an a priori self-weighting (epsem) design, only requiring adjustments for non-response. Due to the cluster sampling approach, separate weights were required at the factory and worker level.

[58] Normalized weights were obtained by dividing each weight by the overall average weight, so that the mean weight was 1. Normalized weights were useful to assess the presence of extreme weights. Extremes weights were the result of inefficient sampling allocations, resulting in excessive clustering of the sample. Extreme weights and excessive clustering were undesirable because they amplified the standard error from specific clusters, incrementing sampling variance.

Out of the total 203 factories that were sampled from the original frame, 200 were completed interviews (163 urban factories + 37 rural factories); two urban factories were found to be closed; and one urban factory refused to be interviewed. The rural stratum, containing no blank listings or non-response, was simply weighted up to represent the total 127 rural factories in the population. The population of urban factories was estimated downwards using the ratio of valid to listed factories. The final sample of urban factories was weighted to reflect their probability of selection based on this new estimate of the total population, with a further adjustment for factory level non-response.

At the worker level, the selection methodology used was the same for each factory and stratum, regardless of the number of workers in the factory: From each factory listing (workers apparently above or below 20), four workers were selected at random. If there were four or fewer workers in a group, then all of them were included in the sample. This sampling approach departed from an epsem design: workers had a probability of selection proportionally inverse to the number of workers in the factory. In order to adjust for this design effect, weights that were inversely proportional to the probability of selection of each worker were developed. These weights were multiplied by the corresponding factory weight (depending on whether the factory was in the rural or urban stratum) to obtain a final worker level weight.

This approach yielded overall balanced normalized weights with some outliers, mostly due to the low probability of selection of workers in the group above 20 in two particularly large factories in Lahore that had 300 and 350 workers, out of which only eight workers per factory were sampled.

Table 75: Descriptive Distribution of Normalized Weights

Min	Percentiles					Max	Mean
	5	25	50	75	95		
0.4224	0.4224	0.4256	0.4256	0.6864	2.0861	18.6192	1,0000

Table 76: Key Factory Worker Variables (Weighted and Unweighted)

		Unweighted		Weighted	
		N	%	n	%
Age	<18	280	24%	182	15%
	≥18	910	76%	1,008	85%
Gender	Female	78	7%	61	5%
	Male	1,112	93%	1,129	95%
Total workers in sample		**1,190**	**100%**	**1,190**	**100%**