



Development of an instrument for the psychosocial assessment of child workers

SYNOPSIS

Those who write about child labour often refer to the possible threat that work can pose a threat to a child's mental health. Common sense says this is true, but the research evidence is still very weak. While some threats seem obvious, as in the case of children who have suffered sexual exploitation or service as child soldiers, others are much more subtle. There remains little robust data on which aspects of worklife might damage a child's psychosocial functioning and development, and under what conditions. Even less attention has been given to understanding factors that support, strengthen or contribute to the psychological resilience of working children.

Without this information, it is not surprising that child labour programmes overlook psychosocial factors in their preparatory research and, consequently, are unable to address them later on in their action phase. Similarly, official policies¹ and practice, such as labour inspection, almost always overlook those occupations and conditions of work wherein physical risks are minimal but the psychosocial risks are potentially substantial.

Why do psychosocial factors not get the attention they deserve? In part, it may be the lack of a method able to quantify or to demonstrate psychosocial impacts on a population-wide basis. Many assume they can only be assessed: (a) by a professional psychologist; and (b) on a one-to-one basis, and are leary of getting into situations in which they do not feel competent and for which they may not have the time or resources to handle.

This paper reports on an effort to find a way around this block. It describes the process of developing a tool capable of examining the key dimensions of child workers' well-being but that is practical for use in settings where child labour commonly occurs.

This paper briefly reviews the research that was used in framing the content and form of the instrument, and describes the various steps which were undertaken to draft and verify the components, including the pilot-tests in Pakistan and Nepal. The paper has two purposes. First, is to provide potential users with sufficient information about the capacities of this tool that they can judge whether or not it is appropriate to employ in their own work. Second, it is intended to stimulate more attention to this vital subject, either through improvement of this tool or using it to conduct more large-scale research on child workers.

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Introduction

Health – psychological as well as physical – is central to the definition of child labour in international law. The International Labour Organization (ILO) Conventions speak of the “fullest physical and mental development of young persons”² and the United Nations Convention on the Rights of the Child declares that “the child, by reason of his physical and mental immaturity, needs special safeguards and care, including appropriate legal protection.”³ However, while the physical aspects of the working child’s health are beginning to receive the attention they deserve, the non-physical aspects are not.

The number of children affected by psychosocial risks is potentially large. As of 2008, 115 million children aged 5-17 were estimated to be engaged in work which poses a health risk.⁴ However, these estimates are based on physical risks only. Of the approximately 300 large-scale national surveys on which the most recent global statistics are based, very few included any indicators of psychosocial well-being. It is, therefore, likely that figures on children in hazardous work are underestimated and would rise once psychosocial factors are taken into account.

ILO’s model questionnaire for national child labour surveys has only one psychosocial-related question (added in 2008)¹:

“Have you ever been subject to the following at work?”

- Constantly shouted at
- Repeatedly insulted
- Beaten /physically hurt...
- Sexually abused (touched or done things to you that you did not want)
- Other (Specify)

Concern about psychosocial impacts of child labour is not new. The issue was officially raised as early as 1972 in a special report of the World Health Organization (WHO), which noted that rapid technological changes, particularly mechanization in developing countries, were having an adverse effect on child workers’ psychosocial health.⁵ The 1984 meeting of the Joint ILO/WHO Committee on Occupational Health raised the issue again and instigated a series of descriptive studies of psychosocial factors associated with child work in four occupational sectors: domestic services,⁶ agriculture,⁷ street-based trades, and factory work. The latter was described as creating a great deal of stress for the child worker.

“Long hours and days of uninterrupted work have a stultifying effect on the child, narrowing his horizons and often crippling him emotionally. Since a child working full time with potentially dangerous machines cannot afford to imagine or fantasize, as most children do, the child’s creativity and ability to transcend reality are blunted and his whole mental world becomes impoverished as a result.”⁸

In 1987, WHO convened a study group to consider the health of working children.⁹ The group undertook an exhaustive review of present knowledge and concluded that, although statistics on economically active children needed to be improved, there was sufficient evidence to indicate a problem of some magnitude, with socioeconomic conditions a contributing factor. The group drew attention to the psychosocial risks that work poses for children, noting that this was of particular concern and needed substantially more study. The study group acknowledged that such studies on children at work were not easy to carry out and suggested various ways to broaden knowledge on this issue.^{10 11}

Relevant research

Subsequent to these early calls for action, a number of academic studies were undertaken on this subject. However, they remain meagre in comparison with research on other topics relevant to understanding the dynamics and implications of child labour. Therefore psychosocial hazards and impacts of children’s work continues to be an area that is critically in need of further study.

The studies which have been carried out might be categorized as follows: a) descriptive papers on the probable psychological effects of children’s work, b) research on actual psychological impacts of work in specific occupations, c) quantitative studies in one country or setting, and d) conceptual and methodological papers.

Descriptive overviews

Two ILO publications are examples of the first of these categories: Forastieri’s, “Children at Work: Health and Safety Risks”¹² and Boidin’s handbook for labour inspectors¹³. The latter is a vigorous document listing various ways in which child labour could have devastating consequences on the psychosocial development of a child. Action-

oriented, it discusses how to interview child workers, and how to identify risk factors at the work site affecting their psychological and social equilibrium. Much of the information in this manual has been obtained by listening to children's stories, by examining their pictures and by observing their non-verbal behavior.

Forastieri's comprehensive book is a landmark in that it presents psychological hazards along with physical ones in her description of various types of child labour. She explains that children in work are socially and psychologically disadvantaged compared to adults, and that such factors as carrying financial responsibility for their families and peer-pressure to take up more risky work can have negative effects on the child's psychosocial wellbeing. She also notes that people's expectations about the roles of children are one of the factors making it difficult to address child labour because they consider work as necessary for children's later integration into the society as well as for development of skills and proper attitudes. However, she takes the position that child labour disrupts the process of healthy development through such factors as isolation, being treated as an object rather than a human being, and increased chances of being subjected to sexual, physical or emotional violence and emotional manipulation. The result is that child workers can develop a distorted sense of self, assuming that they are worthless and have no role but to serve others.

Occupational studies

The second category concerns occupation-specific studies. Those most studied are of children exploited in sex-related occupations (CSEC), engaged in armed conflict, or trafficked.^{14 15 16}

There is a huge literature on the psychological aspects of CSEC but it is quite particular to that type of abuse, and therefore somewhat less relevant to other forms of child labour. While studies in this category do document the psychological impacts of the work, they are largely focused on eliciting information that will inform the rehabilitation of the victims. An example that illustrates this fact focuses on slavery.¹⁷ The organization surveyed a number of rehabilitation

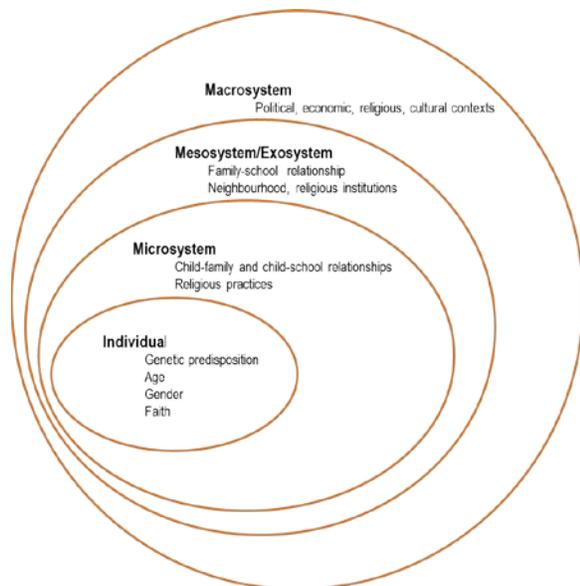
programmes for children coming out of situations of slavery and similar worst forms of child labor in four countries: Cote d'Ivoire, Haiti, India and Togo, investigating to what extent these programmes were able to respond to the basic psychological needs of the traumatized children.

The study warrants mention because it is explicit about its theoretical models, e.g. *Parental Acceptance and Rejection Theory*¹ which holds that maladaptive behavior of the child originates from familial relationships; *Trauma theory* which posits that situations like enslavement may lead to extreme loss of self-efficacy and dependence upon the perpetrator, a condition that leaves permanent scars;^{2,3} and an opposing theory, which promotes the idea that a nurturing social context that meets the basic needs of a child will enable her/him to recover naturally. These theories were used to demonstrate why accurately assessing a child's psychological state is so important in determining the intervention that should take place. This study is interesting also in that it found health workers inattentive to psychological issues and thus unable to respond to them adequately.

There are a number of descriptive studies of child soldiers.¹⁸ In general, they affirm the obvious – that conflict causes psychosocial distress to children – but they also indicate the importance of stepping away from conventional western psychiatric approaches and views on proper childhood development when dealing with children exposed to exploitative work. For example, instead of diagnosing a child as having Post Traumatic Stress Disorder (PTSD) and prescribing individual therapy and medicinal treatment, several studies¹⁹ stress the importance of not only looking at the child's developmental stage (a child's PTSD manifests differently than that of an adult) but also at the larger socio-cultural and economic context which contributed to the situation and which will inevitably be called upon to address it. In other words, they argue that psychosocial distress of child workers needs to be placed within a broader, more holistic picture, and that all children within the community need to be included in remedial programmes, not just the one who is working. See Figure 1 for a model which illustrates the various

contexts in which working children (in this case those affected by armed conflict) exist.²⁰

Figure 1: Model of risk and protection



Source: T.S. Betancourt and K.L. Khan

Child domestic workers are the focus of another set of occupation-specific studies. Unlike child soldiers and sexually exploited children, this form of child labour is not generally considered hazardous. Yet, a number of studies have confirmed that this is not the case.

One has shown that symptoms of mental ill-health (anxiety disorders, phobias, bed-wetting and separation anxiety) were more common among child servants than in all other types of child labour.²¹ This high level of distress is linked to the fact that the work is conducted in a closed social environment which does not provide opportunities for socializing with peers, in which physical, emotional and sexual abuse is not observed by outsiders, and in which the child has a severe lack of control and limited personal freedom due to being completely dependent on the employer. Because child domestic workers often change their workplaces and serve different people, it is not possible for them to form lasting relationships and leads to the belief that they simply live to serve others.²²

A large comparative study among Filipino and Indian domestic child workers concluded that often it is not the nature of the work itself that is intrinsically harmful, but rather the circumstances and conditions of work, especially the opportunity for schooling,²³ and thus argues for policies that provide the basis for monitoring these conditions.

A subsequent six country study by several of the same authors showed that psychological impacts can range from the very positive – a sense of contribution and worth – to extreme exploitation. Often it is schooling, however, that has a positive and protective effect on child domestic workers as it contributes to their self esteem, and brings friends, social support and contact with other adults to whom children can turn in case of need.²⁴

Country specific studies

The third category of studies is exemplified by a series of rigorous studies of child workers undertaken in Ethiopia. Each of these builds upon the other in increasingly more sophisticated and in-depth examination of the issues. For example, the first examined public perceptions of psychosocial risk of child workers in order to see if it was even worthwhile to research this issue.²⁵ The second, a cross-sectional study, was used to convince policy-makers of the need for action on child labour because it was able to show that, compared to school-going controls, child laborers were often emotionally abused (35%) e.g. insulted, belittled or beaten, or sexually abused (14%). It showed that those most needing help were the 14-15 year olds and that mental health problems were most in evidence among boys rather than girls.²⁶

These were followed by an even larger study in 2006²⁷ of over 800 children (cases and controls) which confirmed that child-laborers had higher prevalence of mental and behavioral problems compared to non-child laborers (20.1% over 12.5%) and certain types of mental health problems were particularly high (e.g. anxiety was twice as high).

Conceptual & Methodological studies

While all of the forementioned studies make significant contributions to our understanding of the issue, the seminal conceptual work in the field of child labour and psychosocial health is that of Martin Woodhead. A Working Paper written for the Understanding Children's Work programme of the ILO, UNICEF, and the World Bank in 2004 lays out

“conceptual frameworks for assessing the multiple ways that work can impact (both positively and negatively) on children's well-being and for identifying psychosocial indicators of impact. The paper draws attention to the ways that the context of children's work mediates how far potential hazards constitute a risk to children.”²⁸

An important caveat that Woodhead brings forward is that research should not focus solely on negative outcomes, as both the children and those around them see the benefits as well, weighing them against each other. A second point he emphasizes is that the word “impact” implies that the child is a passive recipient of an external event, whereas in fact, even children in highly exploitative situations, are actively trying to cope. They also frame their perception of their situation in different ways, such that they may not judge their condition as abusive while someone outside might do so. Not infrequently children express a sense of strong personal agency – accepting or even electing to work to support their families, for example, or the myriad of decisions involved in doing street work.

Woodhead also reminds us of the classic differentiation between the presence of a hazard, the risk or likelihood that the hazard will be encountered, and the degree to which, even if it is encountered, a child will be harmed. In other words, child workers may not suffer harm in an otherwise bad situation due to various protective factors. On the other hand, he notes that psychosocial impacts can be accentuated due to the compounding effect of multiple stressors deriving both from work and the child's social environment.

While these concerns certainly complicate inquiry in this field, Woodhead provides a framework that offers a sensible way to proceed. His overriding caution is to be careful not to assume that all these multiple dimensions of children's work can be aggregated into a single simplistic measure.

In constructing a framework for research, Woodhead lays out a set of factors that influence child workers' well-being:

- *“Secure relationships and consistent settings*
- *Activities and guidance*
- *Responsible adults*
- *Peer support and solidarity*
- *Physical environment and daily schedules*
- *‘contract’ with employers*
- *Work and family lives”*

In addition, he proposes five broad domains for assessing psychosocial impacts of child work:

- *“Cognitive abilities and cultural competencies*
- *Personal security, social integration and social competence*
- *Personal identity and valuation*
- *Sense of personal agency*
- *Emotional and somatic expressions of well-being”²⁹*

In proposing these, he emphasizes that these concepts which are drawn from ‘western’ psychiatry must be adapted to the culture being studied when they are incorporated in instruments and analyses.

Turning to other methodological studies, one of the first to attempt an instrument for studying psychosocial health of child workers is Judith Ennew's guide for ILO's rapid assessments of child labour.³⁰ She describes the technique as a series of tests that “look for a few basic and general indicators” and that can be used as indicators of more than one kind of problem. The aim is to examine gross differences between children who work and those that do not, rather than test for subtle effects or to define a therapeutic programme. Among those which focus on particular groups of child workers, note should be taken of Brewer's work which examined the variables relevant for study of child domestic workers.³¹

Another comprehensive conceptual work, which was prepared specifically for this project, was drafted by Stavroula Leka (chair of the WHO Technical Working Group on Psychological Impacts of Work) and Aditya Jain, with an extensive review of literature by Martijn Hofman.³²

The Leka/Jain report reviews the current evidence on occupational psychology. A key point they make is the need to look at both psychosocial hazards and impacts.

They identified 26 existing tools for psychosocial risk assessment which they judge to be based on adequate theoretical models and which have been validated (albeit with adult workers) and an additional seven checklists for detecting stressors in the workplace environment.

Using these as a starting point, Leka and Jain adapted a model to child labour that had been developed for WHO³³ to measure adult work-related stress. To this they added concepts from the Woodhead framework. See following table.

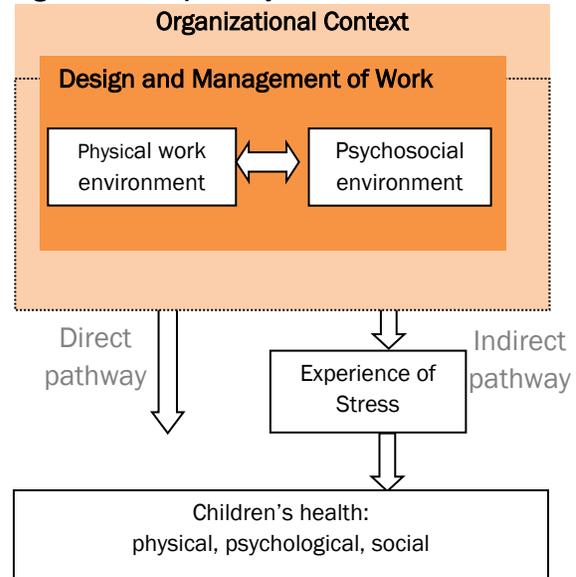
Job content
Lack of variety, fragmented or meaningless work, stigmatization
Workload & work pace
Work overload or under load (boredom), high levels of time pressure
Work schedule
Shift working, night shifts, inflexible work schedules, unpredictable hours, long or unsociable hours
Control
Lack of control over workload, shift working, etc.
Environment & equipment
Inadequate equipment availability, suitability or maintenance; poor environmental conditions such as lack of space, poor lighting, excessive noise
Interpersonal relationships at work
Social or physical isolation, poor relationships with superiors, interpersonal conflict, lack of social support, harassment, third party violence
Precarious working conditions
Poor pay, job insecurity, low social value to work
Life-work interface
Conflicting demands of work and home, low support at home, breakdown of social networks, disruptions to familiar surroundings, disruption in education/ schooling, heavy burden of responsibility for family and siblings

This summarizes the psychosocial factors that are thought to impact on the well-being and health outcomes of workers. Other factors that are frequently included in an assessment relate to workers' psychological and physiological reactions to these stress factors. These responses can take the form of anxiety, depression, high blood pressure, heavy smoking, alcohol consumption, irritability, etc. Coping strategies may also be included. These make psychosocial assessments broader and more detailed than the more

commonly used questionnaires that focus just on stress.

Outside of the psychological risks associated with the work itself, the Leka/Jain report emphasizes that the context in which work takes place must also be examined. Figure 2 is one way of conceptualizing this.

Figure 2. Dual pathway hazard harm model



Their "indirect pathway" echoes Woodhead's hypothesis that stress with child labour is usually multi-layered and does not come from just one source.

In general, Leka and Jain are cautious about the extent to which most existing validated tools can be used to document children's occupational health. Not only were they developed for use with adults, but also with the formal enterprises of industrial countries in mind. The challenge is how to take into account developmental stages of young persons, which vary considerably between the age of 5 when some children start work, to age 18 when they are still finishing the adolescent growth spurt. However, they concluded that a number of the instruments might still prove useful as part of rapid assessments for want of something else or as a starting point for a new instrument. The report laid out a number of steps which could help in the development of a new instrument:

1. **Agreement on indicators:** Review of the suggested indicators by experts in the field of psychology and/or child labour in order reach a consensus on both the indicators and the target child population.
2. **Decision on data collection method:** Selection of those methods (tests, questionnaires, interviews) which are most suitable for use with children.
3. **Incorporation of available tools:** From among the relevant instruments, selection by experts of those most suitable for use with children.
4. **Adaptation:** Modification of the selected tools and methods to incorporate the model.
5. **Pilot-testing a draft:** Once adapted, testing the draft tool in different cultural contexts perhaps in connection with ongoing projects.
6. **Tool revision:** Incorporating the necessary changes suggested by the pilot-tests.
7. **Preparing guidance materials:** Preparation of a handbook as to how and under what conditions to use the tool.
8. **Development of a database:** Creation of a system that would facilitate monitoring and comparisons and guide policy on both a global and country level.

Refinement of the model

In line with the above recommendations, a 3-day meeting, “Technical Consultation on Children and Youth in Hazardous Work” was organized in February 2011 at the ILO International Training Centre in Turin. Within this, 13 researchers³⁴ who had previously carried out studies specifically on psychological aspects of child labour formed the “Psychosocial Working Group” and were invited to examine the literature review³⁵ and the background papers, assess the possibilities, and propose next steps.

In this meeting, the Working Group agreed upon a set of criteria which an instrument for assessing psychological hazards and impacts of child labour would be required to fulfill. In reviewing the instruments that had been examined in the previously-mentioned documents, they determined that, while there were a number of validated tools

which approximated these requirements, such as the Strengths & Difficulties Questionnaire (SDQ) there was none that fully met the requirements. Therefore, based on their own experience plus the recommendations in these documents and other key material, they sketched out an initial set of relevant domains and associated indicators.³⁶

To the model proposed by Leka and Jain, they added two other elements: the SAFE Framework developed by Theresa Betancourt (Figure 3), and the concept of ‘child resilience’. See “The Child and Youth Resilience Measure” (CYRM-28).³⁷

The SAFE model is a rights-based approach that offers a holistic lens for examining four fundamental and interdependent domains of children’s security, including:*

- Safety/freedom from harm,*
- Access to health care and basic physiological needs,*
- Family/connection to others, and*
- Education/livelihoods.*

The SAFE framework is rooted in the UN Convention on the Rights of the Child and Human Security models and recognizes that these core elements of child well-being are interrelated and interdependent.

Source: Betancourt TS, et al. (2010)

The SAFE model gives a comprehensive overview of a child’s well-being and the group thought it could be an effective basic screening tool when used at the first stage of psychosocial assessment.

There was considerable concern about the frequent use of non-standardized, non-validated questions to examine psychosocial functioning. While the group called for mental health to be included in all child labour studies, they insisted that the indicators need to be developed by specialists in the field, and that they must be validated, i.e. tested with comparison groups in every study in order to correctly gauge psychosocial stress against a local baseline.

The Turin group also noted that schooling was not included in most existing instruments whereas the child domestic worker studies cited above had clearly demonstrated that to be a mediating factor in the child labour – stress relationship.

Finally, the group noted that the concept of “exposure windows” needs to be considered when discussing children’s psychosocial and physical

health. This means that it is necessary to take into consideration the fact that children's stress is confined neither to the workplace nor to the home environment but co-mingle.

HealthNet TPO, with its headquarters in Amsterdam, The Netherlands, then took responsibility to fashion these recommendations into an instrument which could be pilot-tested.

The first step was to reduce the list of domains and categories to those which were likely to be most critical for child labour.

- (1) A systematic literature search was undertaken (of academic databases and grey literature) to identify tools that had been used with or were applicable to working children, as well as studies that had examined psychosocial factors associated with child labour. The information was compiled in a background paper.³⁸
- (2) An international panel of 30 child labour experts³⁹ was asked to allocate priorities among the selected domains and indicators.

This led to a final selection of the key domains that have been demonstrated or hypothesized to be associated with psychosocial wellbeing or vulnerability of child workers.

Pilot-testing

There were three validation exercises in all, and the results compared with other existing measurement tools (SDQ, WHO-DAS, etc.)

Pilot #1: Pakistan

The first pilot was carried out in two districts of Punjab, Pakistan in the spring of 2011 with child workers in 10 occupations (n=1,996) and non-working controls (n=464). The study was a component of a larger piece of research which was assessing a variety of occupational health impacts among child laborers in Pakistan. The version of the instrument being tested was called the "Psychosocial Vulnerability Assessment Tool" (PVAT). The tool originally developed in English was translated into Urdu, the local language and again back translated to English to check the accuracy of translation. The final version was administered in Urdu by trained enumerators to working children at workplaces and non-working control group children enrolled at schools.

The tool consisted of the following subscales (internal consistency [α] within the sample is noted between brackets):

- (a) emotional difficulties (existing instrument: Depression Self Rating Scale) ($\alpha=.52$);
- (b) work stressors ($\alpha=.47$);
- (c) sense of agency ($\alpha=.63$);
- (d) social integration ($\alpha=.61$);
- (e) traumatic stress reactions (existing instrument: Children's Revised Impact of Events Scale - 8) ($\alpha=.96$);
- (f) coping ($\alpha=.52$); and
- (g) future outlook ($\alpha=.75$) (response ranges for the sub scales are mentioned in the table below). Internal consistency is good for the traumatic stress reactions subscale and moderate for the other subscales.

In general, the comparison between child laborers and the control group (non-working children) demonstrated statistical differences between the two groups for all the subscales of protective factors, yet not for the symptoms subscales. Child laborers had significantly poorer outcomes on:

- future orientedness ($t=-7.800$, $df=2259$; $p=.000$),
- utilization of positive coping strategies ($t=4.170$, $df=2259$; $p=.000$),
- social integration ($t=-9.974$, $df=2259$; $p=.000$)
- sense of agency ($t=-14.228$, $df=2259$; $p=.000$).

Level of post traumatic stress ($t=-7.800$, $df=2259$; $p=.000$) and emotional distress ($t=-7.800$, $df=2259$; $p=.000$) were no different between both groups.

There were a number of predictors that appear commonly associated with the level of psychosocial indicators. Work-related stressors (as a sub scale of the PVAT) were associated with all of the psychosocial indicators (coping, future orientedness, social integration, sense of agency, emotional distress and traumatic stress). Other predictors included the lack of social security (coping, future orientedness, social integration), lower levels of schooling (future orientedness, traumatic stress, emotional distress) frequent headaches (coping, future orientedness, emotional distress) and being female (coping, social integration, emotional distress, sense of agency).

When testing differences between groups, for each of the psychosocial indicators, t-test analyses were

conducted to compare scores between one sector as a sub-group and the other sectors combined.

In summary, the results demonstrated that depression is lower among children working in the agriculture and brick making sectors, and higher in livestock rearing, mat-making, restaurants and workshop sectors. Higher traumatic complaints were found among cotton pickers, stone crushers and date palm workers, while lower in the agriculture and scavenging sectors.

Given that children working in the agriculture sector also demonstrated significantly lower work stress, higher sense of agency and coping, this is the sector in which children are least vulnerable for psychosocial problems. Children that scavenge also appear to be among the least vulnerable, with higher sense of agency in addition to low traumatic complaints. Children in workshops, on the other hand, demonstrate relatively high work stress and low social integration in addition to higher depression symptoms.

Other sectors demonstrated mixed results, for example the higher levels of depression and traumatic complaints in restaurant workers are further aggravated with low sense of agency, yet they report lower work stress. Similarly, children involved in stone crushing demonstrate higher levels of social integration.

Results of this pilot reinforced the need for measures to improve the environment of children and prevent the psychological and behavioural problems associated with work. The study concluded that gradual, long term policies are required to decrease the need for children to work, since sudden abolishment would likely cause more detrimental psychological effects.

Pilot test #2: Nepal

A field-test was carried out in Nepal for the purpose of generating further indicators of psychosocial wellbeing among child labourers and to rank them. Participatory group discussions were conducted with Nepali working children (n=27), ranging in age from 8 to 16 and representing different sectors of child labour (stone-breaking, domestic service, street work).

Items derived from this and the previous work were compiled, resulting in a list of 66 possible questions, which were organised in different categories through pile-sorting.

A second validation study was then conducted among Nepali child labourers (n=180) and non-

working peers matched for age, ethnicity and locality (n=180) to reduce the items to those most relevant and indicative of good psychometric properties.⁴⁰

Revision

Based on these pilots, the selection of items was again revised. This was done through a two-staged process. First, items were selected through exploratory factor analyses (principal components) generating a three factor structure. Second, all individual items were correlated with relevant constructs (symptoms of depression, sense of hope, impairment in daily functioning). Items included in the prior step were omitted if correlation was $<.30$, items not selected in the previous step were still included if there was a correlation $>.40$ on one of the three constructs of comparison. When testing differences between groups, for each of the psychosocial indicators, t-test analyses were conducted to compare scores between one sector as a sub-group and the other sectors combined.

PATcl-25

The revised instrument was labeled “Psychosocial Assessment Tool for Child Labourers” (PATcl) and contained 25 items. This version of the tool was then made available for a second round of testing. PAT-cl was designed to be a generic tool (i.e. applicable to various types of work) and to study psychosocial well-being⁴¹ in the context of a descriptive study or survey of child labour. That is, it must be accompanied by questions eliciting demographic and sociological data, as well as a description of the work, and the work history of the children concerned in order for the results to be interpreted properly.

For this instrument, child labour was defined⁴² as any type of work which, by its nature or the circumstances in which it is carried out, is likely to jeopardise the health, safety or morals of persons below 18 years of age. This is work that is likely to deprive children of their youth, their potential and their dignity, and impedes the achievement of their fullest physical and mental development.

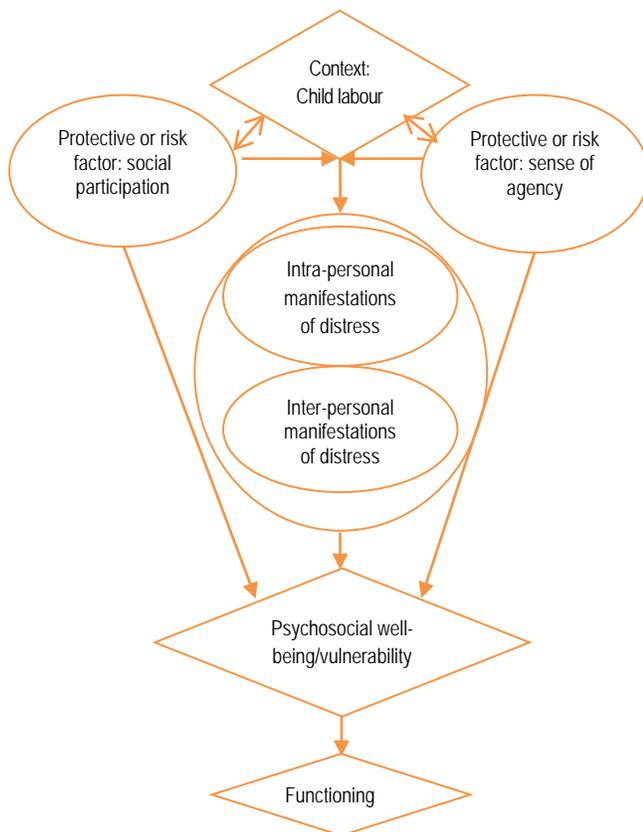
The instrument took into consideration the fact that the work environment is a factor, along with school, community and home environment, that

can influence a child's well-being. Together these factors form the child labour context.

This 25 item version of the PATcl contained three subscales:

- *Psychosocial distress*, composed of both interpersonal and intrapersonal manifestations of distress,
- *Social participation and integration*, which consists of participation in social activities and feeling supported by others, and
- *Sense of agency*, which consists of a sense of control over the situation and pro-social behavior.

Figure 4 is a diagram of the conceptual relationships between these domains. It shows both indicators of risk (i.e. child labour factors that contribute to negative psychosocial outcomes) and protective factors (i.e. those contributing to positive psychosocial outcomes) that are necessary to assess psychosocial well-being or vulnerability, in turn predicting impairment in daily functioning Figure 3. Conceptual Framework



As the PATcl was designed to be used with children who are between 10 and 18 years of age, it could be completed by children themselves. Alternatively, an interviewer could administer it, in which case the question is read to the child and the answer is recorded. To make it easier for children to respond to the 4 point scale, a flashcard with pictures of a glass of water with different degrees of fullness could be used. A brief training course on administration of the instrument is recommended.

The scoring of the total scale (and/or sub scales) was obtained by totaling the scores of individual items for the entire scale, or for each of the sub-scales. Higher scores on each subscale indicated higher levels of distress, social participation and agency, respectively.

As certain items were framed in a positive direction and others in a negative one, before doing the calculation some of the scores needed to be reversed so as to make them all in a consistent direction (i.e. 1 into 4; 2 into 3; 3 into 2 and 4 into 1). Higher total scores then indicated higher psychosocial vulnerability, whereas lower scores would be indicative of psychosocial well-being.

Testing of the PATcl-25 demonstrated good psychometric properties. *Internal reliability* of $\alpha=.87$ for the entire scale (and $\alpha=.85$, $\alpha=.91$ and $\alpha=.81$ for the three subscales, respectively). *Convergent validity* was demonstrated as the instrument correlated as expected with symptoms of depression ($r=.65$), with sense of hope ($r=.55$), and with impairment in daily functioning ($r=.49$). Similar values were found in the Nepal test when the control sample of non-working peers matched for age, gender, location and ethnicity was included ($n=360$): ($r=.61$, $r=.58$ and $r=.45$, respectively).

These findings indicated that the instrument could be used to demonstrate differences in psychosocial vulnerability between child labourers and their matched non-working peers, as a significant difference on total PATcl-25 mean score. (Mean child workers was 30.47 (SD=12.69) and non-working children was 17.23 (SD=6.41); $t(df)=12.49$ (358); $p<.000$).⁴³

PATcI-8

A shorter version of the PATcI was developed for inclusion in large-scale surveys where interview time is at a premium. The PATcI-8 consists of eight items from the PATcI-25. In this brief version, the sub-scales are no longer valid.

Psychometric properties for the PATcI-8 are as follows: Internal consistency of $\alpha=.72$; correlations of $r=.57$ for depression, $r=.32$ for sense of hope, and $r=.51$ for impairment in daily functioning.

Between group comparison on the PATcI-8 demonstrates significant differences on the mean scores: Mean child labourers was 8.79 (SD=4.30) and non-working children was 5.63 (SD=2.64); $t(df)=8.39$ (358); $p<.000$).

IPAC

Before the PATcI was made available for further field-testing, the instrument was subjected to an internal review by ILO statistical and occupational safety specialists. In addition, an exhaustive re-check was conducted by Martijn Hofman to ensure that the instrument took fully into account the recommendations that had been made by the Turin Expert Working Group on Psychosocial Impacts and the points made in the key documents from which the model had been constructed (Woodhead, Leka, Boidin, Alem, Hesketh, Betancourt, Fekadu, and Gamlin). This was to ensure that no critical elements had been overlooked. The Hofman report discusses the most salient elements to be drawn from these several sources, point by point, with a critique or commentary on each. It is an important companion to the present overview.

Key concerns that were considered in the Hofman review were:

- Was the development dimension (the stages of physical, intellectual, moral and psychological development of children) not only integrated in the model, but actually the core of it?
- Does the model enable subsequent follow-up study that would assess longer-term or latent conditions? Does it produce data on the immediate condition as well?

- Does it adequately cover work and working conditions characteristic of the informal economy?

As a result of this critique, a series of additional questions focused on work-related variables drawn from the WHO model were added to the core questionnaire. This final version was labeled, “Instrument for the Psychosocial Assessment of Childworkers” (IPAC).

General guidelines

Language

When preparing an instrument for use in a new cultural context and/or new language, the following steps are recommended for ensuring that it maintains its integrity:

- (1) Translation from English into the new language by a team of bi-lingual professionals, and lexical back translation;
- (2) Review by a bilingual mental health professional;
- (3) Evaluation in focus groups with children from the study area;
- (4) Blind back-translation by a bilingual local expert who is unfamiliar with the original version and comparison of the back-translation with the original;
- (5) Pilot testing among the target population.⁴⁴

Ethical considerations

Research that involves children, and/or for inquiries that concern health, there are special ethical factors that need to be taken into consideration prior to starting the study.

First, interviewers should receive training on how to speak with children.⁴⁵

Second, a source of care and support needs to be identified in case a respondent is found to have a high level of distress, an illness or an injury. The child should be assisted to access these services.

Third, although there is usually a standard procedure for obtaining consent from official agencies in the country concerned, it is important to seek informed consent from the child as well as from her/his care-giver, and appropriate local religious or community leaders.

Context and comparisons

An important challenge lies in finding appropriate comparison groups as there is often a difference in socio-economic profile and general health and nutritional status between the child worker population and the non-working child population, or between children working in different sectors. These factors can be compounded by family violence, alcohol and other drug abuse, and lack of parental support due to death or absence.

These initial disparities are, in turn, accentuated (or reduced) by the type of work the child undertakes. These include the emotional and intellectual hazards characteristic of the occupation in which s/he is engaged and the particular working conditions as well as characteristics of the child her/himself that either exacerbate or reduce the stress. In any case, work creates an additional – in certain cases, very substantial – layer of additional psychological effect.

It is this compounded effect – the stress of poverty coupled with the stress of work, or alternatively, the resilience created through increased self-worth – which underscores the conclusion of several of the studies cited above that the psychosocial well-being of child workers must be studied, and dealt with, as one part of a larger context.

CONCLUSION

This description of the steps leading to formulation of the psychosocial tool confirms both the need for and the difficulty of this enterprise. Over 20 years ago, Judith Ennew summarized the challenge in this way:

“children who are working are, most commonly, also in the age group when emotional maturation is taking place. Social contacts, familial love and security and intellectual stimulation are all crucial in [these] years. One of the greatest dangers of work is interruption of these vital processes, sometimes so serious that there is lasting damage... From the wide range of psychometric testing procedures available for both intellectual and affective functioning, there are, as yet, no tests which are directly applicable to child workers...”

There is no international standard of what is good emotional and intellectual functioning, nor is there a “yardstick” for measuring it. Therefore we cannot compare child workers cross-culturally. The closest we can come is to compare working children with non-working children within a particular society, or to compare children who are working in especially hazardous industries with those who are not. Mainly we are looking for evidence of hidden danger. It is the psychological and cognitive abuse inherent in some forms of child work that may be the greatest danger to working children. Because these risks are not studied, they are ignored.”⁴⁶

The risks of various types of work to children’s psychosocial functioning and intellectual development will continue to remain under-recognized and poorly addressed if they are not investigated in a rigorous way. Psychosocial indicators employing tested methods must be incorporated in all child labour research, especially in those surveys of large population groups, such as national child labour surveys.

In many work situations, it is the psychosocial aspect which will determine whether or not an occupation and/or work setting is harmful to children and therefore whether it is “off-limits” and legally prohibited to all those under age 18. Without means of diagnosing these conditions, action to address them will inevitably be insufficient. The importance of sensitizing policy makers, parents, employers, and the general

public to psychological issues associated with child work cannot be overestimated.

There are promising initiatives that demonstrate how this can be accomplished. However, a good evidence base is crucial. Since demonstrating the risks working children face from physical injury and exposures has been critical to protecting them, the widespread and serious psychosocial health effects must be given equivalent attention. As long

as work-related harm continues to be considered within narrow physical parameters, large numbers of children will be left without adequate protection.

A strong recommendation of the Turin expert group was that this study, this instrument, is only going to be a starting point. Its importance is in showing what can be discovered by looking closely at relevant psychosocial domains. A longitudinal study is the next step.

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Endnotes

¹ All States which have ratified ILO Conventions No.138 and 182 are required to determine the types of work that are hazardous and to be prohibited to all persons under the age of 18. This is commonly called the “hazardous child labour list”. Child domestic labour is not commonly put on this list because the hazards are assumed to be minimal.

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