Barriers to and Opportunities for Poverty Reduction:

Prospects for private sector-led interventions

Istanbul International Center for Private Sector in Development

Contents

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Fostering child neurocognitive development: Proposals for the private sector

Sebastián J. Lipina, PhD
Unidad de Neurobiología Aplicada (UNA, CEMIC-CONICET)

Introduction

Establishing an intersectoral agenda focused on fostering the development of children living in poverty, implies the need to start from a wide conceptualization that consider an approach to multiple dimensions and mechanisms within a systemic, comprehensive, and coherent way involving ecological and transactional perspectives.[1] In such a framework the public and the private sectors are part of the developmental contexts which every community build in terms of cultural and material resources. In this sense, the public and the private sectors are active agents of the modulation of different aspects of childhood development because their actions influence any developmental context. The gradual, agreed by consensus, construction of a common language dealing with child development and its determinants in ecological terms (i.e., biological, social and cultural) would be a first, necessary step toward the construction of networks apt at informing about both the design, and implementation of comprehensive, coherent actions.

Specifically, the neuroscientific study of childhood poverty is an area that has recently emerged in the academic and public contexts.[2] Taking in consideration the current neuroscientific approaches, the agenda of the study of how different environmental conditions influence brain organization and reorganization during development, include a diversity of approaches which include: neural plasticity – what involves the issues of critical and sensitive periods, epigenetics, influence of environmental toxins, nutrition, stress regulation, and poverty modulation of selfregulation throughout the lifespan. In addition, intervention efforts aimed at generating changes in neurocognitive development have been implemented in the context of the study of literacy, arithmetic and cognitive control competences in different populations of children with typical and atypical developmental trajectories.

The intrinsically innovative aspect of the neuroscientific agenda is that it allows the beginning of these explorations in terms of basic mental operations considering different levels of analysis (i.e., molecular, systemic, neural activation, individual and social behavior). In such a context, ecological considerations about how poverty shapes child neurocognitive development and its biological and cultural determinants should consider: (a) the identification of different risk factors and mediation mechanisms; (b) the design of intersectoral and integrated actions (i.e., interventions, policy); (c) the establishment of intervention and financial priorities for NGO´s and philanthropic foundations supporting basic and applied research on neurocognitive development; and (d) the establishing of programs for professional building capacity focusing on child development as a complex phenomenon, aimed at avoiding myths, prejudices, conceptual dogmatism and misconceptions.

How early adverse experiences impact the nervous system

Neural plasticity, brain development, critical and sensitive periods

In experimental settings, rodents and non-human primates exposed to differential motor, sensory and/or social stimulation in complex or deprived environments show several structural and functional changes (i.e., motor, cognitive, and emotional) in several components of the nervous system.[3] Neural plasticity in humans may also lead to use-dependent structural and functional adaptation in response to environmental demands. At the level of neural activation, evidence exists that the brain may adapt dynamically to reflect environmental cognitive demands.[4] For instance, neuroimaging studies evidence structural changes in specific areas after training in difficult motor tasks, such as the increased activation of motor, auditory and visual-spatial brain areas and white matter tracts as well, in professional musicians;[5] or

selective increases in posterior hippocampus[i] volume and concomitant spatial memory performance in licensed taxi drivers from London.[6] During the last decade, the studies of developmental cognitive neuroscience aimed at analysing the influence of poverty or socioeconomic status (SES) on neural organization have been integrated into the research agenda of plasticity.[7] These studies have made a specific contribution through the integrated analysis of different levels of analysis. Examples of such integration are the studies that analyses the prediction of parent nurturing on memory and hippocampus volume;[8] or the links among hippocampal function, HPA[ii] axis function and maternal SES,[9] or prefrontal[iii] function, HPA and complexity of home environmental language exposure.[10]

Regarding white matter[iv] plasticity, different mental and developmental disorders began to be described in terms of their impact on cortical connectivity. In this sense, the experience of a stressful event cannot be localized to single brain regions, but to a distributed system involving cortical and subcortical areas, and the neuroendocrine system as well. Thus, the stressing experience would depend upon sociocultural history and how it shapes the resting neural networks. In the specific context of poverty studies, neuroscientists have recently assessed to what degree white matter microstructure mediates the relationship between education attainment and performance in cognitive control tasks.[11]

Conceptually, current theoretical approaches propose that the basis of cognitive, emotional and learning development may be characterized by mutually induced changes between neural, cognitive, emotional and learning levels, in a complex ecological context involving social interactions with cultural specificities.[12] Therefore, this complexity must be considered when trying to study each one of these dimensions in isolation or at a unique level of analysis, and at the time of designing interventions.

Critical and sensitive periods refer to those times when human brain is especially sensitive to particular classes of external stimuli – a time window temporarily opened during which the brain is particularly receptive to experience, what contributes to its organization. Timing, duration and closure of these plastic processes have been experimentally addressed, what allowed researchers to identify different principles, such as: diversity of mechanisms in different brain areas, different inhibitory and excitatory balances, functional competition between inputs, regulation by experience and stage of development, influence of motivation and cognitive control, and potential for reactivation of organizational processes in adulthood. Thus, there are many different critical and sensitive periods for distinct aspects of the brain throughout development, most of which are still unknown. Several studies performed in humans show the expression of multiple sensitive periods in sensory systems, several aspects of speech development and face recognition.[13] A very important feature in the development of the sensory systems is that sensitive periods are not synchronized among sensory modalities. It was hypothesized that the end of a sensitive period is associated with the age at which a set of neural circuits subserving a given neural processing or function becomes specialized. For example, between the 6th and 12th months of age, electrophysiological patterns associated with

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[i] Hippocampus: A complex component of the brain cortex involved in learning based on the processing of memory and spatial navigation.

[ii] HPA axis: A part of the neuroendocrine system consisting of direct influences and feedback interactions among the hypothalamus (H), the pituitary (P) and the adrenal glands (A) that controls reactions to stress and regulates many body processes, including digestion, the immune system, mood and emotions, sexuality and energy storage.

[iii] Prefrontal cortex: The anterior part of the frontal lobes of the brain involved in planning complex cognitive behavior, decision making, and moderating social behavior.

[iv] White and grey matter: One of the main components of the nervous system consisting of glial cells that transmit signals (i.e., information) between different áreas of the brain. The other main component is grey matter which is composed of neurons.

face recognition processes become specific for a given stimulus. In addition, and approximately at the same age, the number of cortical areas activated by viewing faces seems to decrease. This suggests that the end of the sensitive period of a neural substrate for a given modality of processing coincides with specialization attainment,[14] what highlights the importance of timing in terms of intervention efforts.

In the case of the neural circuits involved in complex behaviours such as cognitive and emotional processing, the closure of sensitive periods seems to depend on their association with circuits performing either fundamental or high level computations. For instance, the sensitive period for circuits combining visual inputs from both eyes ends a long time before circuits responsible for recognizing biologically significant objects do so.[15] Thus, time-scale and integration of different forms of plasticity would also be targets for a neuroscientific agenda in the field of poverty and brain development aimed at exploring windows of intervention opportunities. This analysis is time-consuming and requires methodological innovations for the exploration of molecular, systemic (i.e., multicellular) and behavioural events and phenomena at the same time, and throughout different stages of development.

Epigenetics

Current studies in the developmental neuroscience realm continue to advance in the understanding of the mechanisms through which experience and environmental influences interact with genes, especially with deoxyribonucleic acid[v] (DNA) biochemical markers that regulate gene activity, which could be modified by early experience. Currently, these epigenetic mechanisms involved in interactions between gene activity changes and environmental factors have been identified.[16] Preliminary studies of maternal care, caregiver maltreatment, mother-infant separation and prenatal stress in experimental animal models hypothesize that early environmental influences could produce lasting epigenetic modifications, stable changes in the nervous system gene activity and behaviour. For instance, different studies reported significant associations between childhood maltreatment and developmental disorders later in adolescence and adulthood. In addition, neurocognitive approaches to adults with histories of childhood maltreatment suggest the modulation of this experience on different nodes of the HPA axis. These preliminary results suggest that experiences with an abusive caregiver during the very first stages of postnatal development can modify epigenetic mechanisms and gene expression during lifespan.

Regarding mother-infant separation, recent evidence also supports the hypothesis that this experience can also induce epigenetics changes. Some studies found that periodic mother-infant separations during a sensitive period of development modulate epigenetic mechanisms affecting the synthesis and release of stress regulation hormones.[17] Other studies have shown that prenatal experiences should be recognized for their profound effects on brain development, hypothesizing that glucocorticoids[vi] could be the mediator of such modulation.[18]

The epigenetic analysis of the early experiences on brain development in humans is also at its first stages. Some researchers have recently examined epigenetics mechanisms in samples from suicide victims with a history of childhood maltreatment, founding changes in the gene regulation of hippocampal glucocorticoid receptors, which suggests that human caregiver experiences may program genes through epigenetic modifications in brain structures associated

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v Deoxyribonucleic acid (DNA): molecule that encodes the genetic instructions used in the development and functioning of all living organisms.

vi Glucocorticoids: A class of steroid hormones synthesized in the adrenal cortex that is involved in the regulation of the metabolism of glucose, and in the mechanisms that turns immune activity (i.e., inflammation) down.

with learning and memory processing.[19] In other studies, researchers have found that infants of mothers with high levels of depression and anxiety during the third trimester of pregnancy had epigenetic changes involving the production of cord blood cells.[20]

Evidences of the modulation of epigenetic mechanisms during early development in different rearing conditions (e.g., disparate SES, stress exposure) have been recently incorporated into this research agenda. For example, some studies have examined differences in epigenetic mechanisms in relation to parent reports of adversity during childhood, founding that maternal stressors in infancy and parental stressors in preschool periods predicted differential epigenetic changes and gender differences in adolescence.[21] In addition, recent cumulative evidences have suggested differential susceptibility to rearing environment depending on dopamine[vii]-related genes;[22] and more recently, these frameworks have begun to be applied to analyse educational achievement.[23]

Although many conceptual and methodological issues should be explored, the epigenetic approach supports the notion that changes underlie at least partially the long-term impact of early experiences, and that epigenetic alterations could be potentially reversible or modifiable through pharmacological and behavioural interventions. This means that the understanding of the role of the epigenome in behavioural modifications driven by early experiences could contribute to the field of childhood poverty and brain development. Specifically, the epigenetic approach would contribute to a more precise identification of mediators and targets for intervention, since the prenatal stage of development. However, the genetic polymorphisms[viii] in humans should be cautiously analysed because similar experiences could produce different outcomes in different people, which adds another level of complexity to the study of how behaviour is modulated by early experiences. This highlights the need to support an innovative generation of longitudinal studies.

Exposure to illegal drugs

In recent years several experimental and epidemiological studies have reported the negative impact of different metals, plastics, legal and illegal drugs on pre- and postnatal development of the nervous system.[24] While the impact of these agents can occur in any socioeconomic context, the probability of occurrence increases in poverty-affected contexts. For instance, results from studies carried out in the last decade show a clear connection between poverty in terms of low-income, lack of maternal education, lack of social opportunities, lack of social capital, family distressed environments, living in social disadvantaged neighborhoods and the entrance into the illegal drug market and drug abuse.[25]

Emphasis has been laid on the impact of alcohol consumption during pregnancy and its serious consequences on neurocognitive development throughout the lifespan, as evidenced by the many studies on foetal alcohol syndrome. Specifically, prenatal alcohol exposure has been shown to have cognitive, social and emotional long-lasting impacts compared with other substances, which vary with the amount of consumption and the specific time during pregnancy at which exposure occurs.[26]

Prenatal exposure to cocaine has been associated with various cognitive disorders. For instance, studies with preschool and school aged children that were exposed to cocaine prenatally found changes in the speed of response and procedural learning skills,[27] gender differences in tasks demanding abstract reasoning, visual short-term memory and verbal reasoning tasks, the

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[vii] Dopamine: A neurotransmitter (chemical messenger) involved in many brain (e.g., cognition, reward-motivated behavior, motor and hormones releasing control) and body mechanisms.

[viii] Genetic polymorphisms: Refers to the occurrence of two or more different phenotypes in the same population of a species. It is related to biodiversity, genetic variation and adaptation.

modulation of the impact based on home stimulation and mother's verbal IQs,[28] and differences at the level of neural activation during inhibition demands performance.[29] Since these are preliminary findings, it is necessary to be cautious regarding their implications. Nevertheless, results suggest that cocaine exposure during uterine life affects the development of those neurocognitive systems associated with the regulation of attention and inhibitory responses.

In recent several studies researchers have found significant correlations between prenatal exposure to tobacco and lower performances in cognitive tasks demanding auditory attention, working memory, and analysis and synthesis processing.[30] Exposure to tobacco during pregnancy was also associated with higher levels of excitability and emotional regulation difficulties at the neonatal stage.[31] These impacts could be sometimes reduced through the mediation of adequate parenting and the provision of environmental stimulation, even in the case of children grown up in contexts of poverty.[32] More recently, school aged children and adolescents with prenatal methamphetamine and polydrug exposure have shown altered patterns of brain connectivity between brain areas involved in self-regulation and learning.[33]

These studies, which also require the consideration of mediation analysis[ix], suggest that prenatal exposure to legal and illegal drugs is associated with neurocognitive impairment during the first two decades of life. According to the current agenda, a better understanding of these phenomena depends on the development and evaluation of models for the analysis of the simultaneous combined or cumulative effect of several neural components on different aspects of motor, cognitive and emotional processing.[34] Since social vulnerability is associated with an increase in the use and abuse of these substances,[35] this area of research significantly contributes to the study of the impact of poverty on brain development.

Exposure to environmental toxic agents

Several industrial chemical agents (e.g., lead, methylmercury, polychlorinated biphenyls, arsenic, toluene, manganese, fluoride, chlopyrifos, dichlorodiphenyltrichloroethane, tetrachlorethylene, polybrominated diphenil ethers), have been associated with different neurodevelopmental disorders.[36] Exposure to these chemicals during fetal development can generate brain injury. For example, prenatal exposure to either methylmercury or ethanol is likely to interrupt the neurogenesis process, thus leading to different types of mental retardation manifested throughout the first stages of mental development.[37] Children from low income or low SES communities are more likely to suffer from the impact of environmental toxic agents on their physical and mental health, due to the higher presence in their developmental contexts of different agents such as lead, methylmercury, PBC, dioxins, and pesticides.[38] For instance, lead exposure has been associated with underweight, hair loss, vitamin D metabolic dysfunctions, blood cell genesis dysfunctions, renal disorders,[39] behavior problems,[40] less self-regulated attention,[41] and poor executive functioning – which includes focused attention, attention switching, working memory, inhibitory control, and poor learning in early childhood.[42]

Moreover, about 200 chemicals have been recognised as potential neurotoxicants for adults in laboratory studies, but their toxic effects in the developing brain are not known and they are not regulated to protect children. The two most important obstacles for such a purpose are the gaps in systematic testing of chemicals agents for developmental neurotoxicity, and the high levels of proof required for regulations.[43] The recognition of the risks has generated evidence-based efforts aimed at preventing the impact of chemical agents – such as the elimination of

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[ix] Mediation analysis: A statistical model that seeks to identify the mechanism that underlies an observed relationship between an independent and a dependent variable through the inclusion of a third explanatory variable (i.e., mediator).

lead additives in petrol, the reduction of mercury emissions from power plants[44] and the closure of coal burning power plants[45] – but innovative preventive approaches are still necessary.

Finally, although impacts of some neurotoxic agents on brain development have been identified by high and low exposure at the behavioural and cognitive level, cognitive performance profiles associated with toxic exposure are highly variable. Thus, further research is required concerning why some children are more susceptible than others to certain neurotoxic agents. This would also help to clarify the effectiveness of treatments and both regulatory and public policy interventions in the area.

Nutrition

In neurobiological terms, nutrients and growth factors regulate brain development since conception. The rapid brain development during the early stages of growth leads to greater vulnerability to poor nutrition. For instance, recent experimental studies with nonhuman primates have demonstrated that moderate nutritional restriction of mothers during pregnancy is associated with various structural and functional disorders of the nervous system.[46] However, the detection of specific nutritional deficiencies depends on how each brain area or neural network is preferentially affected, and on designs implemented to measure such potential impacts at the molecular, cellular, and behavioural levels of organization. For example, iron deficiency has been associated with alterations in the synthesis of different neurotransmitters[x], cognitive speed processing, and performance on tasks with motor, emotional and cognitive demands. In addition, the impact caused by nutrient deficiency depends on the identification of that nutrient. To illustrate, zinc deficiency is associated with alterations in hippocampal development, but also in the cerebellum and autonomic[xi] regulation, while deficiencies of certain long-chain fatty acids affect myelin production and further contacts between neurons.[47]

Thus, as in the case of other scientific approaches dealing with child poverty, it is difficult to determine the implications of the different nutritional deficit in the typical and atypical development, since children who lack proper nutrition also lack other resources. Specifically, a difficult issue to be determined is whether a condition associated with nutritional deficit occurs as a direct result of this deficit, or of inadequate prenatal care, difficulties to receive adequate medical treatment, or increased exposure to infectious agents.[48] For example, prematurity and low birth weights are also associated with the absence or reduction of prenatal care.[49] Many families living in poverty have not appropriate access to health care services; therefore, they turn to emergency services at advanced stages of disease, thus increasing the risk of morbidity and mortality.[50]

Recent studies have explored the potential effects of diet on mental health transmitted across generations, and whether diet can influence epigenetic mechanisms. For example, the experimental research on animal models also discusses issues such as the influence of diets rich in saturated fats on gene expression of different regulatory mechanisms of the hippocampus.[51]

Current studies of the effects of nutrition on brain function focus on the effects of breakfast on cognitive function and academic performance,[52] the effects of different breakfast components (e.g., rice versus bread) on neural activation,[53] and the impacts of long-term nutritional interventions. In this sense, the inclusion of multiple evaluation methodologies has been

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[x] Neurotransmitter: An endogenous chemical messenger that transmits signals from a neuron to a target cell across a synapse.

[xi] Autonomic nervous system: The part of the peripheral nervous system that functions below the level of consciousness and controls the visceral functions, affecting heart rate, digestion, respiratory rate, salivation, perspiration, pupillary dilation, micturition, and sexual arousal.

postulated, such as biological markers in combination with nutritional supplements and performance on cognitive tasks at different stages of development. This would also allow the identification of potential sensitive periods during the lifespan[54] and pathways of impacts and interventions.[55]

Stress regulation

Since the mid-twentieth century, many studies have analysed the regulation of stress response in both children and adults, as one of the most important mediating mechanisms of the effect of poverty on emotional, cognitive and social functioning.[56] Threats, negative life events, exposure to environmental hazards, family and community violence, family break-up and moves, job loss or instability and economic deprivation are more likely to occur in poverty conditions.[57] Neural systems implementing this complex regulation include the hippocampus, amygdala[xii] and different areas of the prefrontal cortex (i.e., HPA axis). Together, these systems regulate the physiological and behavioural response to stress, adapting to short- or long-term impacts caused by difficulties in adaptation processes, as in chronic situations of abuse or extreme poverty.[58] These regulatory processes arise from communication among the nervous, immune and cardiovascular systems. On the one hand, bidirectional mechanisms regulating the stress response are protective through adjustments in the short term. On the other hand, these mechanisms may be associated with physiological mismatches under conditions of chronic stress, affecting recovery processes and overall health.[49] The stress and uncertainty caused by economic deprivation conditions increases the likelihood of negative emotional states, anxiety, depression and anger. In turn, this may induce more frequent negative parental control strategies, less sensitive emotional neglect and more difficulties in promoting appropriate socio-emotional adjustment in children.[59] However, some studies show that even in poverty, maintaining proper child rearing can be a protective factor of development,[60] highlighting the environmental plasticity levels of these regulatory systems.

The analysis of the mechanisms mediating the stress has generated a number of guiding principles that can contribute to the understanding of child poverty. For instance, some researchers have suggested that the stressor properties (i.e., magnitude, duration and chronicity), and nature (e.g., social exclusion versus physical threat) modulate the type of differential impact on neural networks involved in acute and chronic responses to stress.[61] However, in this regard it is still necessary to investigate the timing and specificity of the neural developmental sensitive to stress processes.[62]

The current neuroscientific agenda in this area has begun to gradually incorporate the concepts and methodologies derived from the advances in epigenetics and the analysis of neural activation in both animal and human models. Three sets of problems have started to feed the agenda: prenatal programming of brain plasticity, reactivity of amygdala areas in threatening situations, and brain embodiment of adverse life experiences.[63]

In the context of child poverty analysis of long-term stressful experiences, recent studies have found that cortisol levels combined with the quality of parenting contexts could function as mediators of the effect of family income, maternal education and ethnicity on different cognitive control tasks.[64] In addition, in a recent study including children from rural poverty contexts researchers have found that cortisol levels decreased only in those cases where mothers had higher levels of depressive symptoms.[65] This suggests that child poverty and maternal mental health modulate stress regulation: both cortisol and mental health levels are

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[xii] Amygdala: Refers to a group of neuronal nuclei located within the brain temporal lobes, involved in memory and emotional processing.

two mechanisms that may improve the understanding of the associations between child poverty and stress.

The impact of moderate to chronic stress has been associated with the release of a diverse set of brain chemical modulators, which have specific temporal and spatial niches that generate complex phenomena not yet clearly identified.[66] A recent study has shown that the absence of opportunities for adequate attachment during the early stages of development is associated with hormonal changes involving the neuropeptides vasopressin and oxytocin,[67] hormones that are critical to the development of social bonds and the regulation of emotional behaviour. Specifically, experiences of physical and sexual abuse during early developmental stages have been associated with this complex pattern of stress responses, which are assumed mediators of increased susceptibility to psychiatric disorders in adulthood.[68] However, vulnerability and susceptibility to chronic moderate situations of stress vary individually according to epigenetic phenomena and the eventual presence of certain potentially protective factors, such as relationships with caring adults, self-regulation and social competences and the pleasantness of children.[69]

During the last decade, the first neuroimaging studies were performed to explore how socioeconomic deprivation during childhood influences the stress response at different stages of development. For instance, a study has evaluated the long-term neural correlates of adverse rearing conditions and performance on an emotional inhibitory control task that demanded the discrimination of threatening faces. The results showed that children raised in orphanages showed increases in amygdala activity, which was associated with emotional processing and decreased eye contact during dyadic interactions between children and adults.[70] Another study had shown that adults with histories of stressful childhood in families at risk of stress for physical and mental health, presented specific patterns of reactivity in amygdala and orbitofrontal areas during observation of threatening faces.[71] More recently, researchers have applied MRI techniques and have found that children and adults exposed to poverty at childhood had modified hippocampal and amygdala volumes.[72]

Self-regulation and Language Development

Regarding cognitive development, the most commonly described impacts of poverty – first evidenced in the context of developmental psychology and education disciplines – are lower developmental quotients, children's verbal and achievement intelligence quotients, completed school years, and higher incidence of learning disorders and rates of school absence. With respect to language, in the same disciplines, current language studies also show different patterns of socioeconomic modulation on several outcomes, such as vocabulary, spontaneous speech, grammatical development, and communication styles and skills.[73]

Basic processes involved in early cognitive control and language development, such as the different subsystems of attention, working memory, and flexibility, are the cornerstone of all forms of cognitive activity and social behaviour throughout the lifespan in most cultural systems worldwide.[74] Neuroscientific studies that began to assess associations between different forms of poverty and its impact on basic cognitive processing have been recently reported. Several studies verified the modulation of socioeconomic characteristics on different attentional, inhibitory control, working memory, flexibility, planning, decision making, theory of mind, phonological awareness, memory and learning processes related to different neurocognitive systems in infants, preschoolers, and school- and middle school-age children.[75] In some of these studies, researchers have reported that the modulation of SES on performance is neither similar in all the administered measures, nor uniform at all ages.[76] Both aspects are worth considering for different reasons. Conceptually, this implies that poverty does not

necessarily generate homogeneous and continuous changes in neurocognitive processing. This is consistent with temporal and regional differences in cortical organization throughout childhood and adolescence.[77] At the same time, these findings are not consistent with the notion of low-SES performance as a deficit.[78]

In summary, the findings from the above behavioural studies indicate that SES disparities can adversely affect cognitive processes, such as language, executive function, attention and memory. This further suggests that specific brain regions may be associated with these processes, and that the paradigms used would be more specific than those used to measure general cognitive ability (e.g., scales of intelligence). However, these evidences are still behavioural in nature and therefore present certain limitations in the context of a neuroscientific analysis. Thus, researchers can make only indirect inferences about brain function. In addition, many of these tests are multi-factorial and performance could be modulated for reasons other than those resulting from a specific alteration. Moreover, low correlations have been obtained among these tests, which mean that two tasks can engage the same system in different ways. Therefore, a deep examination of the impact of SES on the relationship between cognitive processes and brain function is needed.

In this sense, structural (MRI[xiii]) and functional (fMRI[xiv]) magnetic resonance imaging, and electroencephalography (EEG[xv]) neuroimaging techniques applied to analyse the neural level of analysis, would contribute to a better understanding of these relationships. For instance, researchers have predicted that the strength of the association between phonological awareness and brain activity will be increased in an environment with low exposure to literacy resources (i.e., a context of poverty), and reduced in the opposite case. Results of studies designed to test this hypothesis suggested a significant phonological awareness-SES interaction in a specific brain area (i.e., left fusiform gyrus), indicating that at similar low phonological awareness levels, children from higher SES were more likely to evidence increased responses in it, while children from lower SES were not.[79] In another recent study with normal 5-year-old children performing an auditory rhyme-judgment task, researchers found that the higher the socioeconomic status, the greater the degree of hemispheric specialization in Broca's area[xvi] during rhyming tasks. This suggests that the maturation of Broca's area in children may be ruled by the complexity of the linguistic environments in which they grow up.[80] Additionally, other researchers found that complexity of family language and salivary cortisol, were associated with both parental SES and prefrontal cortex activation during a stimulus-response task. The same researchers verified associations between subjective social status and hippocampal activation in children during a declarative memory task.[81]

More recently, different researchers have begun to explore the SES modulation of different structural brain measures using MRI techniques. For example, some of them examined the effects on adolescent brain morphology of parental nurturance and home stimulation of early experience during childhood (4 and 8 years). Researchers found that parental nurturance at age 4 predicted the volume of the left hippocampus in adolescence (i.e., better nurturance was associated with smaller hippocampal volume). Importantly, the association between hippocampal volume and parental nurturance disappeared at 8, suggesting the existence of a sensitive period for brain systems' maturation.[82] In addition, other researchers found evidences that parental education is associated with cortical thickness in some subareas of the prefrontal

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[xiii] MRI (magnetic resonance imaging): Imaging technique used to investigate the anatomy of different parts of the body –including the brain- in both health and disease conditions.

[xiv] fMRI (functional magnetic resonance imaging): Funtional neuroimaging procedure using MRI technology that measures brain activity by detecting associated changes in blood flow during the execution of a specific task.

[xv] EEG (Electroencephalography): Refers to the recording of brain electrical activity along the scalp.

[xvi] Broca´s area: Region in the frontal lobe of the hemisphere of the human brain involved in speech production.

cortex.[83] Other recent studies have shown that educational attainment and low SES accounted for modification in volumes and connectivity of different brain areas.[84]

Finally, recent studies of socioeconomic disparities have used electrophysiological techniques (EEG) to obtain direct measures of brain activity. Several studies have examined the influences of socioeconomic disparities – founding evidences of impacts – on attention,[85] inhibitory control,[86] emotional processing,[87] and resting state,[88] from infancy to adolescence.

Intervention efforts aimed at optimizing cognitive functioning

After more than fifty years of research based on intervention programs or educational curriculums for children living in poverty, specific conceptual and methodological recommendations have been proposed. Researchers have identified a set of primary mechanisms for child development involving environmental exploration, the expression of basic cognitive and social skills, the stimulation of language and symbolic communication, the adult reinforcement of children achievements, as well as the avoidance of inappropriate parenting practices.[89] Furthermore, evaluations of these types of programs have been associated with the impact of a wide set of intensive and high-quality services, including cognitive training and education, its environmental maintenance through parental, teachers and other caregiver's involvement in the context of integrated social and educational services. Those projects using appropriate designs with adequate controls, as well as conceptual and methodological frameworks based on complex and ecological approaches, showed the best impacts.[90] Based on the results of these high quality intervention programs, the following principles of efficacy have been also proposed: opportunity, sensitivity, directionality of interventions, multiplicity of services, environmental support and maintenance, and timing. In summary, these principles propose that intervention impact would be a function of its regularity during large periods of development – at least the two first decades of life.

However, not all children benefit in the same way from their participation in this type of programs. Individual differences are due fundamentally to multiple interactive factors, among which early status of children in terms of their biological inheritance and environmental risk accumulation and variations in quality are crucial.[91] In this context, appropriate experimental designs allow to explore alternative approaches, and further contribute to the design and adjustments of the same or other interventions and public policies. The analysis of the long-term effects of high-quality early childhood programs demonstrated that early childhood education produces persistent, cost-effective effects on academic achievement[92] among others (e.g., health and welfare dependence). However to maximize the potential of impacts on cognitive and psychosocial development across socioeconomic status, it is necessary to increase the intervention precision. In such a sense, a promising approach is to focus on the development of neurocognitive systems.

Recently, growing interest has been observed regarding the potential contributions of cognitive neuroscience to education and learning.[93] This interest is based on results from different laboratory studies on behavioural training and remediation of basic cognitive processes in healthy, as well as disordered children, after applying integrated experimental and individual differences approaches.[94] The application of cognitive neuroscience frameworks to intervention programs or educational curriculum aimed at improving social disadvantaged children's cognitive development, is even more preliminary. In this context, interventions have been recently implemented aimed at optimizing self-regulatory and academic competences through exercising with several experimental laboratory tasks,[95] preschool curriculum adaptations,[96] computer games,[97] and parenting practices.[98]

Scientific challenges and Policy Suggestions

The trajectories of typical and atypical neurocognitive development in disparate socioeconomic contexts generate different degrees of brain plasticity. The consideration of critical and sensitive periods for many of these plastic processes requires a revision of the agendas of those disciplines addressing child poverty based on the notion that the impacts are permanent and irreversible. Considering the latter as a starting point in the design of new studies and interventions, does allow evaluating the opportunities that could enhance human development. In this context of discussion, the neuroscientific approach helps to understand more specifically the extent of the impacts of social and material deprivation produced by society, and the possibilities for preventive interventions to protect human development. The latter also means that neuroscience should actively participate in the ethical and policy discussions on poverty, and may even enhance discussions about some basic moral rights and facilitate their exercise. Thus, access to adequate nutrition and care from prenatal stage encourages emotional and intellectual development in different contexts, such as home and school. It further promotes full social and educational inclusion, and comprises different aspects such as basic human rights, which have been considered by different disciplines.

Specifically regarding to the research agenda, there is still a trend focused on the effects of poverty on different processes, instead of the analysis of mediation mechanisms, and the use of reductionist conceptions of childhood poverty and development. In this context, the following are among the main issues that require a deeper approach at the present:

A. Theoretical integration of developmental and cognitive psychology approaches in the design of experiments applying neuroimaging techniques, to promote and generate innovative hypotheses and research programs.
B. Development of innovative research methodologies to analyse plasticity of complex emotional and cognitive processes and their windows of opportunity in the context of intervention studies –i.e., critical and sensitive periods.
C. Development of complex analytical tools to approach the neural network activation in developmental contexts with socioeconomic diversity, given its implications in the study of the impact of poverty, its mediators and intervention efforts.
D. Generation of alternative methodologies aimed at overcoming those obstacles associated with small sample sizes, application of cross-sectional designs, and lack of integration of different levels of analysis.
E. Consider a proper neuroscientific criticism on how to conceptualize the child poverty experience, to include and adjust the implications of poverty impacts and mechanisms according to different aspects of neurocognitive development. Although this issue has not yet been developed, the neuroscientific evidence on the impact of social inequities and its progression during development contributes to an insight into poverty as a phenomenon much more complex and dynamic than those definitions proposed by other social and human scientific disciplines – e.g., economy, sociology.

Research in these topics and issues need the support of the private sector – especially in the developing countries-, since public and private funds are frequently insufficient or not used efficiently to run longitudinal studies approaching different levels of analysis. Beyond the provision of human, material and economic resources, innovative supporting strategies should consider the design of a common agenda between researchers, policymakers and the private sector. These types of networks are also necessary for avoiding the fragmentation of actions that characterize public policy in the areas of health, education and social development. In the context of this integrative and comprehensive agenda, the following are among the most important issues to be considered:

A. Identifying different levels of developmental problems and risk factors. Considering the complex set of risk and protective factors characterizing the biological and cultural determinants of child neurocognitive development, allows to deal with specific issues at different levels, such as: (i) children-parents interactions; (ii) homes-schools relationships; (iii) government's, NGOs', and media's impacts on development; (iv) children-related norms, values, and beliefs; and (v) time-related systems dynamics. Such types of approaches are endowed with the possibility of being centered on development as a complex phenomenon, being integrated into different conceptual and methodological frameworks, and being applicable within different sociocultural contexts.

B. Guiding the design of intersectoral actions in terms of different systems and dimensions involved in child development components and processes. In particular, the current neuroscientific agenda in the area suggests that there is a need to analyze the emergence of different cognitive and emotional processes, their role in school learning process, their modulation in function of parental mental health and home stimulation, and their potential optimization through home, school, and community integrated interventions.

C. Promoting financial priorities for NGO´s and philanthropic foundations that support both basic and applied research on child development. Although financial institutions and organizations located in developing countries recently began to consider child development to be a high-priority area, the issue still needs more attention worldwide; and there exists a lack of visualization of the complexity of the involved mechanisms and determinants. Supporting efforts aimed at promoting intersectoral collaborations focused on different levels of organization would be important. Some examples of this type of efforts are: (i) the modulation of parenting on the development of self-regulatory competences; (ii) the connections between teaching styles and the development of executive control competences; (iii) the identification of cultural constraints for nutritional supplementations; (iv) the integration of cognitive, emotional, and social competences stimulation in school curricula and home interventions; (v) the inclusion of art in community interventions as a tool for social and health transformations; and (vi) the right to play as a way to promote child development through a visible and appealing investment option for the private sector. In addition, appropriate impact evaluations are required to adjust actions and rationalize the use of human and financial resources.

D. Establishing programs for professional building capacity focused on child development as a complex phenomenon, so those intersectoral efforts aiming at progressively eliminating myths, prejudices, as well as conceptual dogmatisms should be supported. The lack of childhood visualization − as an agent and a social actor with specific developmental needs − is a frequent problem in developing countries, involving parents, teachers, politicians, policy-makers and the private sector. Such efforts should be enlarged progressively so that NGOs and philanthropic organizations could be involved in actions aimed at optimizing child development opportunities.

Acknowledgements

Notes

[1] Bronfenbrenner, 1979.

[2] Hackman and Farah 2009; Lipina and Colombo 2009; Hackman, Farah and Meany 2010; Lipina and Posner 2012.

[3] Hackman and Farah 2009; Lipina and Colombo 2009.

[4] Hackman and Farah 2009; Lipina and Colombo 2009; Lipina and Posner 2012.

[5] Imfeld and others 2009.

[6] Woollett and Maguire 2011.

[7] Lipina and Colombo 2009.

[8] Rao and others 2010.

[9] Sheridan and others 2013.

[10] Sheridan and others 2012.

[11] Noble and others 2013.

[12] Westerman 2007.

[13] Peretz and Zatorre 2005.

[14] Johnson 2005.

[15] Pascalis and others 2005.

[16] Zhang and Meany 2010.

[17] Murgatroyd and others 2009.

[18] Mueller and Bale 2008.

[19] McGowan and others 2009.

[20] Oberlander and others 2008.

[21] Essex and others 2013.

[22] Bakermans-Kranenburg and van IJzendoorn 2011.

[23] Beaver and others 2012.

[24] Hubbs-Tait and others 2008.

[25] Dunlap and others 2010; Storr, Chen and Anthony 2004; Ompad and others 2012; Abeldano and others 2013; Holmila, Raitasao and Kosola 2013; MacDonald and Marsh 2002; Farmer 2012

[26] Irner 2012.

[27] Schroder and others 2004.

[28] Bennet, Bendersky, and Lewis 2008.

[29] Sheinkopf and others 2009.

[30] Fried, Watkinson, and Grav 2003.

[31] Barros and others 2011.

[32] Cupul-Uicab and others 2011.

[33] Roussotte and others 2012.

[34] Evans, Dongping and Whipple 2013.

[35] Bradley and Corwyn 2002.

[36] Grandjean and Landrigan 2014.

[37] Choi 1989.

[38] Hubs-Tait and others 2005; Mendola and others 2002; Omoy 2003; Wassermann and others 1998, 2001; Wilkinson 1999.

[39] Ornoy 2003.

[40] Wasserman and others 2001.

[41] Winders Davis and others 2004.

[42] Canfield 2003.

[43] Grandjean and Landrigan 2006.

[44] Trasande and others 2005.

[45] Tang and others 2014.

[46] Antonov-Schlorke and others 2011.

[47] Benton 2008; Georgieff 2007.

[48] Adler and Newman 2002.

[49] Bradley and Corwyn 2002.

[50] Friel and others 2011.

[51] Gómez-Pinilla 2008.

[52] Adolphus, Lawton and Dye 2013.

[53] Taki and others 2010.

[54] Prentice and others 2013.

[55] Yousafzai, Rasheed and Bhutta 2013.

[56] Lupien and others 2009.

[57] Evans, Dongping and Whipple 2013; Bradley and Corwyn 2002.

[58] Karatsoreos and McEwen 2013.

[59] Shonkoff and others 2012.
[60] Brody and others 2002.
[61] Ganzel, Morris and Wethington 2010.
[62] Lupien 2009.
[63] Gianaros and Manuck 2010.
[64] Blair and others 2011.
[65] Fernald and Gunnar 2009.
[66] Joëls and Baram 2009.
[67] Wismar Fries and others 2005.
[68] Feder and Charney 2009.
[69] Evans and Fuller-Rowell 2013; Luthar, Sawyer and Brown 2006.
[70] Tottenham and others 2011.
[71] Taylor and others 2006.
[72] Butterworth and others 2011; Hanson and others 2011.
[73] Bradley and Corwyn 2002.
[74] Sperber and Hirschfeld 2004.
[75] Hackman and Farah 2009; Lipina and Colombo 2009; Hackman, Farah and Meany 2010; Lipina and Posner 2012.
[76] Lipina and Colombo 2009; D'Angiulli, Lipina and Olesinska 2012.
[77] Brain Development Cooperative Group 2012.
[78] D'Angiulli, Lipina and Olesinska 2012.
[79] Noble and others 2006.
[80] Raizada and others 2008.
[81] Sheridan and others 2013; Sheridan and others 2012.
[82] Rao and others 2010.
[83] Lawson and others 2013.
[84] Noble and others 2013; Jednoróg and others 2012.
[85] D'Angiulli and others 2008; Stevens, Lauinger and Neville 2009.
[86] Kishiyama and others 2009.
[87] Karoly, Kilburn and Cannon 2005.
[88] Barnett 2011.
[89] Karoly, Kilburn and Cannon 2005; Barnett 2011; Ramey and Ramey 2003.
[90] Lipina and Colombo 2009; Barnett 2011; Ramey and Ramey 2003.
[91] Lipina and Colombo 2009.
[92] Barnett 2011.
[93] Posner and Rothbart 2007.
[94] Lipina and Colombo 2009; Posner and Rothbart 2007.
[95] Colombo and Lipina 2005.
[96] Lipina and others 2012.
[97] Goldin and others 2013; Wilson and others 2009.
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Developmental psychology and poverty in global contexts:
The role of the family

Ariel Kalil
University of Chicago

Hirokazu Yoshikawa
Kathleen M. Ziol-Guest
New York University

Introduction

The last 20 years have seen large reductions in absolute poverty in the developing regions of the world,[1] yet little reduction in income-based poverty in high-income countries.[2] The Nordic countries have seen the lowest rates of relative poverty with rates continuing to fall.[3] Together with large reductions in infant mortality across this same period, these data suggest the importance of moving beyond child survival to realizing young children's right to learn and thrive. In addition to a continued focus on direct poverty reduction, programs and policies to support children's developmental potential must also consider outcomes beyond health (specifically, a full range of cognitive and non-cognitive or socio-emotional skills) and also consider targets of intervention that represent mechanisms of how poverty affects children.[4]

The current paper addresses these two issues for the future of children's prospects worldwide – by summarizing current data on the mechanisms of how poverty affects children's health, learning and behavior. We place emphasis on the proximal contexts of children's development. In the current paper we focus specifically on family influences as a key mechanism for how poverty may affect children's early development. What happens within the family plays a key role in accounting for intergenerational correlations in economic status. Family effects may take the form of money investments, time investments, parenting behaviors that support learning, health and behavior, and parent and adult mental health and well-being.

In this paper we concentrate on family income poverty as the primary indicator of developmental risk. We acknowledge that family income poverty carries with it a wide range of associated conditions – including lack of access to sanitation and clean water; higher exposure to violence, conflict and displacement; parent malnutrition; lower access to health, educational and other services; lower probability of full-time and sustained employment; lack of social security, and lower wages and educational attainment.[5] Our review, however, focuses on studies linking family income poverty (often net of some of these other associated factors) to children's development.

Income-based skills gaps in children's developmental outcomes in rich countries

The gaps in educational outcomes between children raised in advantaged and disadvantaged families in rich countries open up well before children enter school and in most cases do not close as children progress through school.[6] Among U.S. children at age four, children from families in the poorest income quintile score on average at the 32nd percentile of the national distribution on math, the 34th percentile in a test of literacy and at the 32nd percentile on a measure of school readiness compared to children in the richest quintile who scored at the 69th percentile on math and literacy and at the 63rd percentile on school readiness.[7] Income-related gaps in school readiness are broadly similar in the UK to those found in the US,[8] though the US shows greater inequality in cognitive outcomes at the top of the income distribution.

Gaps in conduct problems and attention/hyperactivity are also apparent albeit less pronounced. On measures of hyperactivity, for instance, children from families in the poorest income quintile score on average at the 55th percentile of the national distribution (in this case, higher scores indicate higher levels of behavior problems) compared to children in the richest quintile who scored at the 44th percentile.[9] Compared to the UK, the US shows less inequality in behavior outcomes at the bottom of the income distribution.

Comparisons between preschool-age children in Canada and the US found that income-related gaps in cognitive and behavioral skills differed between the two countries with gaps larger in

the US than in Canada.[10] One recent study was the first to simultaneously examine data from the US, UK, Canada and Australia and finds significant inequalities in children's skills emerge in the early years in Australia and Canada as well, though the disparities are much less compared to the US and the UK;[11] the US shows the greatest disparities followed by the UK and Australia, with the smallest disparities found in Canada. The overall disparities found in Bradbury et al. are large for cognitive outcomes and smaller for behavioral outcomes.

Duncan and Magnuson used the U.S. Early Childhood Longitudinal Study, Kindergarten Class of 1998-99, (ECLS-K) to examine teacher-reported gaps in attention and engagement in first and fifth grade across socio-economic status (SES), race/ethnicity, and gender. They showed that children from the top income quintile are reported by teachers to be far more engaged in school (the gap is approximately two-thirds of a standard deviation) compared with their counterparts in the bottom quintile. This gap grows slightly between first and fifth grade. The income gap in engagement is larger than it is by race or gender.

Income-based skills gaps in children's developmental outcomes in low- and middle-income countries

In the low- and middle-income (LAMI) countries, as well, there are large disparities in educational outcomes by family income. Because of the dearth of comparable achievement and learning measures across LAMI countries, the most consistent indicators are of educational attainment. Four times as many children from the poorest income quintile are likely to be out of school as compared to those in the top quintile.[12] This pattern occurs for several reasons. The most direct link is with affordability; in the absence of free schooling, parents struggle to afford to send their children to school. Children from the poorest households also are the most likely to be absent from school (for example, during harvest times or seasonally for nomadic populations). Parents of children from low-income homes have substantially lower levels of education worldwide - leaving them both less able to communicate effectively with teachers, and to support their children when they struggle at school. Economic compulsions cause many children to drop out at secondary school level, in order to supplement family incomes. In such cases, children do not have the flexibility of distance learning or flexible hours of schooling at a high quality. Children from socially marginalized groups, tribal communities, or low castes are often marginalized within the education systems as well by teachers and their peers.

Family income and young children's development

A large body of literature across rich as well as low and middle-income nations converges on the finding that family income poverty negatively affects children's physical health, learning and mental health.[13] Although most of this literature is non-experimental, some experimental evaluations of income support programs and policies also suggest benefits for children's development.[14]

Emerging evidence from neuroscience and social epidemiology also suggests that the timing of child poverty matters, and that for some outcomes later in life, particularly those related to attainment and health, poverty early in a child's life may be particularly harmful. Both human and animal studies highlight the critical importance of early childhood for brain development and for establishing the neural functions and structures that will shape future cognitive, social, emotional and health outcomes.[15] Essential properties of most of the brain's architecture are established very early in life by genes and, importantly, early experience. Young children's brains are especially open to learning and enriching influences. But the negative aspect of the plasticity of early brain development means that young children's brains are more vulnerable

to developmental problems should their environment be deprived or characterized by the kinds of severe stress that is highly prevalent among income poor families.[16]

Based on insights from this emerging neuroscience literature, Cunha, Heckman, Lochman, and Masterov propose a theoretical model of development in which preschool cognitive and socio-emotional capacities are key ingredients for human capital acquisition during the school years. In their model, "skill begets skill" and early capacities can affect the likelihood that later school-age human capital investments will be successful and productive. This theoretical model predicts that economic deprivation in early childhood creates disparities in school readiness and early academic success that widen over the course of childhood.

Family income and economic investments in children

Economic models of child development focus on what money can buy.[17] They view families with greater economic resources as being better able to purchase or produce important "inputs" into their young children's development (e.g., nutritious meals; enriched home learning environments and child care settings outside the home; safe and stimulating neighborhood environments), and, with older children, higher-quality schools and post-secondary education. Carneiro and Heckman discuss the importance of providing a household environment that supports children's education preparedness. They argue that higher incomes enable parents to buy higher quality environments that produce children who are differentially capable, motivated and empowered by their parents to take advantage of educational opportunities. Yeung, Linver and Brooks-Gunn found that the positive association between family income and children's cognitive development is mediated by investment in a stimulating home learning environment. Yeung and Hofferth found that families who experience severe income losses are especially susceptible to cuts in expenditure. Similarly, Stephens found that consumption is significantly reduced as a result of permanent earnings shocks. Studies have examined gender differences in monetary investments in children, which indicate that mothers' control over family resources is associated with greater investments in children.[18] Evidence from South Africa suggests that families who benefitted from the pension system increased their spending on children's items.[19] Findings from analysis of expenditures following the UK welfare reforms indicate that low-income families with children are catching up to more affluent families, and child-related items are increasing faster than other expenditures.[20]

In low- and middle-income countries, the association between expenditures and children's development has focused on health and schooling outcomes. Gender has been a focus of this research, with studies suggesting that mothers' education and assets are more likely to be directed to expenditures on children's needs (clothing and education).[21] One quasi-experimental evaluation of a conditional cash transfer program (largely directed to mothers) showed that it increased spending on children's education and clothing, as well as sources of nutrition that were protein-rich.[22] The mechanism of child expenditures may therefore be responsible for the observed gendered associations of parents' resources with children's health and education (with mothers' education and resources more strongly associated with children's outcomes such as height or educational attainment than fathers'.[23]

Family income and emotional investments in children

Developmental psychology emphasizes the quality of family relationships to explain poverty's detrimental effects on children. This is often called the "family process" perspective. Its theoretical models emphasize the role of higher incomes in improving family processes such as parenting behaviors and parent mental health and well-being.[24]

It should be noted that the "investments" and the "family process" perspectives are not mutually exclusive. Indeed, it likely takes a sensitive and responsive parent to scaffold children's experiences with purchased "inputs" into development, such as books and toys. Nevertheless, research suggests that economic investments tend to link income (level and stability) to measures of children's cognitive achievement, whereas parenting behaviors more often account for linkages between economic conditions and children's emotional adjustment.[25]

In early childhood, three sets of parenting behaviors have linked poverty and family income to children's cognitive and socio-emotional development: cognitive stimulation; responsiveness; and harsh discipline. In the first years of life, parent cognitive stimulation includes activities such as talking to children; singing songs; playing interactive games such as peek-a-boo; and reading books. A famous U.S. example is the study by Betty Hart and Todd Risley, who intensively observed the language patterns of 42 socioeconomically diverse families throughout Kansas City. They recorded one full hour of every word spoken at home between parent and child in 42 families with children ages seven months to 36 months. Households were divided into three different types: 1) professional families; 2) working class; and 3) welfare-receiving families (low-income families dependent on government assistance). In professional families, children heard an average of 2,153 words per hour, while children in working class families heard an average of 1,251 words per hour and children in welfare-receiving families heard an average of 616 words per hour. Extrapolated out, this means that in a year children in professional families heard an average of 11 million words, while children in working class families heard an average of 6 million words and children in welfare-receiving families heard an average of three million words. By age four, a child from a welfare-recipient family could have heard 32 million words fewer than a classmate from a professional family. More broadly, indices that include speaking to children but also interactive games, playing with toys, reading picture books are consistently associated with children's early cognitive development (language, pre-literacy, math skills) in rich countries.[26]

In low- and middle-income countries, most of these same activities have been linked to children's early learning outcomes. However, commonly used measures of parenting such as the cognitive stimulation subscale of the home observation measure of the environment (HOME) scale have had to be adapted substantially for poorer contexts (e.g., by lessening the emphasis on materials such as toys or books).[27] Many countries, for example, do not have a tradition of young children's literature or picture books and book reading in early childhood. Cultural norms are often adaptive to local contexts for children's roles in home and community contexts[28] – these do not always include early home-based development of academic skills such as literacy or math.

Responsiveness represents another form of parenting that is consistently associated with both cognitive outcomes and positive socio-emotional development and self-regulation in early childhood in rich countries[29] Contingent responsiveness has been defined as rapid and appropriate (e.g., in terms of affect) response to an instance of young child communication, whether that communication occurs through gesture, affect or vocalization. In the U.S. the combination of responsiveness and warmth in the response is predictive of positive outcomes. Poverty has been associated with lower levels of responsiveness, with higher levels of parent stress and economic hardship as potential mechanisms.[30] In other countries, warmth is less predictive in this association[31] – this may vary depending on cultural norms regarding affect in parent-child interaction; differences in emphases on authority and obedience; and other cultural and contextual factors (for example, the priority of issues of survival, in which case obedience may be more important and valued than early behavioral autonomy).[32]

Despite extensive cultural and country variation in the association of parenting warmth with child outcomes, there is consistent evidence that frequent and chronic harsh parenting in the form of corporal punishment is harmful to children's development.[33] In many countries, corporal punishment is a norm (e.g., data from the Multiple Indicator Cluster Surveys).[34] However, this does not mean that this parenting behavior is a daily or chronic occurrence. In the U.S., poverty has been associated with higher levels of such harsh parenting.[35]

Aside from parenting behaviors, poverty and economic insecurity also take a toll on parents' stress, well-being and mental health.[36] These family pressures can increase family conflict, inhibit parents' emotional warmth, and increase parents' erratic or disengaged behaviors.[37] Depression and other forms of psychological distress can profoundly affect parents' interactions with their children.[38] Ineffective parenting can lead to children's poorer health, adjustment, and achievement.[39] One U.S. study used state-level data to show that increases in the fraction of children living in extreme poverty result in increases in child maltreatment.[40]

A new line of research in developmental psychology extends the literature on stress processes to biological processes. Indicators of hypothalamic-pituitary-adrenal (HPA) axis functioning have been the most well-studied as mechanisms for the association of poverty to children's development.[41] Studies have found that chronically elevated salivary cortisol levels, for example, may explain the association between poverty and household risk and early childhood executive function as well as IQ.[42] This largely nonexperimental literature has recently begun to be extended to poverty reduction evaluations. One study on the Mexican Oportunidades conditional cash transfer evaluation showed that children whose mothers participated in this program had lower salivary cortisol levels. This association was most pronounced among children of mothers with elevated depressive symptoms.[43] Although most of this emerging body of work focuses on biological mechanisms in children, one study of the Earned Income Tax Credit (work-based income supplement for poor families in the U.S.) showed that receipt of this income supplement was associated with positive biomarkers in mothers (e.g., lower levels of inflammation).[44]

Family income and time investments in children

Researchers also characterize parenting in terms of the amount of time parents spend in activities likely to promote their children's development. Parents' investments of time in enriching activities (i.e., book reading, singing, helping with homework, organizing enriching out of home experiences) are important predictors of children's success.[45] In the U.S., Annette Lareau's qualitative study of family life reported that middle-class parents target their time with children toward developmentally enhancing activities. In her study, middle-class families (whose jobs, by her definition, require college-level skills) engage in a pattern of "concerted cultivation" to actively develop children's talents and skills. By contrast, in lower-class families, Lareau identified a pattern that she calls "the accomplishment of natural growth," wherein parents attend to children's material and emotional needs but presume that their talents and skills will develop without concerted parental intervention.

Numerous U.S. quantitative studies not only show large differences in the time investments of advantaged and disadvantaged parents but also that these gaps remain large even when other differences across families, such as employment hours and schedules, are accounted for.[46] Most of the U.S. studies of thus type distinguish families by the education level of the head of household or the mother and not by family income. The studies generally find substantive differences in the time use patterns of college-educated parents versus all other parents. In the U.S., households with a college-educated parent make up about a third of total households. But these college-educated earn about 50 percent of national income. Thus, we can reasonably use

college education as a marker of economic advantage in the U.S. context. Guryan et al. reported that maternal time with children increases with education, using data from the American Time Use Survey (ATUS). Conditional on hours worked in the labor market mothers in the ATUS with a college education spend six more hours per week in child care activities than women who did not finish high school and twice the amount of time as mothers who graduated from high school. Because the "education gradient" for child-care time differs from the education gradients for leisure and home production (which decrease with education), they argued that parental time investments in children reflect a fundamentally distinct phenomenon. Guryan et al. posited that highly educated parents (more so than less-educated parents) view time with children as an "investment behavior" with which to increase children's human capital (for either altruistic or selfish reasons) and do not view market alternatives as highly effective substitutes for their own time investments.

Kalil, Ryan, and Corey further show that college-educated mothers are more "efficient" in their parental time investments by tailoring their specific activities to children's developmental stage. They identified a "developmental gradient" showing that college-educated mothers shift the composition of their time in ways that specifically promote children's development at different developmental stages. Specifically, the education gradient in basic care and play is greatest when youngest children are infants and toddlers (zero to two), which is precisely when children most require parents' time on such basic activities as bathing and feeding and also precisely the age when parent-child play is at its most developmentally appropriate. The education gradient for teaching is greatest when youngest children are preschool aged (three to five), which is precisely when time spent in learning activities (such as reading and problem solving) best prepare children for school entry. Conversely, the education gradient in management is greatest when youngest children are between the ages of six and 13—precisely the ages when parental management is a key, developmentally appropriate input.

The significant results in Kalil et al. emerged in the comparison between mothers with a U.S. college education and those with only a high school education; the differences between mothers with some college and those with only a high school education were positive but were seldom statistically significant. This pattern suggests the developmental gradient, as in the educational gradient, may be particularly pronounced among highly economically advantaged mothers.

Finally, Kalil et al.'s findings show that with respect to total child care time, the educational gradient is most apparent in households with the youngest children, a point also made by Hurst, Sacks and Stevenson. College-educated mothers, more so than their less educated counterparts, may have learned the message that parental investments in early childhood are key ingredients in children's long-run success.[47]

There are unfortunately few studies on time use among parents or children in low- and middle-income countries. One study in China shows that parents' migration to cities results in more child involvement in household tasks as well as farm work in rural households.[48] Larson and Verma find that adolescents in post-industrial East Asian countries experienced declines in time spent on household and wage labor as a result of industrialization, and that they spent the freed up time in schoolwork.

U.S. research on the "summer setback" illustrates the importance of how parents orchestrate children's time use. Downey, von Hippel, and Broh used the data from the ECLS-K to measure the decline in reading and math scores over the summer among children of varying socioeconomic levels. Downey et al. estimated the kindergarten learning rate, the summer learning rate, and the first grade learning rate. The summer learning rate was the lowest, which the researchers argued was likely a function of different family and neighborhood experiences during the summer. These data also show that over the summer, first grade children from the

bottom of the income distribution engaged in fewer dance and music activities, team and individual sports, swimming lessons, and scouting than their higher-SES counterparts. In contrast, low-SES children watch twice as much television each week as high-SES children (20 v. 10 hours) in the summer.[49]

Chin and Phillips also find that children from economically disadvantaged families experience larger summer learning losses than more advantaged children. However, they argue that activities such as visiting museums or participating in sports lessons were not associated with summer learning. Instead, they found that the quality of the home literacy environment, including whether the home had more than fifty books, daily newspapers, or magazine subscriptions, as well as the amount that children read or were read to by parents or visited the library were significantly related to children's summer learning losses and gains.

How much does parenting matter for children's development?

Non-experimental research suggests that children's home environment as measured by the HOME score (which includes parental time investments) accounts for up to half of the relationship between socioeconomic status and disparities in children's cognitive test scores.[50]

In a descriptive analysis of US data from the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), Waldfogel and Washbrook conclude that parenting style (in particular, mothers' sensitivity and responsiveness) is the most important factor explaining the poorer cognitive performance of low-income children relative to middle-income children, accounting for 21 percent of the gap in literacy, 19 percent of the gap in mathematics, and 33 percent of the gap in language. Parenting style was far more important in this case than mother's education, mothers' health, preschool enrolment, child health and a set of demographics (including race/ethnicity, family structure, nativity, family member disability, maternal age at birth, number of children in the household, and child gender) This research also showed that the home learning environment is the second most important factor explaining income-related gaps in school readiness. It includes parents' teaching behaviors in the home as well as their provision of learning materials and literacy activities, including books and CDs, computer access, TV watching, library visits, and classes. The home learning environment accounts for between 16 and 21 percent of the gap between low and middle-income children in cognitive performance. In contrast differential enrollment in child care or pre-school (other than Head Start) accounts for between 4 percent and 6 percent of the cognitive gaps between low and middle-income children, and differential enrollment in Head Start is associated with a 6 percent to 9 percent reduction in the gap between low and middle-income children. All told, these findings suggest that what happens in the home is critically important to children's cognitive achievement.

Interactive play between children and adults may be especially beneficial for children's verbal development.[51] Moreover, more hours spent in places outside of school and home appears associated with higher test scores compared to demographically similar children who watch more television.[52] Estimates suggest that high-income children spent nearly 1,300 more hours in places other than home or school between birth and age six than their low-income counterparts.[53]

Only a handful of studies have specifically examined how parental time with children relates to children's cognitive test scores using large-scale time-diary surveys. They largely support the conclusion that simply increasing the quantity of time that parents spend with their children is not likely to improve their child's achievement. Instead the evidence seems to suggest that the returns to time investments depend on the amount of cognitive stimulation parents provide

during that time.[54] Most of these studies use standard OLS estimation models. When Villena-Rodán and Ríos-Aguilar use various instruments for parent's time with their children (local labor market conditions, estimated childcare price, and overtime hours), they find that total parental time has a small positive effect on children cognitive test scores and that the effect is greater for younger children. However, they also find that maternal educational time with a child has a direct causal effect on their children's math scores that is eight times the direct causal effect of the overall amount of maternal time with the child.[55]

Price, who also used an instrumental variables model, finds that an additional year of daily mother–child reading would increase children's reading tests score by 41 percent of a standard deviation. Alternatively, if the mother increases the frequency of reading to her child by one day per week during the first ten years of the child's life, the child's reading test scores would increase by about half of a standard deviation. Economically advantaged parents' increasing engagement in cognitively stimulating activities seems to reflect this understanding.

Implications for programs and policies

What does this global evidence on the role of family factors suggest for programs and policies related to poverty reduction in early childhood? Several points are relevant. First, an emphasis on family mechanisms may be productive when integrated with existing program and policy approaches in early childhood.[56] Experimental evidence from the U.S. Early Head Start and Nurse Family Partnership home visiting programs support this point. Early Head Start takes a two-generation approach by providing child and family development services to low-income mothers and children under age three. Impact analyses suggest that program children performed better than controls in cognitive and language development displayed higher emotional engagement of the parent and sustained attention with play objects, and were lower in aggressive behavior; program parents were more emotionally supportive and provided more learning stimulation compared to controls.[57] Examination of the Nurse-Family Partnership, a high-quality, intensive program of home visitation implemented by nurses starting in the third trimester and into the third year of life, has shown positive effects across multiple dimensions including family life and child outcomes. Specifically, beneficial effects are seen in mothers' lives and parenting as well as children's cognitive development and mental health; and these effects are maintained over time.[58] A meta-analysis of 88 Early Childhood Education studies found that programs that provided parents with opportunities to practice parenting skills revealed larger effect sizes for children's cognitive skills, pre-academic skills and parental warmth and responsiveness.[59] The Triple P parenting program, which originated at the University of Queensland in Australia, takes a population approach to improve parenting in at-risk (often low-SES) families. This is a behavioral family intervention designed to induce changes in children's problem behavior by modifying family environments that maintain and reinforce the child's problem behavior.[60] A recent meta-analysis examining the effectiveness on parenting finds that interventions reduced dysfunctional parenting styles and improved parental competency[61] and interventions for children with multiple behavior problems saw reductions in disruptive behaviors.[62]

Similarly, intervention evidence from multiple low- and middle-income country contexts suggests that adding an emphasis on cognitive stimulation (e.g., speaking and talking more with infants) and responsiveness to basic health and nutrition interventions in the birth to 3 years is associated with positive impacts on children's early learning.[63] One pioneering experimental program of this type in Jamaica produced 20-year impacts on increased IQ and earnings, and reduced depression, anxiety and violence.[64]

Second, parents must be central targets of interventions to increase demand for Early Childhood Development (ECD) programs that improve children's developmental potential. Media campaigns, civil society engagement, and diffusion of innovation approaches can all be used productively to increase demand for ECD programs. This approach has been taken in recent initiatives, for example, in Latin America (comprehensive early childhood initiatives such as Colombia's De Cero a Siempre, Peru's Cuna Mas, and Chile's Chile Crece Contigo programs).[65]

Third, conditional cash transfer programs and other poverty reduction approaches would benefit from continued emphasis on parents' behavior to support early childhood development. For example, conditioning transfers on well-child visits and immunization has proved successful in several countries in improving children's nutritional status and health in early childhood.[66] The next phase in this area of program and policy is to condition transfers on enrollment in preprimary education. This could serve both to increase take-up when preschool education is available, and to drive increases in demand even where it is not available. In rich countries, paid leave policies, child allowances, and other approaches to ensure parental investment in early childhood under conditions of poverty are warranted, with further attention to those in informal employment.[67]

Fourth, given the prominent role that parent mental health may play in early childhood development, further development of interventions to improve parent mental health is warranted. One recent study demonstrates the promise of this approach for a low-income country. Rahman and colleagues implemented the strongest evidence-based approach to improving adult depression – short cognitive-behavioral therapy – by training Pakistan's at-scale community health worker workforce in its techniques in their work with mothers with perinatal depression. An experimental evaluation showed large reductions in diagnosed depression when children were one year old (28 percent in the treatment condition and 58 percent in the control condition).[68]

Finally, incentives to encourage public-private partnerships to reduce poverty could be productively targeted to families with children, particularly during the period of early childhood. A recently passed Indian law, for example, requires corporations with annual profits above a certain amount to contribute 2 percent of their profits to social causes.[69] Although there are many competing targets for this investment, children's issues have been prominent in the policy debate. Recent early childhood development policies such as Colombia's De Cero a Siempre include a prominent role for public-private partnerships.[70]

Given the particularly potent associations of poverty in early childhood with lifelong health, learning, behavior, and economic outcomes, it is incumbent on governments and private enterprises to invest in poverty reduction with an emphasis on early childhood. Compelling evidence suggests that the returns on such investments will be particularly high.[71]

Notes

[1] United Nations 2013.
[2] Förster and Richardson 2010; OECD 2011.
[3] UNICEF 2007.
[4] LMTF 2013.
[5] Walker and others 2007.
[6] Carneiro and Heckman 2003; Goodman and Gregg 2010.
[7] Waldfogel and Washbrook 2011.
[8] Waldfogel and Washbrook 2011.
[9] Waldfogel and Washbrook 2011.

[10] Corak, Curtis and Phipps 2011.
[11] Bradbury and others 2012.
[12] Chavan, Yoshikawa and Bahadur 2013; UNESCO 2012.
[13] Duncan, Kalil and Ziol-Guest 2008; Duncan, Ziol-Guest and Kalil 2010.
[14] Duncan, Morris, & Rodrigues, 2011.
[15] Knudsen and others 2006; Sapolsky 2004.
[16] Nelson and others 2007.
[17] Becker 1981.
[18] Lundberg and Pollak 1996; Lundberg, Pollak, and Wales 1997; Thomas 1990; Thomas 1994.
[19] Case and Deaton 1998.
[20] Gregg, Waldfogel and Washbrook 2006.
[21] Quisumbing and Maluccio 2000.
[22] Attanasio and Mesnard 2006.
[23] Schultz 2002.
[24] Chase-Lansdale and Pittman 2002; McLoyd 1990; McLoyd and others 1994.
[25] Yeung, Linver, and Brooks-Gunn 2002.
[26] Goodman and Gregg 2010; Melhuish 2010.
[27] Bradley and Corwyn 2005.
[28] Harkness and Super 1995; LeVine 1988.
[29] Anker 2013; Blair and Raver 2012; Davidov and Grusec 2006; Tamis-LeMonda, Bomstein and Baumwell 2001.
[30] Gershoff and others 2007.
[31] Bradley and Corwyn 2005.
[32] Greenfield 2009.
[33] Bradley and Corwyn 2005.
[34] UNICEF 2013.
[35] Yoshikawa, Aber and Beardslee 2012.
[36] McLoyd 1990.
[37] Simons and others 1999.
[38] Zahn-Waxler, Duggal and Gruber 2002.
[39] Conger and Donnellan 2007.
[40] Paxson and Waldfogel 2003.
[41] Lupien and others 2001.
[42] Blair and others 2011.
[43] Fernald and Gunnar 2009.
[44] Evans and Garthwaite 2013.
[45] Price 2008; Price 2010; Waldfogel and Washbrook 2011.
[46] Guryan, Hurst and Kearney 2008; Hill and Stafford 1974; Sayer, Gauthier and Furstenberg 2004.
[47] Carneiro and Heckman 2003.
[48] Chang, Dong and MacPhail 2011.
[49] Burkam and others 2004.
[50] Klebanov and others 1998; Smith, Brooks-Gunn and Klebanov 1997.
[51] Dickinson and Tabors 2001.
[52] Hofferth and Sandberg 2001.
[53] Phillips 2011.
[54] Booth and others 2002; Hsin 2009; Huston and Aronson 2005; Price 2010.
[55] Villena-Rodán and Ríos-Aguilar 2011.
[56] Chavan, Yoshikawa and Bahadur 2013.
[57] Love and others 2005.
[58] Olds and others 2007.
[59] Grindal and others 2014.
[60] Sanders and others 1999.
[61] De Graaf and others 2008a.
[62] De Graaf and others 2008b.
[63] Engle and others 2011; Yousafzai and Aboud 2013.
[64] Gertler and others 2013.
[65] Asesorías Para El Desarrollo 2013; Ministry of Development and Social Inclusion 2012; Yoshikawa and others 2013.
[66] Attanasio and others 2005; Fernald, Gertler and Neufeld 2008; Macours, Schady and Vakis 2012.
[67] Gonzalez, 2011; Milligan and Stabile 2011; Raschke 2012; Skinner and Ochshom 2012; Waldfogel 2001.

[68] Rahman and others 2008.
[69] Ministry of Law and Justice 2013.
[70] Yoshikawa and others 2013.
[71] Carneiro and Heckman 2003.

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Education and work as human birthrights: Eradicating poverty through knowledge, innovation, and collaboration

David L. Blustein
Maureen E. Kenny
Saliha Kozan
Boston College

Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment. (UN Declaration of Human Rights, Article 23)

(To) achieve full and productive employment and decent work for all, including women and young people (Millennium Development Goal, Target 1.B)

Beginning in 1948, the United Nations committed itself to the notion that work is a human birthright. Indeed, as we approach the target date for the Millennium Development Goals (MDG) in 2015, inequitable access to fair, dignified, and meaningful work continues to plague the world, with particular challenges for the Least Developed Countries (LDC) and communities that are mired in the devastating grip of poverty, famine, and conflict.[1] In this chapter, we focus on the challenges of attaining the MDG objective of full and productive employment for all by examining the role of education and training in preparing people for work. Given that other chapters in this volume review primary school education and learning in general, we focus on secondary education, post-secondary education, vocational training, and the transition from school to work. The goals of this chapter are to summarize relevant conceptual frameworks for understanding the role of education and work in combating poverty, review relevant research, summarize public policy recommendations, and outline innovative research agendas that emerge from this review.

Our purview encompasses the initial training and education that takes place during adolescence and young adulthood and the continual retraining that is increasingly needed throughout adulthood. At the outset, we would like to highlight two conceptual frameworks for understanding the connections among education, training, work, and poverty reduction. Given that we are exploring the psychological perspective on the interface of education, work, and poverty, we focus on the ways in which individual differences and contextual factors affect how people adapt to challenges and resources. Decisions about bodies of knowledge to include in this chapter have been made based on their relevance to the fight against global poverty and on the potential of this knowledge to inform interventions from the public and private sectors that can foster individual growth and structural change in communities.

The role of work and education in people's lives: conceptual and research frameworks

Identifying effective strategies to reduce, and optimally, to eliminate poverty, unemployment, and social exclusion has eluded scholars, public policy analysts, government officials, and private sector leaders. While "magic wand" ideas that can quickly create social inclusion and reduce poverty have not been identified, promising advances in psychology and related social sciences have been proposed and, often assessed empirically, which can ameliorate circumscribed aspects of global poverty.[2] To guide our discussion in this chapter, we initially present two conceptual frameworks that provide a means of framing the review of research and effective practices designed to reduce poverty via education and training.

Amartya Sen, a Nobel-prize winning economist, has written extensively about creating the conditions that will ameliorate global poverty and other forms of social exclusion.[3] In the book entitled "Development as Freedom," Sen argued that one of the primary tools to defeat poverty is the development of human agency within the context of social, political, and economic freedoms. According to Sen, agency reflects the experience of initiating activity and implementing goals that are consistent with one's own values and life objectives. Sen proposes that agency is most likely to emerge when people live in communities that offer the following freedoms: "economic opportunities, political freedoms, social facilities, transparency

guarantees, and protective security." Sen's perspective supports the notion that education is a form of freedom that is essential in creating agency among individuals and organizations. Martha Nussbaum has further advanced Sen's initial formulations by advocating that all people should have opportunities to reach their highest level of capabilities and a life of dignity.[4] Specifically, Nussbaum highlights ten central capabilities that are necessary for people to lead fully engaged lives, including: the capacity to use one's senses, form attachments to objects and people outside of ourselves, play, and control's one's environment. As such, these capabilities underscore the importance of creating the conditions that facilitate a life of dignity, satisfaction, and meaning.

From a somewhat different perspective, David Blustein and his colleagues have developed a framework that seeks to understand the role of work in people's lives. This perspective, known as the psychology of working, is based on the assumption that work has the potential to fulfill three human needs—survival, social connection, and self-determination.[5] The survival needs are clearly manifested in the MDG and other recent initiatives that underscore the critical importance of access to work as a means of reducing poverty.[6] Access to work that offers livable wages is perhaps the single most effective weapon in reducing poverty, a view that is consistent with Sen's contributions and the MDG. The social connection needs are manifested in the observation that work provides people with sustained contacts with others, thereby helping to create sources of support that are essential in transferring new skills and in developing a meaningful life.[7] A related aspect of the relational needs met by work is reflected in the sense of connection that people feel in relation to the broader social world. When people are working, they are more likely to feel invested in their families, communities, and overall global citizenship. The self-determination needs refer to the capacity for work to provide people with a means of shaping their own lives; in a sense, the self-determination needs parallel Sen's notion of agency, underscoring the human desire to create, contribute, and collaborate.[8]

When considered collectively, work that satisfies these three needs is instrumental in promoting physical and psychological well-being, along with the well-being of communities and nations. In addition, the psychology-of-working perspective has detailed how access to education and other resources (such as safe communities, adequate health care, housing, and access to nutritious food) is essential for individuals in creating a meaningful and dignified working life. Another key attribute of the psychology of working is the importance of efforts that explicitly link education and training with the world of work

The perspectives by Sen and Blustein, respectively, represent a synthesis of macro and micro levels of analyses of the role of education in promoting agency and reducing poverty. Each of these perspectives underscores the need to understand the way that the environment, writ large, affects education and work and how individuals shape their contexts. The human development economics perspective and the psychology-of-working framework, when considered in tandem, suggest that the outcome of a good life within the education and work contexts would be one where people can attain agency, achieve their capabilities, and obtain work that is dignified, provides a means of survival, and is meaningful.

Education and the transition to work: contextual perspectives

In this section, we describe the broad context of the relationships among education, work, and poverty, beginning first with a discussion of the changing world of work, followed by a review of challenges and new innovations in education and training.

Describing the context of the world of work requires mapping vastly different life experiences, ranging across the full spectrum of opportunities and barriers. A number of dimensions exist

along this continuum, including access to education, access to financial affordances, access to human freedoms, and access to safe communities. For some individuals, the world of work provides opportunities that are consistent with their interests, values, talents, and that offer the promise of satisfaction and self-determination. However, the vast majority of people around the globe who are able to obtain employment work in jobs that are not "chosen" in an agentic or planful way.[9] Rather, for many people, particularly those in LDCs, work is arduous, tedious, often unsafe, and inconsistently available; indeed, for most people around the world, the choice of a job is based on availability. Moreover, the struggles of unemployment, underemployment, exploitation at work, and the need to migrate to other more economically vibrant communities is the unfortunate reality that faces the vast majority of adults around the world.[10]

Complicating this huge distance between the "haves" and "have nots" is the Great Recession, which has transformed the world of work around the globe.[11] Within many post-industrial societies, like the United States (U.S.) and Europe, the Great Recession has had the most pernicious impact on the lives of the working class and poor. For example, Andrew Sum and his colleagues from the Center of Labor Market Studies at Northeastern University in Boston, Massachusetts documented how the Great Recession had a particularly harsh impact on the lives of the poor, young, and of people of color within the U.S.[12] Similar phenomena have occurred in both developed nations and the LDCs as the Great Recession has ravaged the porous safety net that communities and nations have developed for those without access to work.

Many scholars have discussed the end of the "career contract" between employers and employees who often had long-term economic relationships in industrialized societies.[13] Of course, the "career contract" for the poor and for those living in LDCs barely existed or was nonexistent.[14] For many people without access to the antecedents of volitional work lives, the world of work currently is characterized by sporadic opportunities to work, grinding unemployment, and outsourcing of service and manufacturing jobs to nations and regions with lower wages. In addition, the increasing use of short-term work contracts rather than longer-term relationships between employer and employee is rapidly becoming the norm around the globe.[15] In contrast with advice from Sen's model of sustainable development and other anti-poverty initiatives,[16] the world of work for most people does not typically offer the conditions for the development of human agency and the capacity to care for others and for one's community. That said, many public and private sector leaders are aware that investments in social and human capital are critical in improving the well-being of people and their communities.[17] One of the challenges is to provide the most effective education and training opportunities that are most relevant to a given community or nation. For example, in many post-industrial nations, an excess of workers exists for many fields, although some industries (especially those in Science, Technology, Engineering, and Math; STEM) face shortages of skilled workers.[18] In LDCs, the attraction of low wages is often hindered by a lack of skills within the workforce.[19] By connecting the needs of a community to the development of educational and vocational training goals, we believe that communities can develop a collective level of agency that may lead to sustainable development and considerable poverty reduction.

The Sustained Development Solutions Network (SDSN) report recently published by the United Nations Development Program provided specific guidelines on how to match the needs of industries with educational and training goals.[20] Building on the observation that industries, schools, and individuals are often not well integrated, the SDSN report presented a compelling case that intentional educational, training, and intentional school-to-work transitions systems represent an important means of reducing poverty and enhancing opportunities. In the sections that follow, we review ways of connecting education to the resources that enhance agency and

opportunities by highlighting new ideas that can help people to survive and, optimally, thrive at work and in their overall lives.

Education and training

Education and training represent one of the most important and potentially effective means of combating poverty.[21] Indeed, across most parts of the globe, education is inversely associated with unemployment and poverty and positively associated with income, job success, physical, social, and psychological well-being, civic participation, and access to power as individuals and members of a social group. The importance of education as a prerequisite to employment that offers a living wage and opportunities for advancement has increased as more and more routine work has been automated. The best jobs (i.e., jobs that offer people dignity, decent working conditions, some degree of stability, and, optimally, some degree of personal meaning)[22] go to persons with advanced academic and technical skills, and an array of adaptive non-cognitive skills.[23] A recent report by the National Research Council (NRC), for example, identified three major sets of factors that are essential for work and life.[24] In addition to academic/cognitive skills, the NRC report proposed that the Intrapersonal domain (i.e., intellectual openness; work ethic and conscientiousness; and positive core self-evaluation) and the Interpersonal domain (i.e., communication, collaboration, responsibility, and conflict resolution) are critical for successful lives in the 21st century. Education and training are thus challenged to equip individuals with a range of cognitive and non-cognitive competencies if they are to be adequately prepared for lives of agency, productivity, and engaged citizenship.

Although access to education is vital for entry into the level and types of work that meet the human needs for survival, connection, and self-determination, educational opportunities are not distributed with equity. While progress has been made globally in universal primary education, illiteracy rates remain very high in LDCs. Enrollment in secondary education and other programs that offer appropriate training and life skills remains inequitable, with exclusion related to numerous social, geographic, and economic factors. Multiple structural inequalities and associated disparities, including household wealth, disability, rural location, language, religion, political and religious conflict, natural disasters, migration, displacement and caste often intersect, undermining the quality and level of education accessible to those who are in most need.[25] Indeed, those youth who are most in need of quality education to advance out of poverty are likely to experience the poorest-funded schools,[26] which are plagued by numerous dysfunctions, including a shortage of trained teachers. As we discuss in the next section, societal barriers to education and other opportunities key to social mobility can be internalized in ways that undermine individual expectations, hope, and motivation.[27] Pragmatically, poor children and their families often cannot afford to pay fees for school supplies and uniforms charged in many LDCs; moreover, many youth engage in child labor that only perpetuates their social vulnerability and societal marginalization and offers no escape from poverty.[28] Access to childcare and decent health care also varies by social class and influences the capacity of individuals to stay in school.[29] In the context of these realities, the public and private sectors are challenged to improve equitable access to education and to work that offers a living wage and opportunities for exercising individual and collective agency. Providing citizens with the tools to compete for jobs and to develop agency are responsibilities that governments, and increasingly the private sector, face as the global marketplace becomes even more competitive, resulting in growing inequality.

Public and private partnerships are one means to improve educational quality and pathways from school to economically rewarding work. Although the main source of funding for much of education is public or governmental, those businesses and corporations who rely on well-

trained individuals to staff their workforce and garner profits for their enterprises stand to benefit considerably by investing in education. Research findings from decades of studies on education, work, career development, and poverty reduction provide important tools, which as described below, can be used to enhance the efforts of public and private partnerships.[30]

Some research has focused on partnerships between education and the workplace that link education with work preparation, including career development education, work-based learning, mentoring, structured school-to-work transition programs, and preparation for lifelong learning and training.[31] Two premises of the psychology-of-working perspective that underscore the importance of the education and work connection have received support in the research literature. First, schools that offer students a clear understanding of how their efforts can enhance the quality of their work lives are more likely to promote student engagement and motivation, which can optimally lead to higher levels of academic achievement. Second, educational programs in secondary and post-secondary settings that are explicitly embedded in working contexts (e.g., work-based learning, internships) provide students with a more seamless transition to the world of work. Consistent with those premises, career development education offered in school settings with links to experiences in the community can help young people to learn more about future careers and the skills needed for the workplace.[32]

Work-based learning (WBL), including internships, apprenticeships, job-shadowing, and other vocational-specific curricula developed through partnerships of schools with the private and public sectors, provides opportunities for youth to explore future work possibilities, connect current learning to work preparation, and develop a range of life and work skills.[33] WBL can offer mentorship from work supervisors and help young people to understand the connection between their current academic studies and their vocational futures.[34] School-to-work (STW) programs are designed to assist students in making successful transitions from school to the workplace, whether or not they choose to enroll in post high school education or training en route.[35] Well-developed STW programs, with elaborate systems of internships and collaborations between secondary schools and employers, have been established for decades in a number of industrialized nations, including Germany, Austria, Switzerland and Japan, with measurable positive impact.[36] For those youth who do not pursue post-secondary education, obtaining vocational training within the school curriculum and through internships and collaborations with employers can be vital in facilitating entry into meaningful work.

In addition to traditional education, vocational training offers a powerful vehicle to fight poverty. In this chapter, vocational training refers to intentional and systematic efforts to provide individuals with skills needed to function effectively in a given work context. The skills may include specific work-based tasks (e.g., skills in operating factory machinery), general academic competencies (e.g., literacy skills), and adaptive internal attributes (e.g., self-efficacy, resilience, interpersonal skills)[37]. Emerging best practices in training reveal that initiatives that are constructed based on learning theory and that attend to the individual and cultural differences of trainees are most effective. Two recent findings that are particularly promising include a focus on active learning (which involves the trainees developing mental models of a given task) and the use of technology (e.g., web-based training modules).[38]

These broad-based programs provide an important context for the improvement of education and work preparation. Research reveals that programs that offer a connection between school and the workplace can play important roles for many youth in helping them to understand the importance of school to promote engagement in academic and technical skill development, and to provide real world experiences for developing many of the interpersonal skills, self-regulation, feelings of confidence, and internalized individual and social identities that play significant roles in school, work, and life success.[39] Indeed, many individual attributes

determine how people react to and use educational affordance and training opportunities. We now review some of the most promising ideas that inform contemporary understanding of how the external context can promote or undermine individual motivation and agency. (A summary of these individual attributes is provided in Figure 1 –see annex A.)

Education and the transition to work: individual perspectives

To provide context for the review that follows, we underscore here that poverty occurs in an environment with multiple sources of oppression and marginalization.[40] People who are poor are often marginalized because of other social identities (e.g., race, ethnicity, and gender).[41] In addition, while we are focusing on individual difference factors, we want to reaffirm Sen's view that economic development and poverty reduction are generally best fostered by human freedoms and democratic principles. In addition, the lack of equity that exists in most societies has a cascading impact on education and work, affecting people in complex and pervasive ways. That said, the psychological view that we are exploring in this section is based on an individual perspective and offers viable knowledge to inform the development of programs and systems that can enhance agency and can change important aspects of the structures that sustain poverty and oppression.[42] In addition, we focus on attributes of individuals that can help them to become engaged, active citizens, who can obtain the skills and power needed to change inequitable institutions. The factors that we have chosen to review herein, while necessarily circumscribed by space limitations, reflect aspects of human functioning that have been related empirically to various indices of educational and vocational functioning and that are amenable to change via systemic and individual interventions. (Please see Figure 1 for an overview of the individual factors reviewed in this section.)

The internalization process: a framework for individual intervention and public policy

As a means of providing an organizing rubric for our presentation of individual factors, we focus on the role of internalizations, which reflect beliefs, attitudes, orientations toward others and the world, and aspects of our identities that serve to coalesce our inner life and organize our interactions with others.[43] In effect, internalizations are akin to a bookshelf in our minds, providing a means of structuring our identities and social interactions. By focusing on internalizations, we are able to describe the complex ways in which people take in messages from the social world and from interpersonal relationships that form important aspects of their identities, self-concept, and many of their capabilities. For example, we have internalized views of ourselves as men or women, which are known as gender-role identity, that affect how we view education, training, and labor market work.

The notion of internalizations is very useful in understanding how various aspects of the context (such as racism, sexism, classism, and faith-based discrimination) shape individuals, often yielding an additional oppressive condition. For example, racism is often internalized into one's internal sense of self, culminating in feelings of self-denigration or alienation, which affects a wide range of behaviors, attitudes, and motivations pertaining to education, work, and agency.[44] The notion of internalizations, when applied to the challenges of evoking and sustaining agency, offers policy makers and private sector leaders with evidence-based ideas that are amenable to change and that can provide the focal point for efficacious and cost-effective interventions. In other words, contemporary psychology can be used to deliver both systemic changes to a community and tools that facilitate changes in individuals; the outcome

of such interventions can be transformative given the reciprocal relationship between people and their contexts.

Sources of resilience and resistance

One internalized attribute that is relevant to our understanding of education, work, and poverty is resilience— the process of developing competence and the capacity to adapt in the face of adversity, trauma, and stressful life events, such as natural disasters, poverty, and losses. Interventions that aim at developing resilience and competence should consider both risk and protective factors in multiple domains[45] (e.g., academic achievement and social competence). Masten and Curtis, for example, articulated several strategies that promote competence, including reducing the occurrence of risk factors (such as low socioeconomic status, poor parenting or adult mentoring, neighborhood violence, academic and social problems) and exposure to stressful life events, increasing resources that play a protective role for youth faced with adversity, and improving the effectiveness of adaptational systems for development and coping.[46] Focusing on fundamental adaptational systems, including facilitating positive relationships with family and peers, providing access to quality education, and strengthening self-esteem to support positive development, government programs, educators, and community/business partnerships can help youth overcome future challenges and enable long-term positive development and resilience.[47]

In a similar vein, the growing interest in the assessment and promotion of character strengths such as self-control and grit offers important insights about how to engage people in education and training. Psychologists report that grit and self-control are linked to successful academic and vocational outcomes.[48] Although both grit and self-control contribute to individuals' success in the long term, grit refers to one's perseverance and motivation to achieve long-term goals and self-control is the ability to regulate emotional and behavioral impulses or temptations in the moment. Hence, interventions that focus on fostering these personality traits, along with other intrapsychic and interpersonal competencies, are likely to create positive educational, vocational, and health-related outcomes for individuals of different ages.[49]

Another internalization that provides a source of resilience is critical consciousness. Brazilian pedagogue Paulo Freire[50] developed the critical consciousness method to help oppressed groups gain a critical understanding of society, politics, and power relationships that function to maintain the status quo. Moreover, this pedagogical method emphasizes using one's awareness to take action against unequal systems to create a more just world. Freire's perspective can serve as an antidote for communities that face insurmountable barriers due to the policies and practices that disregard their needs and rights and inhibit their educational and vocational development. For example, in many countries with sociopolitical structures that create obstacles for particular populations, increasing critical consciousness among disadvantaged groups (e.g., ethnic, religious, and sexual minorities) can enrich their engagement in school and/or work and empower them to challenge systemic injustices by helping them "read" their world and understand the reasons for structural inequalities. As Freire posited, engaging in a critical analysis or inquiry of the sources of oppressions can reduce the psychological oppression of marginalized individuals that stems from internalizing a sense of inferiority and self-criticism. Interventions that include an explicit focus on critical consciousness are positively associated with career development as they are likely to promote students' vocational expectations and their perspectives regarding the importance of work to their futures.[51] In addition, a number of studies have demonstrated a strong link between promoting critical consciousness and sociopolitical development. When combined with a sense of agency and action, sociopolitical development among youth, particularly those who have

been marginalized and disadvantaged due to systemic injustices, such as ethnic minority students in the U.S., can also promote student achievement.[52]

Academic mindset

Another relevant group of internalizations pertaining to the development of adaptive behavior and attitudes in the academic context, known as the academic mindset, was highlighted in a recent report by the University of Chicago Consortium on Chicago School Research.[53] This report, which focused on identifying the non-cognitive factors that shape academic performance, described the critical role that one's beliefs about oneself in the academic context play in the development of adaptive academic behaviors and ultimately, improved performance. An adaptive academic mindset would include beliefs about one's capacity to set goals, confidence in one's ability to perform, and beliefs that one's efforts can lead to positive outcomes. Two particularly robust exemplars of the academic mindset are described next.

Self-efficacy beliefs reflect people's judgments about their abilities and capacity to perform a given task. Considerable research shows that people's educational and vocational performances along with their academic and work-related interests and decisions are significantly influenced by their self-efficacy beliefs.[54] While it is important to recognize the positive outcomes of fostering self-efficacy beliefs of individuals, it is also necessary to acknowledge that non-supportive environments and systemic barriers, which are more prevalent in the context of poverty, may inhibit individual's perceived abilities.

One psychological factor central to understanding the academic attainment of ethnic minorities, women, and other disadvantaged groups is the concept of stereotype threat. Stereotype threat refers to a sense of threat that individuals experience when they are performing a task that may provoke a negative stereotype about their group membership.[55] Although this concept was initially used to describe the experiences of African-American college students and women in math and science fields in the U.S., this threat can distress anyone or any group where a negative stereotype could apply. Individuals who strongly identify with the stigmatized group are more likely to suffer from the effects of stereotype threat. When students experience a stereotype threat, their emotional reactions can interfere with their school performance. More significantly, when the stereotype threat becomes chronic, it can diminish one's identification with school. Consequently, those who are exposed to the negative stereotypes are less likely to do well academically, which might also mean that they are likely to miss the opportunities to improve their social and financial conditions. Numerous intervention strategies designed to reduce stereotype threat have been developed and tested, providing important tools for enhancing the motivation of students and workers who have been faced with endemic sources of racism and marginalization.[56]

Internalized social identities

Another relevant cluster of internalizations reflect the complex structures that people construct to help them understand the various dimensions of their social identities, such as their gender, race, ethnicity, and social class. These identities typically play a significant role for people in organizing their experiences and informing how they manage themselves in various social contexts, including education, training, and work.

One particularly powerful social identity is gender. Despite some marked improvements in the socioeconomic conditions of women across the world within the last few decades, gender gaps in many areas including school enrollment, wages, and political participation continue to create problems for women, especially those who live in developing and the least developed countries.[57] Overlapping with other social identities, such as ethnicity, socio-economic status

(SES), and geographic location, gender inequality is an important issue that exacerbates poverty.[58] Considerable research exists that has identified the role of reducing sexism and liberating women from the constraining aspects of gender-based socialization as powerful means of lifting communities and nations out of poverty.[59] For example, according to a World Bank report,[60] while Latin American and Caribbean countries have made significant progress in fostering women's agency and participation in education and workforce, indigenous women in Guatemala are still struggling with restrictions due to their ethnic backgrounds and gender. These restrictions limit women's agency, economic opportunities, educational attainments, access to services (e.g., health care), and life expectancies due to the gender-based violence and maternal mortality. Similar scenarios are found around the globe as women face traditional gender roles and gender socialization, which requires that they adopt domestic and family responsibilities, while discouraging their participation in the workforce, including traditionally male-dominated sectors (e.g., math and engineering). Another important means of combating poverty is to provide women with greater control over the size of the families. The wage gap based on gender is another chronic social injustice, even in the developed countries.

Furthermore, the devaluation of personal care work, which includes work that is done to care for self, others, relationships, and communities in one's personal life,[61] continues to contribute to social inequities and affects perceptions regarding the most appropriate types of work people are expected to have. In addition to shaping women's experiences in the world of work, traditional gender role socialization and gender stereotypes are likely to discourage men's participation in personal care work (e.g., parenting, caring for older family members, and volunteering for the community) and market care work, which is often poorly paid. As women participate more in the labor market and try to find the balance between traditional female roles and the expectations of the male-dominant work life, failing to acknowledge the importance of both market work and personal care work for men and women poses challenges for people who need to engage in these types of work.[62]

Experiencing racial discrimination and stereotypes that occur in multiple contexts (e.g., educational and work settings), racial and ethnic minority youths are likely to internalize the biased messages they receive from the dominant culture, which can powerfully shape, and often, constrain their academic and career trajectories. Janet Helms, a leading scholar in multicultural psychology at Boston College, has developed the concept of racial identity status, which reflects individual differences in how people make meaning of their race and ethnicity in the context of a diverse culture.[63] Helms and her colleagues have found that differences in racial identity status are predictably associated with various outcomes, including academic performance and progress in career development. Efforts to foster adaptive racial identity statuses, which include an affirmation of one's culture and the capacity to negotiate effectively with members of dominant groups, have been developed and tested in a number of contexts, thereby offering promising tools for systemic and individual interventions.[64]

Additionally, wealth-related inequalities significantly impede the educational and work experiences of individuals around the world.[65] Lack of access to resources that promote educational and career achievement, in of itself, functions as a clear impediment to social mobility and inclusion. For example, despite its intersection with gender and ethnicity in creating educational inequalities, Perry and Francis report that social class continues to be the strongest predictor of achievement in the United Kingdom. In addition, people internalize messages about their social class, which may become an embedded part of one's identity, impacting upon a wide array of domains. Differences in how people understand their social class, known as social class worldview, have been explored in recent research and have yielded insightful perspectives on the complex ways that people internalize their socio-economic status in relation to prevailing social class norms within their communities.[66] For example,

individuals from poor and working class communities may develop social class worldviews that are characterized by maladaptive academic mindsets and pessimistic expectations about the future. Thus, multi-faceted approaches need to be employed to deal with social class-based inequities.

While we briefly explain the necessity of paying attention to the ways internalized societal roles and beliefs regarding gender, race, and ethnicity might impede individuals' success at school and work, it is worth noting that the specific ways that people adopt and express other social identities such as language, religion, skin color, sexual orientation, and political views can also impact psychological, educational, and work-related outcomes. Regardless of the specific identity that functions to diminish one's educational and vocational prospects, limitations stemming from these social structures make it more difficult for individuals from underprivileged groups to identify with academic domains and to be successful at school and work.

Motivational factors

Considerable attention has been devoted to developing the most effective individual and contextual conditions to promote self-regulated motivation among students and workers. An understanding of motivational theory and research can be used to foster conditions that support motivation and to prepare individuals with the knowledge and resources to resist the de-motivating effects of oppression and poverty.[67] We review two prominent perspectives in this chapter, each of which has been applied to educational, vocational, and training contexts. We have selected these two perspectives because they represent relatively distinct, yet evidence-based views of motivation and because these ideas are particularly informative to the development of new initiatives building on private/public partnerships.

Edward Deci and Richard Ryan have developed self-determination theory, which is based on the notion that people are inherently curious and oriented toward engaging in activities that are intrinsically interesting to them.[68] Beginning with the observation that establishing external controls tends to reduce one's motivation for activities that are intrinsically interesting, Deci and Ryan have developed a view of human motivation that seeks to enhance the natural state of initiating, creating, and exploring. Most activities that people engage in, naturally, are not intrinsically interesting; however, people often are motivated to initiate activities because the outcomes are valued as important to one's life and future. According to Deci and Ryan,[69] extrinsic motivation can be internalized and can become part of our self-regulated system, providing that selected factors are in place. When individuals experience a sense of autonomy, competence in the given tasks required for an activity, and a sense of relatedness, they are more likely to be motivated to initiate and sustain activities, even if they are not intrinsically interesting.

Another important motivational theory that focuses more explicitly on achievement has been developed and tested by Jaqueline Eccles and her colleagues. The Eccles et al. model, known as expectancy-value theory,[70] is based on the assumption that motivational processes are shaped by individuals' "expectations for success and the perceived value of the task, including interest, importance, and perceived utility."[71] As Kenny noted in her review, the Eccles et al. theory helps to explain the ways in which failure experiences reduce self-directed motivation and lead to feelings of disengagement from school.

Both individually and collectively, the theories by Deci and Ryan, and Eccles et al. suggest that the experience of competence in given tasks will enhance motivation. In effect, people are more likely to initiate activities when they experience success, opportunities for autonomy,

supportive relationships, and a feeling of achievement. In addition, enhancing the relevance and value of a given task can provide an important means of fostering self-initiated behavior.

Barriers to and opportunities for economic development and upward mobility

The material reviewed thus far provides a summary of some of the most notable contextual and individual factors pertaining to education, work, and training that play a role in sustaining social exclusion and poverty. In this section, we identify the major barriers and opportunities that have emerged in our review, culminating in an integrative summary of policy recommendations. (Figure 2 provides a visual overview of the complex array of factors that contribute to poverty eradication and dignified work—see annex B.) This review integrates and expands upon the material that we have presented thus far, framing the issues and challenges from a broader, macro-level perspective, creating the foundation for the public policy recommendations and innovative research ideas that conclude the chapter.

Investments in education: Creating the infrastructure for agency and empowerment

In order to realize the potential of education as a human birthright that will eradicate poverty, societies across the globe will need to invest more fully in education for all citizens. This investment includes funding of quality schools with adequate learning resources, financial and political support for teachers, and the provision of an array of social resources and health care that allows children and families to engage fully in educational opportunities. Social and political discourse across the globe has debated the conditions that lead to strong academic achievement as reflected by international benchmarking assessments, such as the Program for International Student Assessment (PISA), Trends in International Mathematics and Science Study (TIMSS), and Progress in International Reading Literacy Study (PIRLS). While teachers, families, and students are often blamed for failure to progress academically, the literature we have reviewed in this chapter highlights the psychological mechanisms by which poverty and societal oppressions are internalized by individuals and undermine their academic motivation. Indeed, comparative analyses of high and low achieving countries reveal the critical importance of economic and social resources for children and families and respect and autonomy for educators and students as factors supporting the academic attainment of young people.[72]

From a public policy perspective, this investment should be shared among public and private stakeholders. Public social service agencies can work more closely with the educational system to assure that all young people have the social, psychological, and health support they need to succeed in the school arena. Private industry, which benefits from the development of an educated citizenry, has the capacity to invest human and financial capital in education systems. Financial support of the arts, culture, science, technology, sports, and vocational programs in the schools can enrich curricular offerings for all students. The private sector can furthermore share its special expertise in teaching and mentoring of students and educators both in the school setting and in the workplace. In addition to academic and technical skills, the workplace demands employees with a wide range of intrapersonal and interpersonal skills. The research literature makes clear that these non-cognitive skills are important not only for future work, but also for success in school and life. Non-cognitive skills also constitute critical psychosocial resources that allow those youth who are marginalized and disenfranchised by society to be resilient, despite conditions of injustice.[73] The value of non-cognitive skills, many of which have been reviewed in our summary of individual factors and internalizations, necessitates a holistic approach to education that extends beyond the cognitive domains. Psychoeducational

programs have been integrated effectively with the academic curricula within schools to promote non-cognitive skills as related to socio-emotional learning and career development.[74]

Insufficient preparation for 21st century work: building capacity via education and training

Preparing people for the competitive labor market involves substantial educational reform efforts, as highlighted in the previous section, along with more focused initiatives designed to help people become agentic authors of their own careers. In this section, we highlight the most notable barriers that impede people from developing self-determined work lives. The description of these barriers is juxtaposed with an overview of opportunities, with a particular focus on private sector contributions to the preparation of an engaged and productive workforce.

Career development education

One of the major barriers that exist in the fight against poverty is that many people do not feel connected to the world of work. Generations of social exclusion, unemployment and underemployment, and other forms of marginalization often leave people feeling disengaged from education, and ultimately, from the labor market. The lack of connection between work and other spheres of life undercuts natural strivings toward achievement and self-determination.[75] As indicated earlier in this chapter, inconsistent efforts designed to help students and adults become more engaged in school represent a significant barrier that may contribute to sustained school disengagement. One way of responding to this disconnection is via career development education (including interventions by counselors and/or teachers), which represents an important resource that helps students to maximize their educational opportunities. Despite the evidence supporting the utility of career development education and counseling, these resources remain inconsistently available to students, particularly in poor communities and LDCs. Considerable research has supported the notion that intentional efforts to help students and adults plan their educational and working lives is instrumental in enhancing their capacity to derive benefit from opportunities and to bounce back from disappointments and losses.[76]

In addition to the traditional foci of career development education, our review suggests that a broad array of internal factors play a role in enhancing capabilities and fostering agency. As such, the factors that we identified earlier in this chapter ought to be included in our consideration of the barriers that exist in career development education. The prevalence of pervasive poverty, inadequate schools, and other contextual barriers detracts from the development of adaptive internalizations, which provides a secondary form of marginalization, thereby perpetuating social exclusion.

Opportunities for effective private and public sector collaborations abound when considering the role of career development education in combating poverty. Using evidence-based practices developed in countries that have successfully integrated career development education into the full spectrum of the educational pipeline can be applied to poor communities and LDCs. Programs that build on the notion of empowering students and adults with both academic skills and non-cognitive psychosocial skills can be implemented in educational settings, employment contexts, and job training programs. These interventions can be structured as free-standing workshops or classes and/or may be infused into educational curricula and training efforts. The private sector may find these sorts of interventions to be particularly helpful in setting up new ventures in poor communities, which could be very useful in building an engaged and adaptive workforce. These points notwithstanding, the challenges of developing career development

services in LDCs and other poor communities are daunting. Linking career development programs to educational initiatives and other anti-poverty endeavors might offer some informative ways of designing interventions that are both culturally relevant and effective in promoting hope and positive expectations for impoverished communities.

Responding to shifts in the market place: retooling and retraining

Existing job training programs provide a powerful means of combating poverty. However, many nations and communities struggle in providing effective and relevant job training programs. A major barrier in job training is the lack of basic academic preparation, which can interfere with efforts by the public and private sector to provide people with 21st century skills. In addition, job training efforts need to balance a nimble responsiveness to existing needs in the labor market with a focus on leading a community toward industries of the future. For example, private sector/public collaboration in a community college or technical college might respond to an existing need for health care technicians by setting up programs to train unemployed and underemployed people who could benefit from existing openings. However, public/private partnerships need to be able to envision the long-term labor needs of a community and nation. We suggest that job training programs become both responsive to existing needs and also help to create the labor market needs of the future by providing people with skills that best position people and communities for innovation and entrepreneurship.

From an individual perspective, job training efforts would benefit from using the latest findings in the social sciences to design programs that enhance motivation, transfer of learning, and skill development. In addition to these observations, we advocate for the use of training that builds on an individual's natural strivings for mastery and self-determination. As our review of individual differences and internalizations has revealed, people vary considerably across a wide range of dimensions. Tailoring training efforts so that they match the personal attributes and cultural contexts of individuals is essential in developing programs that will be effective and relevant. In addition, helping individuals develop self-determined career plans, using the latest evidence-based practices in career development, can help people and industries "match" so that both the employees/students and organization/employers experience a "fit" that will yield satisfaction and meaningful accomplishments. However, training in basic academic competencies will typically need to be a foundational skill, particularly in communities within LDCs and other nations where the low cost of wages attracts private sector investment, but the labor market is limited in its capacity to master 21st century job tasks. Using the motivational tools that we have reviewed in conjunction with other findings regarding optimal conditions for learning will be instrumental in developing vocational training programs that are effective in both creating a viable workforce and lifting people out of poverty.

Another critical feature of training is the need for an investment from individuals, employers, and government leaders for lifelong learning. Preparing people for the stable "grand career narrative" is no longer an option for most working people as the world of work recasts all of our assumptions about work and career. People increasingly need to prepare for multiple jobs, often in very diverse fields, across their life spans. As such, we believe that we need to create a culture of lifelong learning that will encompass a consistent commitment to retooling as new skill sets emerge. The input from the private sector is essential in developing this culture of lifelong learning as industry will often have a close connection to the evolving skill sets needed in a given field and community. Moreover, the private sector in conjunction with educational and government officials, can develop standardized training programs and certifications that can ensure quality training as geographic mobility, both of which are critical in developing a viable 21st century workforce.[77]

Addressing human rights violations and different forms of oppression

Without doubt, human rights violations around the world create intense barriers for those who have been marginalized due to structural inequities. Human rights are at the core of reducing poverty and inequality, increasing access to educational and vocational opportunities, improving health, and creating developmental and environmental sustainability. A human rights perspective calls attention to discrimination, racism, sexism, heterosexism and other "ism"s that impair equality in many societies, oppression, powerlessness, leading to a lack of individual and collective agency. Given the significance of human rights violations as both the cause and the result of poverty, an increased number of governmental and non-governmental organizations have been advocating efficient policies and practices that can integrate the human rights principles and standards into development.

Consideration of human rights can empower individuals living in poverty and individuals who face other forms of oppression on multiple levels and provide them with better school- and work-related experiences. For example, ensuring one's right to equality and the principle of non-discrimination are foundations of international human rights law. Thus, when those in power discriminate against certain individuals and populations (such as ethnic, racial, religious, and sexual minorities due to the societal prejudices and stereotypes), public officials need to create change through education and to enforce laws prohibiting any form of discrimination by individuals and/or institutions. Moreover, through equitable and justice-oriented policies, governments should ensure that socially excluded and marginalized groups, which undoubtedly include the poor, are protected against further discrimination by public and private authorities in multiple domains such as education, work, health, and housing.

One promising example that uses a human rights perspective is the Half the Sky Movement, which was inspired by Nicholas D. Kristof and Sheryl WuDunn's book of the same name,[78] and which seeks to reduce sexism and empower women around the world. By using a rich set of tools, such as videos, websites, blogs, games, and social media, this movement has increased public awareness around the problems related to women's rights (e.g., sex trafficking, maternal mortality, sexual violence, microfinance and girls' education). This movement has been particularly relevant in developing countries, such as China, which have developed significantly and decreased poverty, due in part, to their commitment to emancipating women and increasing their participation in the formal economy. Therefore, the human rights framework can offer valuable opportunities for challenging and reducing unequal treatment of those with limited agency and fighting poverty. A human rights agenda can empower the poor and other disenfranchised communities by informing them about their rights in terms of education, work, and training and giving them a voice to affect the decisions of policy-makers. More significantly, those living in poverty can participate in decision-making processes and impact the policies pertaining to their rights and opportunities. Hence, within such contexts as education, community organizations, and faith-based groups, human rights principles and standards can facilitate active participation of the poor and other marginalized groups in the planning, implementation, and evaluation of poverty reduction policies and interventions. We also envision a role for the private sector in advocating for human rights and human freedoms. Given the compelling case for the existence of human rights and economic growth, private sector firms and organizations have a clear stake in ensuring that all people have access to the fundamental rights that have been articulated by the United Nations.

Public policy recommendations

While public policy recommendations are embedded throughout the chapter, we summarize the most noteworthy suggestions that have emerged in our review, which also serves to integrate several strands of our review.

1. The importance of human freedoms is a clear theme that runs throughout this chapter, and indeed, throughout the human development economics community. We join our colleagues who have advocated for the assurances established by the United Nations in 1948 by reaffirming the critical importance of human rights for all citizens. The foundation of freedom that is critical to a fair, dignified, and caring society provides the scaffolding for the individual and systemic changes that can dramatically reduce poverty and enhance the quality of life around the globe.

2. The importance of education as a tool for the development of agency and as a means of self-determination has never been more apparent. As such, we strongly urge the public and private sectors to invest in quality education, available to all citizens, irrespective of social class, race, religion, or geographic residence. Educational systems need to foster the full array of academic, technical, and non-cognitive skills that are needed in the contemporary workforce and for a full and meaningful life. Society also needs to invest in the health, child-care, and transportation systems that support the physical and psychological well-being and educational progress of all citizens.

3. Education works best when students are able to connect their learning to their own lives and to their future work. Students and their families need to understand the relevance of education, both basic and advanced skills, and vocational preparation for accessing a work life that meets the human needs for survival, social connection, and self-determination. Consequently, we recommend that private sector partnerships with schools and post-secondary institutions be enhanced with the focus on providing work-based learning for all students.

4. People learn and work best when they know where they are going in their lives. Career counseling and career development education represent essential means of helping people to become planful and agentic, while also enhancing their motivation at school and work. We therefore recommend that private sector/public sector collaborations be used to develop culturally-embedded career guidance practices that will be available to all students and workers across their lifespans.

5. Building on the notion that people do best when they can connect school and work, we advocate that intentional school-to-work and school-to-college programs be used for all students, including those who are interested in university training as well as those who are focused on technical and skills-based training.

6. Students and workers are most invested and engaged when they envision meaningful and dignified work that offers decent wages as accessible to all who work hard. While policies need to be developed to reduce external barriers to opportunity as related to social class, race, religion, and disability, K-12 education and vocational training also needs to be attentive to fostering adaptive individual qualities (i.e., self-efficacy, critical consciousness, racial identity, etc.) that foster resilience and resistance to the internalization of negative stereotypes. Public policies that provide support for well-trained counselors and other educators who can nurture the "whole student" (including both the cognitive and non-cognitive realms) are essential in developing each person's capacity for an agentic life.

7. Students and workers are most motivated to be productive when conditions offer relational support, autonomy, a sense of competence, and sense that they are engaged in something of value. Schools, work settings, and social institutions need to be

designed with attention to these conditions if all citizens are to be engaged and invested in their futures.

8. Vocational training works best when it is part of a social commitment to lifelong learning. Consequently, we recommend that policy makers identify evidence-based methods of developing lifelong learning that enhances existing skills for workers and offers new skills-training for those who are unemployed and underemployed to meet the real needs of the workforce. Where possible, existing institutions, such as community colleges, may function as the focal point for such efforts. In communities where the infrastructure does not yet exist, private sector leaders and public officials should design institutions that fit with a given culture and existing education and training practices.

9. For too long, the public and private sectors have carved out their own areas of influence in the education, vocational training, and career development contexts. We advocate that educators, government officials, and private sectors leaders convene task forces that will design, develop, and assess the optimal integrative practices for a given country or state that will foster individual growth and the development of a more equitable society. Projects that link education, training, and career development education with specific private sector actors would be particularly useful. For example, a business that initiates an enterprise in an LDC might seek out connections to local educators and public officials in the development of training efforts for current employees as well as investments in education for the long-term welfare of the community and workforce.

10. The impact of racism, sexism, heterosexism, classism, and other forms of discrimination are toxins that plague nearly every society, to some extent, across the globe. We advocate that intentional educational efforts be used in schools and other social institutions to reduce the pernicious impact of these insidious forms of social exclusion and marginalization.

Promising research directions

In this section, we review a number of promising research agendas that build on the knowledge base that we have identified in this chapter. Given the wealth of research that has already mapped out the relationships between education, work, and poverty reduction, we believe that the best use of resources at this point is to develop and test intervention projects that have the potential to foster agentic and dignified work lives for all citizens who want to work. In the material that follows, we present a few general research agendas and identify some examples that emerged out of our review.

1. Given the importance of work-based education and school-to-work programming in enhancing the relevance and rigor of education, we suggest that new interventions should be developed and evaluated for pre-school through high school graduation that include a focus on the non-cognitive factors that we reviewed. For example, infusing a focus on enhancing the academic mindset into existing work-based learning programs might significantly improve the effectiveness of secondary schools. In a similar vein, the educational relevance of these non-cognitive constructs and their applicability to designing effective interventions in LCDs will need to be assessed.

2. The internalization of social identities offers people a critical resource for resilience and connection to their culture, gender, and social class. However, due to the impact of oppression and discrimination, some of these internalizations may result in self-doubt and disengagement. We advocate studies that assess the effectiveness of providing critical consciousness training, aligned with specific cultures and historical contexts,

which will help people to develop the skills to negotiate a multicultural society in a way that promotes agency and self-determination.

3. Vocational training within poor communities has often focused on skill development that is tailored to the needs of the industry. A promising research agenda might be to develop a broader array of training modules that include basic academic skills, programs to enhance resilience, motivation, self-efficacy, and career planfulness. By designing the training modules in a highly structured manner (e.g., a training manual with specific modules that can be used in different contexts), it will be possible to assess how effective each of these modules are in various contexts.

4. The importance of human rights in the development of agency and the reduction of poverty is now a well-accepted tenet within the human development economics world. Accordingly, we suggest studies that explore various existing models of how private sector organizations can contribute to human rights agendas. This sort of study might culminate in a collection of best practices that identify ways in which private sector leaders and their organizations have played a role in enhancing the rights for women, minorities, and other communities.

5. The need for private sector collaboration in education is becoming a major theme in educational reform in many communities and nations. Within the U.S., numerous models exist in which private sector organizations and philanthropies have contributed to various aspects of education, ranging from the training of teachers to developing curriculum and evaluation tools. We recommend research that will review private sector collaborations with education and identify viable practices that ensure equity and quality.

6. Career development and career counseling are very important resources for people, especially given the vast number of changes and challenges that exist in the workforce in the 21st century. However, little attention has been devoted to developing culturally-tailored career guidance resources for poor and working class people, especially in LDCs. We believe that it would be useful to design and evaluate career development models and tools that can be used by impoverished students and adults in varied national contexts, which optimally will help them to feel connected to education, work, and training.

7. The importance of reducing the oppression of girls and women was a major theme in our chapter that offers a potent means of fighting poverty. We suggest that interventions be structured and evaluated that empower girls and women, while also focusing on changing social norms that have contributed to centuries of social exclusion based on gender.

8. Research that can identify best practices in the design and evaluation of programs to enhance learning, training, and career development education would be very informative. For example, studies that identify how program design can be constructed more easily, less costly, and with greater accessibility to businesses who may want to get more involved in Corporate Social Responsibility (CSR) would be particularly illuminating.
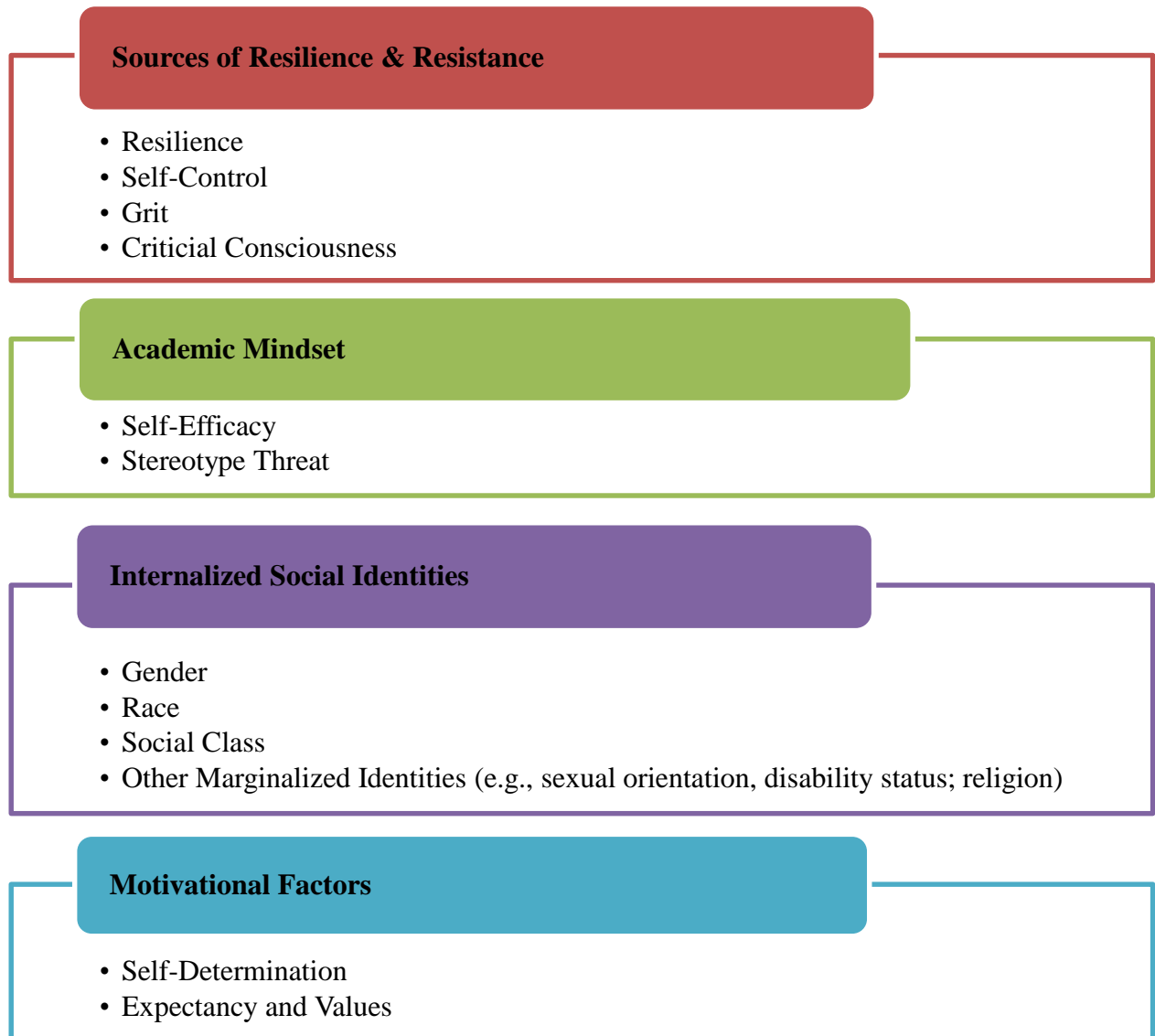
Conclusion

The challenges that face poor and working class individuals and communities are clearly daunting. However, the contributions of the scholars and policy makers whose work has informed this chapter provide a well-articulated road map for the development of programs and policies that may result in substantive reductions in poverty. The knowledge gleaned from this review, coupled with the other chapters in this volume, provide the foundation for new

innovations and partnerships, which we believe are critical in ensuring that school, work, and a life of dignity and opportunity are the inherent birthright of all citizens in the world.
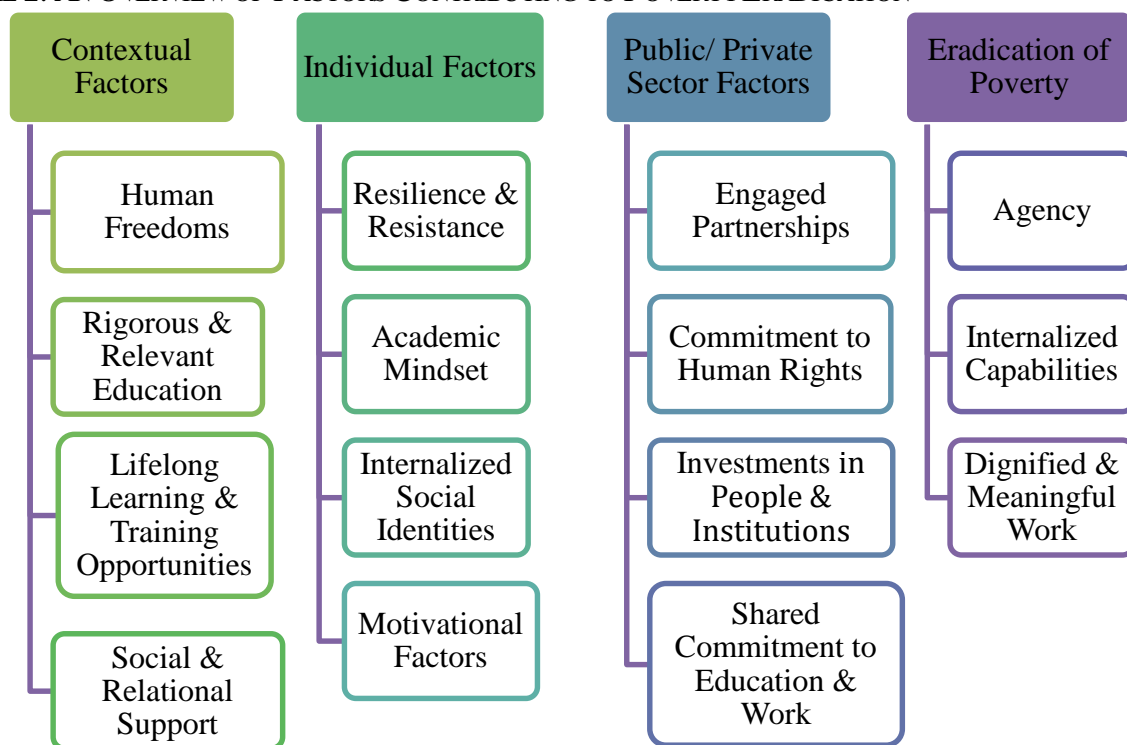
FIGURE 1. A REVIEW OF INTERNAL FACTORS

Sources of Resilience & Resistance

- Resilience
- Self-Control
- Grit
- Criticial Consciousness

Academic Mindset

- Self-Efficacy
- Stereotype Threat

Internalized Social Identities

- Gender
- Race
- Social Class
- Other Marginalized Identities (e.g., sexual orientation, disability status; religion)

Motivational Factors

- Self-Determination
- Expectancy and Values

FIGURE 2. AN OVERVIEW OF FACTORS CONTRIBUTING TO POVERTY ERADICATION

Notes

[1]Nussbaum 2011; United Nations 2011; UNDP 2013.
[2]UN SDSN 2013.
[3]Sen 1999.
[4]Nussbaum 2011.
[5]Blustein 2013, 2006.
[6]UNDP 2013.
[7]Blustein 2011.
[8]Deci and Ryan 1985; Ryan and Deci 2000.
[9]UN SDSN 2013.
[10] Blustein 2013; ILO 2014.
[11]United Nations 2011.
[12]Sum and others 2009.
[13]Savickas 2011.
[14]Blustein 2013.
[15]Arthur, Khapova and Wilderom 2005.
[16] Nussbaum 2011; Pick and Sirkin 2010.
[17]Krugman 2013.
[18]Business Higher Education Forum 2005; Heppner 2013; Tate 2001.
[19]UN SDSN 2013.
[20]UN SDSN 2013.
[21]Kenny 2013; National Center on Education and the Economy 2007.
[22] Blustein 2013.
[23]Farrington and others 2012.
[24]National Research Council 2012.
[25]UNICEF and the UNESCO Institute for Statistics 2012.
[26]UN SDSN 2013.
[27]Glewwe and Kremer 2006.
[28]UNICEF 2013.
[29]UN SDSN 2013.
[30]Blustein 2013; Good and McCaslin 2008; Hughes, Bailey and Mechur 2001.
[31]Kenny 2013.
[32]Lapan 2004; Lapan, Aoyagi and Kayson 2007.
[33]Fleischman and Heppen 2009; Kenny 2013.
[34]Kenny and others 2010.
[35]Blustein, Juntunen and Worthington 2000.
[36] Mortimer 2003.
[37]Fisher 2011; Juntunen and Bailey 2013.
[38]Salas and Cannon-Bowers 2001.
[39]Blustein, Juntunen and Worthington 2000; National Research Council 2012.
[40]Smith 2010.
[41]Ali 2013; Flores 2013.
[42]Farrington and others 2012.
[43]Blustein 2011; Deci and Ryan 1985; Ryan and Deci 2000.
[44]Flores 2013; Helms and Cook 1999.
[45]Cicchetti and Toth 2006.
[46] Masten and Curtis 2000.
[47]Yates and Masten 2004.
[48]Duckworth 2011.
[49]Duckworth, Quinn and Seligman 2009; Moffitt and others 2011.
[50]Freire 1972.
[51]Diemer and others 2010.
[52]Watts, Diemer and Voight 2011.
[53]Farrington and others 2012.
[54]Lent, Brown and Hackett 2000; Bandura 1997; Lent, Brown and Hackett 2002.
[55]Steele 1997.
[56]Sherman 2013; Alter 2010; Shapiro, Williams and Hambarchyan 2013.

[57]Kristof and WuDunn 2009.
[58]Pick and Sirkin 2010.
[59]Heppner 2013.
[60]World Bank 2011.
[61]Richardson 2012.
[62]Richardson and Schaefer 2013.
[63]Helms and Cook 1999.
[64] Barrow and others 2007.
[65]Smith 2010.
[66]Liu, Soleck and others 2004; Liu, Ali and others 2004.
[67]Wigfield and others 2006.
[68]Deci and Ryan 1985; Ryan and Deci 2000.
[69]Deci and Ryan 1985.
[70]Eccles and others 1983; Wigfield and Eccles 2000.
[71]Kenny 2013.
[72]Hargreaves and Shirley 2012
[73]Farrington and others 2012.
[74]Jones and Bouffard 2012.
[75] Kenny 2013; Ryan and Deci 2000.
[76]Brown and Lent 2013.
[77]UN SDSN 2013.
[78]Kristof and WuDunn 2009.

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Poverty reduction through positive work cycles: Exploring the role of information about work, culture and diversity, and organizational justice

Dharm P.S. Bhawuk
University of Hawaii at Manoa

Stuart C. Carr
Massey University, New Zealand/Aotearoa

Alexander E. Gloss
Lori Foster Thompson
North Carolina State University

Introduction

Poverty, both in absolute and relative terms, is perhaps the greatest challenge of our time. An understanding of work, especially in the private sector, is central to efforts to reduce poverty. Consider that 9 out of 10 jobs in the world reside in the private sector and that the creation of decent work opportunities and working conditions are two of the chief methods for poverty reduction.[1] In addition, prominent goals related to the reduction of poverty, like the United Nations' proposed Sustainable Development Goals,[2] rely upon various aspects of work from effective goal setting, appraisal of performance toward goals, training and motivating people to work together to accomplish goals, and supporting organizational cooperation around the pursuit of goals. Perhaps even more profoundly, it has been argued that "being able to work as a human being, exercising practical reason, and entering into meaningful relationships of mutual recognition with other workers" is a fundamental aspect of human development. [3]
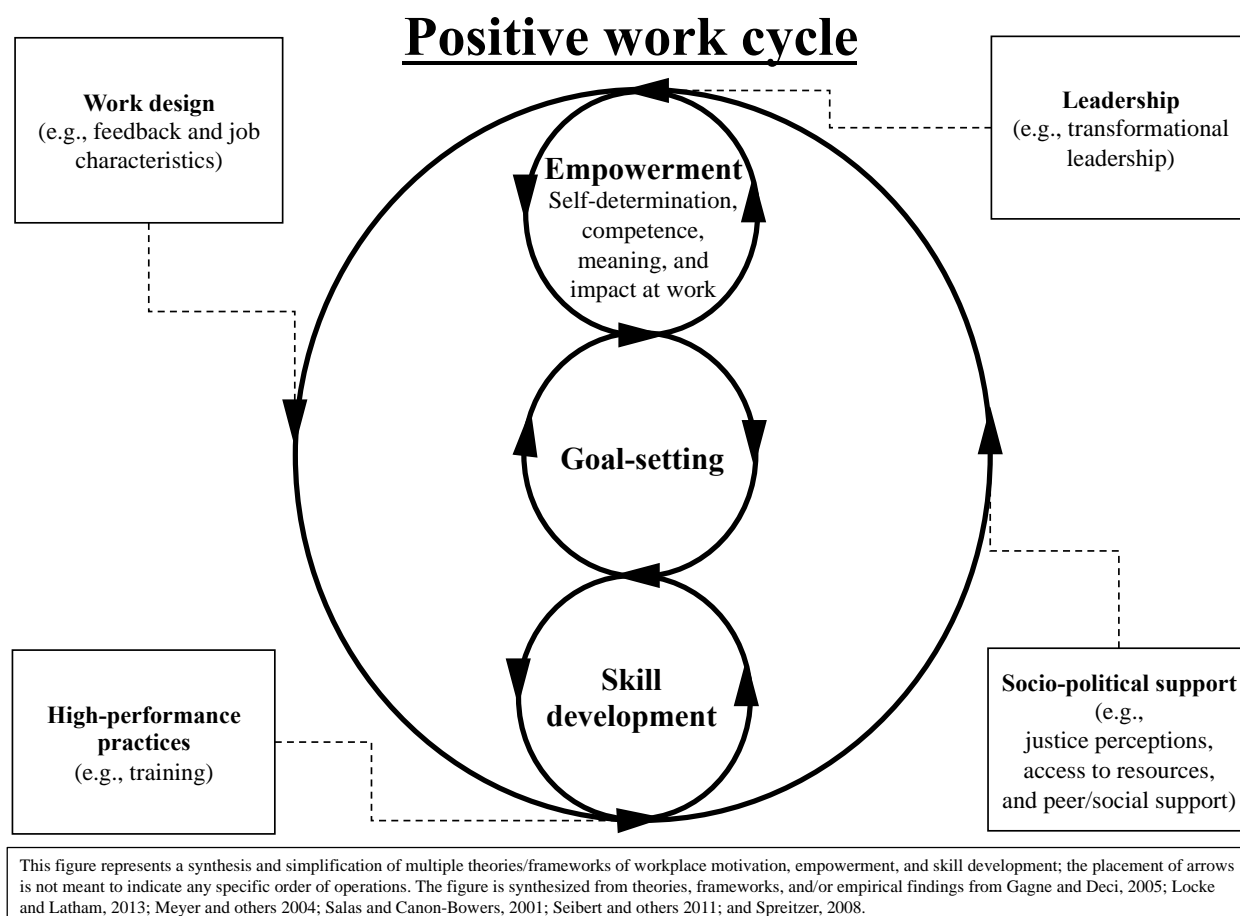
In recognition of the private sector's important role in supporting human development, the United Nations Development Programme (UNDP) and the Republic of Turkey created the Istanbul International Center for Private Sector in Development (IICPSD).[4] In 2014, this institute launched a report on the barriers to and opportunities for the private sector as it works to help reduce global poverty (herein the UNDP report). Teams of experts, including the authors of this paper, were recruited to consider major barriers to poverty reduction, namely: child development, health, skills, and social dynamics, and economic behavior. This paper is meant to complement the UNDP report by building on themes in the report and further considering the role of work dynamics as both barriers to, and opportunities for, the reduction of poverty.

In this paper, we highlight that poverty can be reduced, or perpetuated and worsened, through cycles of behavior in the workplace which are greatly influenced by organizational and societal context. In particular, we highlight a "positive work cycle" that can lead to both greater productivity and well-being (see Figure 1). At the heart of this cycle is the setting of challenging and specific goals and the realization that people are powerfully motivated by the need to fulfill certain fundamental psychological needs. When this positive cycle is broken or reverses due to poor working conditions or unfair working arrangements, or when it does not start due to unemployment, people can be further disempowered, their skills can atrophy, and ultimately, they are likely to remain trapped in poverty. When this cycle is in operation, people are empowered to shape their own destinies and the destinies of their communities and nations. Due to the multifarious influences of poverty, unemployment, and unfair and poor working conditions in lower-income settings (see the UNDP report), positive work cycles might often not exist for people affected by deep poverty – that is, for people at the "base of the pyramid." [5]

This paper, which is organized into three major sections, discusses important considerations for promoting human development at the base of the pyramid. What the sections of this paper have in common is that they focus on human behavior in the workplace – inclusive of the psychological dynamics that underlie that behavior. Recommendations to help the private sector engage with and promote poverty reduction are offered in each section. In order to set the stage, a brief review of the world of work's connection to human development is first provided.

Figure 1. Positive work cycle

Positive work cycle

Work design
(e.g., feedback and job characteristics)

Leadership
(e.g., transformational leadership)

Empowerment
Self-determination, competence, meaning, and impact at work

Goal-setting

Skill development

High-performance practices
(e.g., training)

Socio-political support
(e.g., justice perceptions, access to resources, and peer/social support)

This figure represents a synthesis and simplification of multiple theories/frameworks of workplace motivation, empowerment, and skill development; the placement of arrows is not meant to indicate any specific order of operations. The figure is synthesized from theories, frameworks, and/or empirical findings from Gagne and Deci, 2005; Locke and Latham, 2013; Meyer and others 2004; Salas and Canon-Bowers, 2001; Seibert and others 2011; and Spreitzer, 2008.

Altogether, this collection of papers, and the foundational UNDP report and conference accompanying it, represents an important new step in marshaling greater insight into human behavior and psychology in the workplaces at the base of the pyramid. Just as importantly, it focuses on how dynamics in the workplace generally, wherever it may be located, can help the private sector to reduce poverty globally.

Work's connection to human development and conditions at the base of the pyramid

One of the cornerstones of discussion in the international development community around human development is people's freedom to do and become whatever they value in life.[6] This approach to understanding development is people-centered – it focuses on people's inherent freedoms, including the freedom to "lead long and healthy lives, to acquire knowledge, to be able to enjoy a decent standard of living, and to shape their own lives."[7] Work and the workplace are intimately related to promoting these freedoms through their ability to reduce poverty. Poverty is often viewed as much more than a lack of income; it is fundamentally a restriction on human freedom. Beyond the general concept of freedom, three interrelated themes in human development have been promoted by the UNDP, namely: human "capabilities"; procedural freedoms; and principles of justice.[8] Each of these three themes relate closely to concepts in the workplace.

Human capabilities, which are thought of as "opportunity freedoms" often occur in the workplace – for example, central human capabilities include having the opportunity to:

imagine, think, and reason; participate in major choices which govern one's life; have meaningful relationships with others; and have the right to seek employment on an equal basis with others.[9]

Procedural freedoms, that is, people's ability to shape their own destiny by participating in the process of development is greatly shaped by work-related individual differences – often, by various procedural skills. As recently as 2013 and as early as 1960, the United Nations has identified the development of skills through such means as education and training as a critical enabler to both economic growth and individual freedom.[10] Historically, the development of work-related skills has often been identified as "human resource development" or more simply "skills development." The United Nations and other commentators have sometimes eschewed the terms "human resource" or "human capital" in order to avoid any indication that people are tradable commodities and instead to signal that skills development is the enhancement of a person's unique resources for pursuing his/her own life goals.[11]

A substantial amount of skill acquisition takes place at work.[12] Indeed, training on the job, which is only one form of skill development at work, has been estimated to account for a substantial amount of "human capital" formation.[13] A recent study in more than 20 higher-income countries confirmed that work activities and occupational characteristics are related to proficiency in key skills including literacy and numeracy, even after education is taken into consideration.[14] Moreover, fundamental components of the process of skill development are forms of practice,[15] and opportunities to practice work skills take place largely, and sometimes exclusively, at work and also take place across the entirety of a worker's career. In a study in 8 lower-income countries, there is an indication that engaging in certain types of tasks at work can hone important cognitive skills like attaining higher levels of reading proficiency.[16] Furthermore, there is evidence that as workers age, formal education plays less of a role in determining skill proficiency and skill retention is increasingly shaped by the use of skills at work and outside of work.[17]

The positive work cycle

As noted, work is inextricably linked to human development in a number of important ways. A large share of work's relevance to development can be captured by considering the positive work cycle introduced earlier (Figure 1). The basis of this work cycle is the observation that people's individual needs (e.g., for income and dignity), and the needs of a workplace (e.g., for more customers and a positive reputation), help to shape work and career goals. Under the right conditions, when people successfully reach these goals as individuals or groups they frequently gain a sense of self-efficacy and satisfaction, become more committed to further pursuing similar goals, and set new and more challenging goals.[18]

When people successfully complete challenging goals, they often become better, or more skilled, at what they do. The self-efficacy that results from sustained successful skill development and performance is a major way people's sense of competence can be positively shaped at work. Furthermore, as people successfully complete challenging goals, they are likely to have a positive impact on their workplace. And through the process of choosing to set new more challenging goals of their own, they can gain a deeper sense of self-determination and meaning.[19] In summary, goal-setting and skills development can, under the right conditions (see below), lead to at least four positive psychological outcomes: (1) meaning – that is, a perceived good "fit" between what one does at work and one's broader values; (2) competence – one's "self-efficacy" in completing work tasks, or rather, a belief in one's capability to carry out a given form of work; (3) self-determination/autonomy – a sense that one has some degree of choice in how one's work is carried out; and (4) impact – feeling that one's efforts have a

meaningful relationship to important work outcomes. [20] Together, experiencing these four things at work can lead to psychological empowerment.[21] Psychological empowerment is itself associated with positive outcomes including job performance and commitment[22] which can further support goal setting and sustained performance[23] which can then lead to even greater skill development. Altogether, the relationships between goal-setting, skill development, and empowerment can combine to create a powerful positive work cycle that benefits both the worker and the workplace.

Opportunities for promoting human development through skills development, workplace empowerment, and organizational justice sometimes appear to be limited at the base of the pyramid because of a high incidence of poor working conditions and arrangements. The International Labour Organization's Decent Work Agenda establishes the fundamental importance of providing employees with living wages, safe and secure working conditions, sufficient economic security in case of accidents or illness, fair and equitable treatment, and the opportunity to voice concerns and participate in decision-making about working conditions.[24] In sharp contrast to high-income countries where over 86% of workers are in formal work arrangements that include wages and salaries, only 18% of workers in lower-income countries have such economic security and the vast majority work in conditions of vulnerable and informal employment like unpaid family work or occasional self-employment.[25] Vulnerable and informal work is characterized by a lack of formal registration of the firm and employees, a lack of secure employment contracts and more volatile pay, inferior working conditions, and other violations of decent working conditions.[26]

Even when decent work is available, opportunities for skill development are often still constrained at the base of the pyramid. There are indications that the share of firms that support formal training, and the proportion of workers offered formal training, might be smaller for low income countries than for high or upper middle income countries.[27] In addition, part-time workers who often help to make up the large informal sectors of lower income countries might have fewer opportunities for skill utilization than full time workers.[28] Moreover despite fast growth in lower-income countries, large gaps exist in relation to high-income countries in terms of labour productivity, which is an important indicator for the use of new technologies which often require training and skill development.[29] Other major barriers to skill development at work are limitations of investments in training due to concerns that workers will leave the organization after their training.[30] Social discrimination at work can also block some groups of workers from training opportunities[31] (for example, women might not be considered for training in some types of work due to gender stereotypes).

Many of the same working conditions that restrict skills development at the base of the pyramid also serve as major barriers to workplace empowerment. As illustrated more in depth in the subsequent sections, empowerment can be precluded, broken down, or strengthened by organizational and societal factors, including: working conditions, workplace leadership and high-performance work practices, by the characteristics of someone's job, and by levels of socio-political support.[32] It is likely that some of the sources of support for workplace empowerment that have been studied in higher-income settings and in formal organizations are either absent, inappropriate, or weakened in lower-income settings and informal workplaces. For example, the benefits and nature of formal performance appraisals, a well-established "high-performance" work practice, appear unclear in unpaid family work or in firms without job contracts or registered workers. Indeed, due to cultural and socioeconomic circumstances at the base of the pyramid, the conditions for empowerment at work might be fundamentally different than they are in Western high-income settings, where they are most often studied.

As is the case with empowerment, positive work cycles can be affected powerfully by a number of work-related issues and workplace dynamics at the base of the pyramid. The first section of this paper focuses on the role of information about work (for example, information about skills, work activities, and working conditions) in human development. The second section focuses on how issues of training and leadership can be used to assist one of the most vulnerable populations at the base of the pyramid – international migrants – and also to build cultural and other forms of diversity competencies into organizational practices. Finally, the third section delves deeply into work-related inequality and injustice that can powerfully influence work and human wellbeing.

Section 1. Putting human capabilities to work: the role of work-information

Policymakers, the private sector, and diverse actors involved in international development often rely upon information about work to promote worker well-being and productivity. Indeed, as the World Bank argues, projects meant to address such issues as skill development and unemployment are "navigating blind" without "sound country-level surveys of workers and firms that are regularly administered and measure the supply and demand of technical, cognitive, and noncognitive skills."[33] Moreover, the generation of information through the analysis of work "is ubiquitous in organizational settings… and serves as the foundation for virtually every human resource (HR) activity, including job description, classification, and evaluation; selection system development; job and team design; performance management programs; training program development; compensation program development; career management systems; workforce planning; and legal compliance."[34] Despite its importance, however, information about work at the base of the pyramid seems to be limited. The OECD and the World Bank have documented deficits in indicators of skill acquisition, skill requirements, and the matching of skill supply to skill demand in lower-income countries; moreover, there seems to often be a lack of understanding about the effectiveness of various methods of skill development (e.g., methods of on-the-job training) in lower-income countries.[35] Indeed, cross-national research in lower-income countries has shown that workers often lack precise information on what skills might be relevant for advancement in their careers.[36]

Major international development institutions have begun to address the lack of information about work at the base of the pyramid through the proposed creation of an international database of skill indicators and international studies that directly measure a range of information including work requirements and skill proficiencies.[37] While a greater understanding of skills development at the base of the pyramid is essential to promoting sustainable economic growth, the importance of developing information about work extends even beyond important issues like unemployment and economic productivity. The shortcomings of focusing exclusively on economic-based conceptualizations of global human development have been well articulated through the capabilities approach.[38] Just as the capabilities approach has expanded the measurement of human development, so too should the priorities for the measurement of work be expanded, and honed, to focus squarely on human capabilities. Frameworks for measuring skills advanced by the OECD and the World Bank have already gone some way in this regard by considering both non-financial contextual influences and outcomes (e.g., maternal health) in their framework for the proposed database mentioned above.[39]

Human capabilities related to work

What would work information aligned to human capabilities look like? Capabilities represent people's functional opportunities to accomplish the goals that they set for themselves.[40] The attainment of goals is a product of an individual's motivation, ability, and the influence of situational enablers or constraints. If people "can do" something and "want to" do something, then the only thing stopping them from accomplishing their goals is the situation (e.g., a power outage) which can prevent both individual-level outcomes (e.g., exerting effort at a job) and group/organization-level or extended outcomes (e.g., an individual's effort being rewarded by an organization). These latter outcomes are often thought of as goals in the workplace. Table 1 visually displays the relationships of these components.

When capabilities are understood as the process of attaining goals, they can be further operationalized, and measured, generating useful information about the world of work and human development. Translating capabilities to the process of pursuing goals has the advantage of utilizing insights from various social science disciplines, including industrial-organizational psychology, which have a long track record of developing reliable methods of conceptualizing and measuring work-related goals, motivation, ability, and contextual workplace influences on work-behaviour.[41] Table 1 lists examples of how work-related capabilities can be operationalized and a brief review of each major component is included below.

Measuring influences on motivation. People's motivation to expend effort toward goals is shaped by a variety of internal and external factors to an individual that are either relatively constant and have more of an "indirect" influence on motivation (for example, someone's national culture) or change readily and have more "immediate" connections to motivational states (for example, someone's day-to-day basic needs for food and security). [42] For example, an important "immediate" influence on motivation is self-efficacy – that is, estimations of one's own ability to accomplish something. [43] As explained in the UNDP report, the multidimensional nature of poverty can have corrosive effects on people's self-efficacy at work. Cultural values/norms can have an important but often indirect influence on motivation. Moreover, needs, including the needs for economic and physical security at the base of the pyramid, might have both immediate and indirect influences on motivation. [44]

Table 1. Human capabilities related to work

Diagram (top panel, "Capabilities at work"): Situation → Individual-Level Outcomes; Motivation × Ability → Individual-Level Outcomes → Goal.

			Theory		Example measurement indicators	Person-oriented (skill proficiency levels)	Work-oriented (skill requirements)	Skill-development processes	Information on skill gaps/matching	Contextual information	Outcomes
Capabilities at work: From theory to measurement	Motivation	Indirect influences			Values and norms - including cultural and religious	X					
		Indirect influences			Needs (e.g., financial and physical security)	X		X			
		Immediate influences			Self-efficacy	X			X		
	Personal abilities				Knowledge	X			X		
					Procedural skills	X			X		
					Developed abilities	X			X		
	Situational enablers and constraints	Organizational/workplace dynamics	Human-resource practices		Training (including training needs analyses)		X	X	X		
					Work design		X	X		X	
					Leadership		X	X		X	
			Decent work conditions/ arrangements		Living wages		X			X	
					Voice in workplace safety issues		X			X	
					Voluntary (as opposed to forced/child) employment		X			X	
		Socio-political support	Access to resources		Financial					X	
					Informational					X	
					Health-related					X	
					Social support (e.g., from teammates)					X	
					Political					X	
			Sense of justice							X	
	Goals	Holistic assessment	Satisfaction (e.g., with jobs or goals)								X
			Empowerment		Self-determination (autonomy)						X
					Competence			X	X		X
					Meaning						X
					Impact				X		X
			"Fit" between the person and the environment				X		X		
			Goal accomplishment				X		X		X

Measuring personal abilities. Of primary concern to enabling human capabilities at the base of the pyramid are the individual differences that can be most readily shaped through education and training, namely knowledge and procedural skills and developed abilities (KSAs). Particularly important to workers at the base of the pyramid, especially in informal and vulnerable employment, might be the mixture of KSAs that facilitate "adaptive performance" or people's ability to deal effectively with a socially and physically dynamic work environment that can require creativity, dealing with emergencies and crises, and learning a variety of new work tasks.[45] Chapter 4 of the UNDP report discusses individual differences at greater length.

Measuring situational enablers/constraints. The influence of individuals' motivation and abilities can be greatly shaped by factors in the groups/teams, organizations, communities, and societies that the individual is part of. Within informal sectors of an economy, and especially in conditions/arrangements that do not meet the basic requirements for decent work (e.g., vulnerable employment), the influence of various "organizational" or "workplace" factors are perhaps most obvious in terms of the frequent absence of formalized work rules, structures, and processes.[46] These rules, structures, and processes undergird many of the "high-performance" practices that have been studied within large and formal organizations – predominately in higher-income settings (e.g., employment tests or structured interviews, formal appraisal for pay, and employee opinion and attitude surveys).[47] Despite the potential inapplicability of many of these practices, they might be able to be adapted in ways to focus on their core goals, namely: (1) the development of workers' KSAs; (2) increasing workers' motivation to leverage their KSAs for work goals; and (3) empowering them to do so.[48]

The examples of organizational/workplace dynamics listed in Table 1 are not intended to be exhaustive, and before their effects could most properly be considered, conditions of decent work must be met (e.g., living wages, voice in workplace safety issues, and voluntary employment, etc.). As long as decent working conditions are established, one of the most important examples of human-resource practices relevant to human development is training. Numerous aspects of the effectiveness of training design and its successful incorporation into

organizational processes have been studied; moreover, training measurement/evaluation has been a major concern in much of the literature on training.[49] A second major human-resource practice is the specification and design of jobs and work. The ways that jobs are designed can facilitate successful job performance and learning, the design of a job can also create stress and strain, increase burnout and turnover, and undermine organizational goals.[50] Similarly, leadership also plays an important role in both motivation and ability (see the next section). Alongside workplace/organizational dynamics, forms of socio-political support (e.g., an abundance or lack of alternative job opportunities) can also affect goal-directed behaviour.[51] Socio-political support includes access to various resources (e.g., informational and political) and people's relationship with their social and political environment – prominently including people's sense of justice (included in the final section of this report). Cooperative relationships at work are an important form of social support. Often, these relationships emerge through positive teamwork that can enhance motivation and skill-development. Teamwork can be empirically measured through a number of behavioural and psychological dynamics; for example, measuring team members' "mental models" can provide estimations of team dynamics and performance.[52]

Goals. When evaluating goals, it is important to point out that capabilities do not necessarily involve actual goal attainment – but instead the capability to accomplish goals; therefore, to measure outcomes, we focus on holistic assessments of capabilities – that is, reflections on whether people feel that they have met, or can meet, their work-related goals. Perhaps the simplest holistic assessment of capabilities at work is job satisfaction – simply the degree to which people are satisfied with their job in general. The use of job satisfaction as an assessment of capabilities is similar to the use of life satisfaction and general happiness as developmental indicators. Job satisfaction can help account for a wide range of potential dynamics at work as it is determined by, correlated with, and influences a wide variety of important work dynamics and psychological states.[53] In light of its close relationship to agency and capabilities,[54] psychological empowerment as operationalized by Spreitzer (see above) is also included as a holistic assessment of capabilities.[55] If Seibert and colleagues' meta-analytically validated model of workplace empowerment is adopted, the relationship of workplace empowerment to the psychological needs of self-determination theory, namely: competence, autonomy, and relatedness (or social support), can more readily be seen.[56] Self-determination theory appears to be relatively well-supported cross-culturally.[57] Thus, despite the fact that various instantiations of empowerment might have different and sometimes negative effects in different cultures,[58] multiple core aspects of what is meant here by empowerment appear likely to be relatively robust.[59]

Finally, a third way to holistically assess capabilities is via indices of "fit" between people and their work environment (including their job/occupation, work group, and organization). Perhaps most importantly for its relationship to capabilities, person-environment (P-E) fit includes consideration of people's goals, the goals in the environment (e.g., of a work group) and congruence between the two.[60] In contrast to skill "matches," P-E fit considers the full range of people's identities and aspirations and accounts for a two-way relationship between the person and the work environment such that both sides have important needs that can be fulfilled by the other.[61]

In summary, capabilities can be operationalized in the workplace through individuals' opportunities to accomplish work-related goals given the right motivation and ability in the context of organizational/workplace influences and socio-political support. As displayed in Table 1, this framework of human capabilities can be related to other work-information taxonomies (e.g., that of the OECD/World Bank[62]) that create distinctions between person-oriented information (e.g., skill proficiency levels), work-oriented information (e.g., skill

requirements), skill-development processes, information on skill gaps/matching, contextual information, and outcomes.

Recommendations for generating capability-enabling information about work

The previous section articulated a range of important concepts to measure in order to generate information about work that is relevant to understanding, measuring, and supporting human capabilities. In order to ensure that information about work is both accurate and has the maximum developmental impact at the base of the pyramid, a series of recommendations are made regarding (1) how information-collection should be organized; (2) important decisions in the collection of information; and (3) considerations for researchers. All recommendations are focused on maximizing the utility of work information for promoting human capabilities. Moreover, these recommendations and considerations are drawn from research focusing on the analysis of work, lessons learned from the development of information about work in both high-income countries and in lower-income countries, and the principles of delivering effective development assistance.[63]

How information-collection should be organized: As mentioned at the beginning of this section, information about work is essential to many effective human-resource interventions. Moreover, the processes of formally setting, counting, measuring, and/or defining goals, work activities, jobs, and KSAs are critically important to organizations[64] and constitute an important aspect of an organization's formality versus informality. The overall positive developmental impact of collecting information about work can be greatly enhanced through partnerships with private-sector organizations at the base of the pyramid. If these partnerships are formed early in the information collection process, information collection might be more readily aligned to base of pyramid needs, processes, and systems. Importantly, information collection can be aligned with a wide range of strategic human-resource processes and systems including:

-   Organizational goal setting;
-   Training needs analyses;
-   Training evaluations;
-   Definition of employee selection criteria;
-   Standardized performance evaluation;
-   Work design and reorganization;
-   The creation of formal job descriptions;
-   Employee satisfaction and feedback surveys;
-   Organizational culture and climate surveys.

Organizations, especially those in the informal sector will likely often require training, capacity-building, and support in the implementation of many of these initiatives. Properly employing such initiatives might involve the development of customizable, but standardized, toolkits that can be understood and implemented by private-sector organizations at the base of the pyramid. Importantly, these interventions should be sustainable and a broad range of stakeholders should be invested into the repeated administration of one or more toolkits. Partnerships could form between private-sector organizations and might resemble the business-to-business benchmarking used to develop information about the greening of the workforce in Thailand.[65] In any form of partnership, information-collection efforts should be harmonized and/or aligned with national- or regional work-information sources like qualification frameworks or occupational frameworks and skill profiles (see for example, South Africa's efforts in this regard).[66]

Decisions in the collection of information: The characteristics of information about work should be shaped by its purpose.[67] Once the purpose of the information is determined, important

methodological questions, including those below, should be answered in light of empirically derived methods, considerations, and findings from the science of work analysis:[68]

- What will be measured? The omission of certain types of descriptors and the use of poorly researched taxonomies or indicators can greatly undermine the usefulness of information about work;
- Who will the information be collected from? For example, from workers or supervisors, individuals versus groups/work teams, or from either experienced or new workers;
- What formats and methods will be used? Different collection methods and formats (for example, written surveys and in-person interviews) are more or less effective for different types of information and purposes;
- How will information be rated? Typical rating scales are sometimes redundant, confusing, or unhelpful for certain purposes and should be aligned to theoretical assumptions about the constructs to be measured;
- How specific and detailed should the information be? Information about important individual differences might need to be more general and qualitative for strategic team-development workshops but more specific to individuals and quantified in more detail for formal performance appraisals;
- What quality of information is needed? Important considerations include, what is an acceptable level of reliability? How long will the information be valid, and can certain biases be expected from different types of raters?

Research considerations: Because of its importance, but its potentially high expense to develop,[69] information about work is often being used for purposes, and in places, beyond its original design. This includes the transport of information about work into new national contexts. For example, both the European Centre for the Development of Vocational Training and the United Kingdom Commission for Employment and Skills have used information from the United States to begin to build occupational "skill profiles" designed to inform vocational learning and training efforts across Europe.[70] As these efforts show, while many characteristics of work activities (e.g., occupations) might be expected to stay largely stable across national borders, work information might need to be adapted in specific ways to account for potential differences in work across nations of differing cultural orientations.[71] Importantly, an understanding of how socioeconomic development shapes various aspects of work is quite limited. Providing greater insight into the "transportability" of work-information might (1) facilitate the ability of stakeholders to make better use of existing information around the world and (2) help policymakers, the private-sector, and academics understand broader changes in the world of work.

In settings where reliable information about work is missing, alternative methods for information collection should be pursued. For example, information about occupational requirements in the United States has been used in combination with international occupational employment patterns to estimate various characteristics of the workforces in those countries.[72] This indirect form of information about work might be able to be combined with information from other sources to improve its accuracy. For example, using the same occupational information source as in the previous examples, the KSA, work-requirement, and work-context "characteristics" of countries' export products have been estimated by combining insight into the occupational breakdown of industries and the set of products that are produced by various industries.[73]

Finally, an important issue for researchers to consider is how the collection of information about work can be done more efficiently and cost-effectively. A promising option is greater utilization of mobile phones – which are increasingly utilized at the base of the pyramid.[74]

Moreover, as various online employment services grow, including those that are accessible by mobile phones, a larger amount of information about work is likely being stored on the Internet.[75] Developing ways to generate/collect information about work at the base of the pyramid via information technology should be a key priority for researchers.

Conclusion

People are not only the wealth of nations, they are the wealth of private-sector enterprises. By putting people and their capabilities at the centre of information about work, stakeholders can help to better promote not only private-sector development, but human development at the base of the pyramid.

Recommendations

1. Ensure that information collection includes partnerships with private-sector enterprises at the base of the pyramid and utilizes those enterprises' processes for information collection in a way that promotes their information-generation capacity;
2. Establish the ultimate purpose for information about work and develop a plan regarding its collection based upon empirical research in the field of work analysis;
3. Investigate the nature of work across cultures and levels of socioeconomic development; research ways to develop additional information about work to complement what already exists at the base of the pyramid; and determine cheaper and more efficient methods to develop work-information through information technology.

Section 2. The role of intercultural training and transformational leadership

Mobile populations

It is important to recognize that people and skills bases at the BoP are often mobile rather than settled, and that skills development through decent work can help to provide security and integration into society (inclusion). For example, a particularly vulnerable, and increasingly prevalent, population that can benefit from poverty reduction initiatives are international migrants, including forcibly displaced persons. In 2013, at least 232 million people lived abroad, most of them of working age.[76] In the same year, 51.2 million individuals had been forcibly displaced worldwide as a result of persecution, warfare, violence and human rights violations. These are the highest numbers of migrants and displaced persons on record, and 86% of refugees were hosted in lower income countries.[77] Displaced persons include refugees seeking safety outside of their home country and people seeking refuge within their home countries.

International migrants make up a "diaspora nation" that can make significant economic contributions to their host and home nations through meeting labour market demand and through remittances. When given the opportunity, they can also contribute to organizational health, well-being, competitiveness and prosperity. In an inclusive workplace, diversity of knowledge and skills can be a significant stimulus and advantage for group innovation and creativity over the mid to longer term.[78] A meta-analysis of the effects of cultural diversity in over 10,000 teams for example found that although cultural diversity may be harder to negotiate than similarity, these process losses can be offset by gains in creativity and satisfaction.[79] Thus, reaping the benefits of diversity at work is likely to be heavily dependent on how it is managed – on diversity management skills, which need to be "embedded in business strategy not treated as an ad-hoc addition."[80]

Barriers to positive outcomes for international migrants include precarious employment, lower-than-living wages, and prejudice and discrimination in job selection and advancement,[81] even against the relatively skilled.[82] This is true for people migrating from a low income country to a high income country and for those moving from one low income country to another. Underemployment often prevents international migrants from putting valuable skills to use,[83] and from developing them further in positive work cycles, in a so-called "brain waste" and subsequent deskilling. Overcoming these barriers requires a range of flexible and socially responsible macro policy measures, from flexible immigration and temporary visas to job creation and inclusive labour rights.[84] The private sector, through its International Organization of Employers, has been cooperating with the Global Forum on Migration and Development and The Hague Process on Refugees and Migration to explore a range of options to facilitate stronger links between business, migration and development.[85]

Traditional corporate entities have a tremendous opportunity to encourage integration and transform the lives of international migrants through practices that also make business sense. In addition, social entrepreneurship can reduce the barriers facing migrant populations, including refugees. The social enterprise Hathay Bunano employs women in refugee-hosting areas to produce hand-crafted items while teaching them new skills. Women can earn a wage for their work while strengthening social ties with each other. Meanwhile, the enterprise's profitability has helped to ensure that it can operate independently of public donors.[86] Another example, the social enterprise Technology for Tomorrow, based in Uganda, employs refugees in the production of goods that address challenges in refugee settings—such as low-cost solutions for feminine hygiene.[87]

Another major solution to empowering international migrants is facilitating their access to credit. The UNHCR has identified facilitation of microcredit to refugees as an important priority. The private sector can facilitate the disbursement, and effective use, of microcredit loans by international migrants in at least a few ways, including: providing microcredits to migrants, support existing microcredit recipients with assistance – for example, with skills training, and third, to request and purchase the products and services of international-migrant microcredit entrepreneurs.

Private sector organizations should be prepared to work with women when working with poverty alleviation projects as most members of Self-Help Groups (SHGs) and beneficiaries of microfinance projects like the ones sponsored by Grameen Bank in Bangladesh or the National Bank for Agriculture and Rural Development (NABARD) in India are women. Private sector organizations can learn from decades of UNDP's experience and expertise in working with women at the grassroot level and developing Women in Development (WID) programs and efforts.[88] One of the most important lessons learned from the Grameen Bank experience is that village women have skills and they are open to learning other skills as necessary if they are allowed to build on their existing skills by providing micro-credit, rather than be thrown into a new skill set that is alien to them. Private sector also needs to be sensitive to the women's need to balance family needs with those of their business needs, and the two cannot be separated or one cannot be prioritized over the other. Another important lesson to remember is that the skill growth and confidence development in women takes over an extended rather than a short period of time. Therefore, private sector organizations should cultivate long-term relationship while working with people in the BOP and create an environment that allows their personal growth and development.

The positive examples of Hathay Bunano, Technology for Tomorrow, and microcredit lending provide positive examples of how the private sector can engage with international migrants. What can all private-sector organizations do to help empower international migrants through

their internal business practices? Major workplace interventions to overcome barriers that international migrants face include intercultural training and instilling transformative leadership practices.

Mobile firms

Much of the prejudice and discrimination that migrant populations experience occurs in the workplace.[89] But this is also the very place where much can be done through humane work practices. Moreover, it should be noted that while migration is about the flow of talent, businesses can also flow. When respectfully managed, firms moving towards people in lower-income settings (as well as employing them in higher-income ones) can bring benefits. Respectful management, then, is critical to both types of flow (people and firms). This "migration development nexus" requires attention to a variety of practices, including access to decent work, positive work performance cycles, and returns on "investment" for employees and firms alike. These measures may include but are not restricted to creating formal job descriptions and job selection processes, providing access to skills training and development opportunities and implementing processes for fairly appraising, evaluating and rewarding job performance—each addressing unfairness in job access and treatment.[90]

Diversity skills training

In addition to such interconnected approaches, a major intervention that workplaces can undertake is intercultural training. Bhawuk (2009a) presented a synthesis of theory and methodology to propose an approach to develop effective intercultural training programs that could serve the needs of private sector organizations in dealing with intercultural training needs. He emphasized the need to focus on the culture specific elements where real action takes place in the field between two individuals in the context of their individual cultures and their common organization. He also emphasized the role of culture theories[91] in training people for intercultural interactions, and noted the importance of economic and political differences that different people bring to intercultural interactions.

The differences that can arise between host-country nationals and international migrants might often be ones emerging from the socioeconomic characteristics of their respective national backgrounds. Indeed, as we have just seen above, many migrants are either temporarily or permanently moved to settings in higher-income countries. Building on the work of Toffler (1985), the author (2009b) compared and contrasted the characteristics of developing and developed countries and derived ten economy-based cultural standards on which these countries are significantly different, which can present hurdles in intercultural interactions. Bhawuk and colleagues[92] used these cultural standards[93] to develop critical incidents for training people in one of these countries to be able to work in the other. These cultural standards and critical incidents can be used as the starting point for effectively preparing private sector organizations to work with people in the base-of-the-pyramid as they capture socio-cultural and socio-economic differences between managers of private sector organizations and people in the BOP, which are shaped by economic factors. There will be other cultural differences depending on the particular country of operation, but the differences resulting from economic conditions could be summarized under the following ten themes.

1. In the economically advanced countries information processing is heavily stressed as these nations are in innovation-driven and wealth-driven stages of economic development[94], while in the developing countries the role of labor, raw material, capital and land would still be considered more important as factors of production since these nations are in factor-driven or investment-driven stage of economic development.[95]

While working with international migrants from the BOP, it is important for managers from private sector to keep variations arising from such stages of economic development in mind.

2. In the economically advanced countries, the basic needs of the people are generally satisfied, and so to motivate them, economic rewards are not sufficient and work needs to be challenging to meet the growth and self-actualization needs of people. In contrast to this, in the developing countries, economic incentives still play an important role since the basic needs of people are not fully met, and this is even more relevant in the BOP.

3. Having realized the upper limits to economies of scale, the economically advanced countries have slowly moved from having large bureaucratic organizations to large 'constellation' type organizations, and the constellations consist of a number of small and independent organizations[96] called strategic business units (or SBUs). Helping international migrants to account for organizational contexts and working realities that come from working in a new socioeconomic setting will likely be important for their successful integration into the organization.

4. The economically advanced countries have moved towards customized goods, in contrast to mass-produced goods, with the help of information processing, robotic, process technology, computer aided design and manufacturing (CAD/CAM),[97] and internet-based trade. On the other hand, many lower-income countries still stress mass-production. International migrants from the BOP need to be supported to be able to interface with these mass-production oriented organizations.

5. The organizations of the economically advanced countries adopt an adhocratic style of management,[98] whereas in lower-income countries, organizations are still largely bureaucratic. Organizations in developed countries would be following what is called double-loop learning, whereas organizations in the developing countries would still be following single-loop learning[99]. These different management styles need to be bridged by people from lower-income countries as they work in organizations in higher-income private section organizations.

6. While the government and managers of economically advanced countries often feel the imperative of globalization, those in lower-income countries are still obsessed with nationalism and protectionism.[100] Private sector organizations need to ensure that all of their employees are aware of and prepared to deal with globalization and to eschew many businesses practices otherwise associated with nationalism and protectionism.

7. The managers of the economically advanced countries might be more geocentric than the managers of lower-income countries who instead might be more ethnocentric and polycentric due largely to a lack of exposure to the global work culture.[101] Geocentric managers are likely to adopt ideas based on their merit rather than on the source of the ideas, whereas ethnocentric and polycentric managers are open to ideas from their own culture or from countries that are more advanced than their own. Private section organizations need to be aware of such differences in management styles, and make effort to bridge them.

8. The economically advanced countries have micromarkets with buyers having a bias for what they want. On the other hand, in lower-income countries, buyers have need bias and, due to the lower standard of living of the society, there is more price competition in the market. Private sector organizations need to understand differences in business philosophy and behavior that might result in adaptation of having worked in lower-income countries where buyers have need bias.

9. The economically advanced countries are more democratic and open while the developing countries are less democratic and have various types of political systems

depending on their cultural background and geographic location.[102] This would cause conflict in the basic values of the managers of the two worlds, one might believe in equality of human beings, whereas the other might believe in privileges derived from family background and other such sources, which need to be addressed by private sector organizations while trying to bridge the north-south divide to serve the people in the BOP.

10. The economically advanced countries often have fragmented values resulting from social destandardization. Lower-income countries often have more of a homogeneous value system, and their organizations would be less subjected to public pressures. Whether it be the pressure to create a smoke-free workplace to protect the rights of non-smokers, the reasonable accommodation that organizations have to make for physically disabled people, or the Family Leave Act passed in the United States in 1995, all point to the shifting focus of society-at-large from economic profit making to social well-being, a shift which is sometimes yet be seen in lower-income countries. These shifts in economically advanced countries often create work standards that are often unusual for people who have been working at the base of the pyramid.

Using critical incidents tapping the above ten cultural standards[103] could be the starting point of the development of an intercultural training program to facilitate communication between people who have extensive work experience in higher-income contexts and those that have spent a large share of their lives at the base of the pyramid.

Culturally sensitive transformative leadership practices

In solving social problems, the goal is to be faithful to the needs of the community and its members, allowing them to create their own voice and, eventually, sustain their own changes rather than telling them what their problems are and how they should go about addressing them.[104] The social agent of change has to act much like a community researcher to have certain degree of openness to the issues and changes resulting from the interventions.[105] To facilitate an effective relationship between the change agent and a particular community and the creation of a program of change, change agents can learn some lessons from community psychology. These lessons are essential for private sector organizations that want to help integrate international migrants into their workforce.

Drawing lessons from community psychology, Bhawuk, Mrazek, and Munusamy (2009) presented five essential principles that successful social change agents were found to adopt in their practice of community transformation. These five transformative practices are: i) being a passionate facilitator embedded in the community, ii) defining the problem with the community, iii) using multiple methods and perspectives to measure the problem, iv) conducting collaborative implementation, and v) being flexible to change when needed. They presented case studies from three countries, Amul from India, Grameen Bank from Bangladesh, and Mondragon from Spain, which supported this model of transformative leadership that also has support across cultures. They demonstrated that in all the three cases the social change agents were not disinterested catalysts but involved people who also saw significant transformation in their own person life. Transformative leadership, thus, is bi-directional, both the leader and the followers are transformed. Bhawuk, Mrazek, and Munusamy (2009) urged social agents of change to disassociate from the top-down expert-driven problem solving paradigm and adopt the community psychology approach, which can help transform both the community and the agent. Private sector leaders can adopt these five community psychology principles to transform the lives of people in the BOP.

Conclusion

In conclusion, international migrants from the base of the pyramid are an especially vulnerable population. The private sector has a range of important ways that it can assist and enable self and collective empowerment – initiatives ranging from CSR designed to facilitate successful microcredit loans to social entrepreneurship that helps to develop the skills of international migrants. In addition, all private-sector organizations can assist international migrants by adopting structured and equal opportunity business practices, e.g., by hiring them and taking efforts to ensure that they - and their skills development - are successfully included into their workforce/place. Diversity skills are a key component for businesses at all levels of the economic pyramid. Two major ways that private-sector organization can include international migrants are intercultural skills training and through culturally-sensitive transformative leadership skills.

Recommendations

1. Private sector organizations should support international migrant microcredit lenders by either helping to facilitate access to those credits, assisting those migrants to gain important skills, or providing them with other resources (including access to a professional work space) necessary for their success.
2. Private-sector organizations in higher and lower income settings alike can facilitate the successful inclusion of international migrants and host national employees into their workforces through intercultural skills training that takes into account the socioeconomic and industrial factors that pervade many lower-income settings, and by helping to ensure culturally sensitive transformational leadership practices that enable positive skills cycles.

Section 3. Organizational justice and equality of opportunity

"Development is more than just the accumulation of capital and the enhanced efficiency of resource allocation; it is the transformation of society. Equitable, sustainable … development requires basic labor rights, including freedom of association and collective bargaining... development that promotes societal well-being and confirms to basic principles of social justice."[106]

Global inequality (like mobility) is a major issue for our time. Inequality of course is an issue of justice, including justice at work.[107] Inequality is also a barrier to prosperity.[108] Inequality of outcomes (like income) tends to beget inequality of opportunity, which begets further inequalities of outcome - a negative, vicious circle.[109] Sustainable growth by contrast is positively related to income distribution, including just and equitable wages.[110] Justice at work clearly matters - immensely.

With its 90% share of jobs globally the private sector can lead its development, by bridging the missing competencies in how to implement macro development goals in everyday workplace practices[111] – in organizational behavior. This section focuses on 'how' private sector organizations can readily operationalize otherwise abstract concepts like fair and decent work,[112] thereby contributing to positive work cycles and social justice at one and the same time.

One basic principle of social justice at work is that like good health, which is pivotal, is that it often goes unnoticed until productivity, and industrial relations, turn awry.[113] Whilst justice in itself may be inherently motivating when hardship and struggle are the norm, to-date the most researched threat to healthy organizational justice is probably perceived unfairness.[114] The

emotional "sting" of unfairness[115] has been linked to many standard performance indicators, including reduced work quality and quantity,[116] "counter-productive work behaviors" such as stealing or moonlighting,[117] absenteeism,[118] job dissatisfaction,[119] workplace de-motivation and dis-engagement,[120] mistrust and lack of organizational commitment,[121] occupational stress/strain,[122] turnover intentions,[123] brain drain of skilled workers,[124] losing out on international and regional talent flow (above),[125] and reduced societal wellbeing.[126] These are all bad news for business productivity. For skill-development cycles that rely on performance itself, not only for building momentum but also meeting people's needs (Figure 1), they are literally circuit breakers.

Justice principles themselves are largely unwritten tacit and subjective – they form part of a "psychological contract"[127] between employers and employees.[128] This inherent subjectivity can easily give rise to unrecognized differences between management and labor over what is "fair" vs. "unfair." Indeed a work decision or process that is tacitly assumed to be fair - or as having nothing at all to do with fairness - by one party, may feel completely unfair to the next. Justice is therefore often a question of skillful and socially responsive alignment. It requires being mindful of and sensitized to justice principles; including when they may be operating in conflict rather than harmony (Table 2).

Table 2. Principles of justice at work			
Behavior: Type of Justice:	Making decisions: "Procedural"	Conveying decisions: "Interactional"	Decision outcomes: "Distributive"
Principles:	Inclusion Probity	Informational Interpersonal	Need Equality Equity

In Table 2, Procedural justice requires that decision-making processes themselves are perceived as fair.[129] When economic times are hard, this can help nurture organizational commitment, management trust and a more secure and settled workforce.[130] How? First, by preserving a sense of Inclusion. Safeguarding procedural justice, and freedoms (above), is often a question of competently preserving alignment with people's values and aspirations. For example whenever people value hierarchy and the collective over egality and individuality,[131] then "participative" rather than "nurturant" decision-making, one-to-one rather than group "performance appraisal," and "360-degree feedback" may actually feel like imposition rather than inclusion (above on cultural diversity[132]). Imposition of course is anathema to psychological empowerment (Figure 1).

Also important from Table 2 is ensuring Probity. This too is a matter of perspective: In matters of socio-political support (Figure 1), one person's or group's cronyism can be another's loyalty to family,[133] or country.[134] As a result, what is considered "fair" in terms of hiring practices, or in who and how to support people at work, may clash. Conflict and exclusion are generally less likely the more job selection and advancement decisions adhere to pre-agreed standards and rules (for examples from BoP and ToP settings[135]). Sustainable empowerment may require each party to act in good faith, by accepting that (i) neither view is completely dysfunctional, and (ii) that fairness is a shared, mutual concern, a potential overarching goal.[136]

From Table 2, Interactional justice means that decisions once made are conveyed respectfully to the people most directly affected by them (Table 2). Firstly Informational justice means that people feel they have been kept appropriately and respectfully 'in the picture' about grounds for the decision, its rationale etc. Secondly, Interpersonal justice means that they are treated with dignity, e.g., they are not demeaned or embarrassed by workplace feedback; or do not sense that they are being stereotyped or demeaned. Interactional respect is often part of a supervisor's responsibility to their supervisee(s), for example during or after goal-oriented performance (Figure 1). Simply taking time to respectfully explain the basis for any performance decisions signals respect, and may help reduce any risks of backlash whenever the feedback itself is sensitive.[137] Interpersonally, contextualising any under-performance (e.g., "did we the organization give enough socio-political support?") and respectfully with cultural sensitivity (above) reinforcing positive performance (individual or group) can enhance people's sense of fairness and "self-image."[138] The latter may help to build confidence, or self- and collective efficacy. In all it seems, in any firm large enough to have supervisors, the interactional justice skills of its managers and leaders are vital for workforce skills development.

Distributive justice (Table 2) means that any rewards or resources like wages and benefits or promotions and recognition, for example, are fairly allocated. How fairly people at work judge those allocations (including rewards or penalties), judged either by management or by workers, hinges on how well the allocation meets - in their eyes - at least one of three basic criteria: Need (e.g., people may feel it is particularly important to address poverty, or discrimination, say by using positive discrimination, or secure employment), Equality (paying everyone a fixed, say minimum or other form of set wage), and Equity (e.g., by ensuring individual or group rewards for individual or group inputs to performance, for example rewards for up-skilling by taking on extra training). All three principles are commonly invoked, but not always respected, in workplace scenarios.[139] Which of them is most salient at any particular time or place however again depends on perspective and context. The important point for justice skills development is that the context can be read, and navigated safely (safeguarding fairness). For example on the evidence discrimination and hardship will probably tend to elevate Need, hierarchy often favors Equity, collectivities may prefer Equality within their work group but Equity between groups.[140] Provided a resource allocation chimes with the most salient of these concerns at the time and place, justice will not only have been done but have been seen to be done.[141]

An illustrative case-in-point is wages and other elements of remuneration. The most direct way for distributive justice to make a difference to poverty reduction is through wages that are livable.[142] For many BoP farmers and factory workers (above), wages are governed by markets, corporations, and supply chains. In such BoP contexts, "Fair Trade" can be an expedient way to nudge primary producers' wages from well below to just above the poverty line (for some powerful examples, Abad-Vergara, 2012). From Table 2, fair trade might not only help to pay the bills but also to meet need and redress equity, and inclusion. At a macro-level, more livable wages may reduce social conflict[143] and may help to encourage young people to enter legitimate and productive occupations in the primary sector.[144] Table 2 suggests that adding probity into price setting across supply chains would also be useful, and more sustainable than Fair Trade perhaps.[145] Interactional justice (in Table 2) may be facilitated via supervisory skills, and consumer feedback to farmers, for example using mobile technology to help connect primary producers with consumer demand.[146]

Moving from between to within firms, as we have seen already, wage rises above poverty lines can be very cost-effective. Across a wide range of small-, medium and larger organizations, recent evidence shows that raising workers' incomes above legal minimum wage and poverty

levels, i.e., addressing need and redressing inequity (Table 2), can be good for business performance.[147] Added major spillover benefits for society include job creation, formalization and security (Figure 1), domestic consumption and gender equity.[148]

Gender equity of course is also often a question of inequality in income.[149] The ILO (2013) considers income inequality, including within firms, to be a barrier to poverty reduction and productivity, highlighting a range of fairness measures that firms can take to address them, simultaneously, at the workface.

Firstly, inequality means that other levels of the firm have their role to play. For the top tier, leadership-by-example includes (and in many cases has included) curtailing any perceived excess in CEO wages, which can build or restore trust in leadership, and trickle down to help to finance a less inequitable distribution of wage resources to the shop floor; capping ratios between CEO and shop floor wages, to encourage joint ascendance by vertically integrated, i.e., shared and interconnected, high performance goals; and introducing a "say on pay" for shareholders and civil society groups (procedural and interactional justice, Table 2). Reducing inequality at work may thus bring efficiency gains as well as skills development.

Secondly, having a thriving middle-income group in society - who in businesses are often skilled managers and supervisors - is extremely important for economic as well as active labor market programs.[150] They carry many BoP communities' hope for the future, and as such are also role models for entry-level workers. An extant inequality barrier to their managerial skills development in BoP and some MoP settings however is the paying of "dual" (and disparate) salaries to equivalently qualified and experienced expatriate over local workers.[151] Multi-country research has shown the income gaps to be excessive (anywhere up to 9-10:1; the acceptable fair threshold was 2-3:1); to exacerbate local poverty (e.g., via inflation in some Island Nation communities); are seen by local workers as distributively and procedurally unfair (Table 2); are de-motivating; undermine teamwork; self-reinforce negative stereotypes; encourage turnover and brain drain; build dependence on expatriate labor; and so build a negative cycle. The end result is an "economic apartheid" which progressively strips capacity and skills from local workforces.[152]

Inclusion for local managers in workplace decisions has the potential to boost equity between the two pay groups (Table 2), enhance inter-group cooperation, facilitate mutual skills transfer, reduce any counterproductive or retaliative work behaviors, and raise organizational commitment, trust and citizenship behavior.[153] Managerial jobs have relative leeway to enable empowerment[154] and flex skills in leadership (Figure 1). Thus closing the wage gap by including more local say on fair workplace practices and policies would enable more positive skills cycles among managers[155] and their supervisees.

In accordance with the IICPSD Report[156] the model in Figure 1 is in principle applicable to any kind of organization or combination of organizations. These range from large MNCs to small micro-enterprises to banks that might finance those micro-business to expand into medium sized enterprises, creating jobs and rising incomes, According to A. Sen (1999), people come into any job, or work opportunity, in any kind of organization or supply chain, with inherent agency; including needs, aspirations and goals of their own - including (of course) poverty reduction and expanding their own capabilities (!). This is likely part of the psychological contract, and perhaps particularly so at the BoP.[157] Workplaces in the private sector are certainly capable of recognizing, rising to and thus reciprocating that expectation.

First and foremost they can reciprocate through work design characteristics, fundamentally job formalization and security. This may also include access to credit for enterprise developers in the BoP, and to empowering technology (below), that enable the development of skills. Skills

are a performance win-win for shareholders, managers, employees and communities. Socio-political support for skills development at work can entail procedural justice, inclusion and probity, via industrial bargaining, more say on pay, wage reform across the supply chain, or the organization of skills camp for marginalized youth.[158] Leadership is a way for any of procedures and empowerment-led, high performance practices and decisions to be respectfully conveyed, whenever practicable and appropriate, to workers themselves (i.e., with interactional justice). As part of performance practices, rewards and recognition also need to be fairly distributed, especially following workplace performance, for example through decent and living wages and opportunities for workplace career advancement. These too can equally be enabled in the factory, the micro-credit market, through social enterprise or in community development. Rewards and recognition may then help to reinforce self-efficacy, individual and/or group, which meets poverty and opportunity goals; and so on in a virtuous (positive) performance cycle (Figure 1).

Conclusion

"Decent work sums up the aspirations of people in their working lives. It involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration [distributive justice], freedom for people to express their concerns, organize and participate in the decisions that affect their lives [procedural justice] and equality of opportunity and treatment [interactive justice] for all women and men."[159]

Recommendations

1. *Justice skills and competencies*. Justice at work is much more than pay. Proactively practicing principles of workplace procedural, interactional and distributive justice (from Table 2), empowers human agency to get on with the business of setting and achieving meaningful productive goals; building skills; and reinforcing empowerment, and so on in a recursive, positive cycle (Figure 1). Yet outside of restoration (once conflict has occurred), and tolerance of all forms of diversity (above), proactive workplace justice skills themselves (Table 2) could also be more widely trained. They are arguably "missing competencies" for sustainable development at the BoP.

    Recommendation 1 – Implement evidence-based work justice skills training, including pro-justice policies, in private sector organizations, based on but not confined to Table 2.

2. *Living wages*. These are a necessary condition for fairness at work, and thus for lubricating positive skill and performance cycles (Figure 1). Widely touted principles and processes, like Diminishing Returns and Poverty Traps, suggest that they may have comparative traction for people at the BoP (above, diversity; also, Seibert et al., 2011). Living wages are more than just minimum wages; they enable a decent quality of life, and work life. In short they enable occupational and social freedoms – capabilities (above).

    Recommendation 2 – Actively continue to monitor and evaluate ROI, at organizational levels, of living wages. Include capabilities in the benefits, as well as efficiency gains and any job losses or gains.

3. *Addressing income inequality*. Gender bias and dual salaries are heavily contested and outmoded barriers to poverty reduction through skills development. Through a range of distributive, procedural and interactional injustices, for example, they can promote disengagement and thus become self-fulfilling prophecies. Justice in pay, like good leadership itself, has to be seen to be done at all levels, and will "trickle down" to motivate talent. Gini Coefficients are widely used to calibrate inequality for countries – why not in private sector organizations – some of which have larger budgets than BoP countries- too?

   Recommendation 3 – Replace dual salary structures and ceilings, which risk breaking the psychological contract on reciprocation for skills training and development, with evidence-based ROI on which remuneration policies, at the organizational level, are seen as fair, and work best to promote capacity building, gender equity and talent flow. Use Organizational Gini Coefficients (OGCs), and related income ratio measures,[160] to help capture and monitor equality at the organizational level, enabling links to be made between equality at work and capacity building within firms, and possibly sectors.

4. *Tackling global inequality.* A final recommendation, possibly more contentious but consistent with the concept of positive skills cycles, is to directly link the goals of shop floor with other – middle and even top (e.g., CEO) tiers of the firm. After all, each tier has an interest in the organization doing well, and shared (overarching, or "superordinate") goals in particular have been consistently linked to group cooperation and performance.[161] The ILO (2013) has suggested capping the ratio between executive and shop-floor pay, which would mean that one cannot rise without performance gains from the other – "positive interdependence." Such ratios could be implemented nationally (e.g., the recent attempt to legislate a 1:12 ratio cap in Switzerland). More manageably perhaps, they can be introduced directly by business firms themselves, e.g., through shareholder activism (as in the US company, Whole Foods Market) and/or by allowing wider employee and civil society input on Company Boards.[162] These are bold and to some extent perhaps perceived as risky investments for businesses. Far from being a constraint however, shared goals (Figure 1) could deliver real efficiency gains in procedural, interactive and distributive freedoms.

   Recommendation 4 - An extant stereotype of business is that it is pro inequality not equal opportunity. This is often untrue, and thereby unfair. Addressing inequality of *opportunity is a 'mighty purpose' on which business in general, and all types of* businesses in particular, can lead sustainable human development.

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the ambitious and challenging step of engaging with diverse voices and perspectives on the issue of poverty reduction.

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The behavioural economics of poverty

Jennifer Sheehy-Skeffington

Harvard University

Johannes Haushofer

Jamil Poverty Action Lab, Massachusetts Institute of Technology

Introduction

Both the channelling of anti-poverty efforts through the private sector, and the refocusing of market development toward the base of the pyramid, require a focus on the global poor as economic actors. Whether acting in the roles of producers, consumers, or employees, the world's poorest millions might be predicted to make economic decisions as it is assumed the middle class in developing and developed countries do: with a calculation of the costs and benefits of a set of decision options, and the choice of the one with the greatest payoff for one's long-run utility.

In fact, we argue that the decisional context that poverty creates is so radically different from that of wealth and comfort that a unique framework for the behavioural economics of poverty is needed. The pervasiveness with which poverty penetrates everyday lives affects decisions not only by narrowing the set of options from which one can choose, but by altering the mindset of the decision-maker. The result is a set of decisions and behaviours that may appear to be irrational or self-defeating from the point of view of the Western or middle class observer. Yet while they often play out in self-defeating ways in contemporary developing country contexts, the decision-making patterns of the income-poor make sense when considered as responsive to the psychological situation of poverty. In this chapter, we outline four key characteristics of this psychological situation, and present evidence for how each affects the economic decision-making of those living in poverty. We aim to show how universal psychological processes can be triggered or amplified by an environment of poverty, in a way that would play out similarly in any of us were we unlucky enough to be land into such situations.

The psychological situation of poverty

Few readers can truly imagine what it is like to live in poverty. Life at less than $1 a day is one of having insufficient income to support good quality food and shelter, and of facing dysfunctional institutions, exposure to violence and crime, poor access to healthcare, and low levels of education. The reality of living in material poverty means the absence of basic provisions such as sanitation, a comfortable bed, good schooling, and adequate medicine. We focus on the decision-making consequences of lacking the money to assure such basic provisions, bearing in mind that this material scarcity leads to, and thus operates within, difficulty in almost all dimensions of one's life.

Scarcity in material resources has one obvious consequence for economic decision-making: it constrains the set of options from which one can choose. Examples of the consequences for private sector actors working with those living in poverty are uncontroversial: A company marketing to the income-poor will need to create a set of product options that are affordable to them, while a business employing those living below the poverty line needs to consider the cost of the daily commute to work.

Less obvious is the effect that this narrowing of options has on the mindset of someone living in poverty. By thinking about key aspects of the psychological situation of poverty, we might predict how being poor can lead one toward a different pattern of decision-making than does being materially comfortable. The narrowing of choice options is by definition a removal of the level of control one can have over one's activities, lifestyle, and outcomes. Someone living in poverty often has as little say over everyday decisions, such as whether he or she will have chicken or beef for dinner, as over large decisions, such as whether to attend school or which occupation to pursue. As we detail in the next section, the less people feel in control of what happens in their lives, the less they are likely to make decisions that might benefit them in future.

For the poor, not having full control over one's activities is often accompanied by not having control over one's environment. If one lacks the money to buy a plot of well-irrigated land, then one cannot avoid the threat of drought on the current small patch of land one has. Similarly, being unable to afford regular medical check-ups leaves one prey to illnesses and infections that can arise without warning. The uncertainty of one's environment, and the consequent unpredictability of future outcomes, are both characteristic of life in poverty, and thus shape the psychological situation it creates. As we outline below, they lead to a chronic state of vigilance to threat—a stressed mindset that, if persistent, is harmful both psychologically and physically.

Being poor means not just having scarce resources: it means having far less resources than others in society. Research in psychology and biology converges on the importance of relative social status for health and well being. The message from these fields is that being at the bottom of a resource hierarchy induces anxiety, maladaptive behaviours, and a sense of low self worth.

If being poor involves being concerned about one's social status, in addition to worrying about how to provide for the basic needs of one's family and the challenges of an unpredictable environment, then it means having little space left in one's mind for reasoning about one's long term economic self-interest. Thus, unlike the rich, the poor interact with employers and retailers while being chronically distracted by concerns unrelated to the particular economic decisions at hand.

In sum, demands placed on people living in poverty are absent in those who live in material comfort: demands to come up with money for food and school fees, to deal with the challenges of living in dirty and dangerous places, and to respond in some way to the sense that one is at the bottom of the societal ladder. Facing such a set of pressures, the mind of any of us may narrow to focus on immediate needs and the avoidance of immediate dangers—what we describe below as the lowering of level of cognitive construal. Such a psychological shift should lead to decisions and behaviours that address the goals of the here and now quite well. Yet present-biased decisions are likely to backfire as their consequences accumulate over time, undermining the long term goal of lifting the poor out of poverty. As a country develops economically, it moves further away from situations in which immediate survival is threatened, to those in which success depends on careful financial planning and the shrewd navigation of increasingly sophisticated markets. Thus, this mismatch between the decision patterns triggered by poverty, and the decision patterns needed to end poverty altogether, becomes increasingly acute.

In the remainder of this chapter, we outline the set of processes through which poverty creates a particular mindset distinct from the state of being middle class or wealthy, and what this means for decisions and behaviours of personal and economic consequence.

Poverty depletes self-efficacy

A decreased sense that one is in control of one's life circumstances is likely to have significant consequences for decision-making; but is it a consequence of poverty? This question has been explored most extensively in the field of public health, where researchers are interested in individuals' beliefs regarding the extent to which they are able to influence their own life outcomes.[1] Though this belief construct has been articulated in different ways, from one's perception that events are driven by forces internal versus external to oneself (what is known as 'locus of control'[2]), to one's sense of 'personal mastery'[3], we use the widely known concept of generalized self-efficacy[4] to capture it. In analyses of public health datasets from large United States samples, higher socioeconomic status (SES) is reliably associated with an

increased sense that one is efficacious in performing tasks and in control of one's outcomes[5] while lower socioeconomic status is found to be accompanied by the experience of powerlessness and anomie.[6] Beyond the United States, Haushofer and Fehr[7] used data from the World Values Survey to show a strong positive relationship between income and a proxy measure of self-efficacy, both across and within countries: Richer respondents and countries are more likely than poorer respondents and countries to believe that their outcomes are determined by themselves rather than fate.

The above evidence for the link between poverty and low self-efficacy is correlational in nature, making it difficult to tell whether poverty decreases self-efficacy, or, on the other hand, whether having low levels of self-efficacy partly causes one to become poor. The results of online experiments by Sheehy-Skeffington and Sidanius[8] support the former possibility. Taking a situationist approach, the aim was to see whether temporarily simulating the experience of poverty would elicit aspects of the poverty mindset even in those who were not poor. In one study, the researchers randomly assigned middle income American participants to play a household budgeting game in which they either had a large or a small monthly income, with which to meet their monthly needs. Those who played the game with a small income, and thus gained a temporary sense of what it's like to be poor, later reported having less control over their general life outcomes.

Other studies in this series demonstrate that decreased self-efficacy can be caused not only by experiencing scarcity in resources, but by believing one has less resources than most other people in one's society. Sheehy-Skeffington and Sidanius experimentally induced a sense of low relative socioeconomic status, either comparing those told they were doing worse than 70 percent of Americans with those told they are doing better than 80 percent of Americans, or getting them to fill out a sociodemographic form in which income brackets stretch either very high or very low. In both studies, those made to feel relatively low in income reported having lower generalized self-efficacy, indicating that thinking that one is at the bottom of society causes one to feel less control of one's life outcomes.

Why does self-efficacy matter for the economic decision-making of the poor? Firstly, it is notable that poor self-efficacy is connected to poor health-related behaviours and decisions, ranging from taking up smoking to eating unhealthy food.[9] As health behaviours are critical contributors to physical health,[10] it is no surprise that greater sense of control also predicts positive health-related and other life outcomes,[11] recurring as a key mediator of the effects of socioeconomic status on physical well-being.[12] It may also play a moderating role, as one cross-national study found that the strength of the effect of perceived self-efficacy on health outcomes increases as socioeconomic status decreases.[13] Moving from physical to subjective well-being, there is now reliable cross-national evidence that, other things being equal, the poorer one is, the less happy one is,[14] and the more likely one is to suffer from depression and anxiety.[15] This path, too, could be mediated by self-efficacy, as social psychology experiments show that lowering a person's sense of power or control leads to a decrease in that person's happiness and mood.[16]

The effect of poverty and powerlessness on physical and subjective well-being matters for those private sector actors who care about the productivity and job satisfaction of employees drawn from poor backgrounds. Even more economically relevant, however, is the fact that self-efficacy, and even happiness, are robustly associated with consequential decision-making patterns. They exhibit their effects partly via what is known as self-regulation: the ability to behave in line with future goals in the face of conflicting proximate goals.[17] Psychologists have known for a long time that the ability to resist the impulse to satisfy a present urge for the sake of a future benefit is connected to a range of positive outcomes later in life.[18] Bringing this to

bear on the link between self-efficacy and health behaviours, the more one believes one has power over one's conduct and future direction, the more one can engage in self-regulation, resisting the temptation to smoke, drink and eat unhealthy foods in the face of stress.[19] A process related to self regulation is also studied in behavioural economics, where researchers measure how much more one is willing to pay to get a product or good now, as opposed to receiving it after a period of time—a phenomenon known as 'temporal discounting'[20]. The more one privileges current goals over future goals, the more one will pay a premium to get something now versus later.

A set of studies by Priyanka Joshi and Nathanael Fast suggest that self-efficacy, operationalized as a personal sense of power, has a causal effect on temporal discounting. Participants were randomly assigned to experience a low sense of power, either by being given a low power role in an online game, or writing about a time in which someone else had control over them. Those feeling low in power subsequently discounted the future more than those feeling high in powerThe same authors found that those who experience a generally high sense of power or control in the workplace are the ones most likely to put money away as savings.[21] Other studies in this research field show that the less powerful one feels, the less one is likely to focus on one's goals,[22] to believe one can attain them,[23] and to take the actions needed in order to achieve them.[24] A similar pattern holds for subjective well-being: Laboratory[25] and field[26] experiments have shown that the worse one feels, the more one discounts the future, to the point of interfering with daily economic tasks.

In sum, there is a body of evidence, only now being integrated across different fields, suggesting that being poor, and seeing oneself as a lot worse off than others, reduces one's sense that one's life outcomes are under one's control. This diminishment in perceptions of self-efficacy in turn drives down one's likelihood of holding off on present temptations for the sake of achieving future goals. The result is that not only are those on very low incomes unhealthier and unhappier on average, they are also more likely to make decisions that harm their chances of long term success. Indeed, evidence that the link between poverty and self-efficacy matters for economic outcomes comes from the finding that a one standard deviation decrease in efficacy, as measured by the locus of control scale, was associated with a 6.7 percent wage decrease in a longitudinal sample representative of the United States population.[27]

Poverty is stressful

Life in poverty is life in the presence of a significant number of stressors: the discomforts of living without adequate food, shelter and healthcare, the depressing sense of being at the bottom of society, and the constantly salient absence of control over one's environment and what happens in one's life. Looking at how stress manifests in the body, through hormones and neurotransmitters such as the cortisol and norepinephrine, both measurable through saliva, can reveal how chronic exposure to it impacts economic decision-making.

There is now an increasing body of evidence that poverty is related to the physiological experience of stress. Analyzing daily cortisol profiles in 781 middle-aged adults in the United States, Cohen et al.[28] found that lower income and education were associated with higher evening cortisol levels, indicative of chronic stress. In American sample of 193 adults of various ages, the authors found that persons with low SES, as measured by income and education, had higher overall levels of cortisol, epinephrine, and (marginally) norepinephrine.[29] Similarly, Li et al. found a robust relationship between cortisol levels and lifetime socioeconomic position in a large British sample, in which poorer individuals showed higher overall cortisol levels, as well as more abnormal diurnal patterns. Similar results have been obtained in infants and children, revealing that those from low-income families have greater

amounts of cortisol[30] and epinephrine.[31] The relationship between parental SES and children's cortisol levels gets weaker as children get older and closer to leaving the home.[32]

In additional to correlational data on the link between poverty and cortisol, studies have tested and found support for the causal role of poverty in driving up cortisol levels. Arnetz et al. reported that cortisol levels were significantly higher in Swedish blue-collar workers who had just lost their jobs, where such job loss was due to a factor that was unlikely itself to be affected by cortisol: plant closures.[33] Studying the effects of the government-led Mexican Oportunidades program, Fernald and Gunnar showed that children who went through the program exhibited lower baseline cortisol levels than an otherwise similar group of children who did not.[34] Finally, Haushofer and Fehr asked whether negative income shocks to Kenyan farmers, which were randomly generated by periods of little rainfall, lead to increases in cortisol levels. Combining a household-specific measure of rainfall (based on satellite data) and salivary cortisol samples, they found that farmers have higher levels of cortisol, and higher self-reported worry, when it does not rain and therefore crops are likely to fail.[35]

Elevated cortisol is a sign that the body is ready to respond to threat: a physiological state beneficial for reacting to immediate harm, but physically wearing if chronically maintained over time.[36] There is also evidence that it impacts economic decision-making. For example, it has been shown that stress, induced by anticipating giving or actually giving a speech, leads to impairment in an economic decision-making game that involves picking up on patterns of gains and losses in order to win money.[37] Porcelli and Delgado also found that inducing stress by asking participants to hold their hands in ice cold water caused participants to be more sensitive in their risk preferences to whether they were framed in terms of losses or gains: a pattern suboptimal for economic outcomes.[38]

A recent study by Haushofer and Fehr directly tested the effect of stress hormones on economic choice by orally administering 10mg hydrocortisone, a chemical which raises cortisol levels in the brain, and thus mimics some of the neurobiological effects of stress. Fifteen minutes after drug administration, those participants who had received hydrocortisone showed an increase in temporal discounting as compared to those who received a placebo.[39] That is, those experimentally exposed to the neurobiological markers of stress valued the present more highly relative to the future, suggesting that stress drives up the temporally short-sighted behaviour akin to that observed in poverty.

How does the link between poverty and stress interact with that between poverty and self-efficacy? Early stress research has shown that lack of controllability in terminating an aversive stimulus is one of the most important contributors to stress, and leads to symptoms of depression as well as learned helplessness.[40] More recently, Carney et al. found evidence that assuming a low power pose, involving constricted (versus expansive) body postures, increased levels of cortisol, while also decreasing levels of testosterone. Participants in the 'low power' condition subsequently exhibited increased levels of risk aversion, in that they were more likely to choose a safe outcome over a gamble of comparable expected value.[41] Thus, powerlessness, a proxy for the low self-efficacy characteristic of life in poverty, may lead to an increase in risk aversion and its associated increase in cortisol levels, a combination which results in lower average economic payoffs in the long run.

Poverty is distracting

Considering the combination of stress and lack of control associated with poverty, it is clear that that the income-poor have a lot on their minds. That a person living in poverty must exspend substantial time and effort thinking about how to get a comfortable night's sleep, or

how to earn money to feed a family, means that they have less mental space and energy to devote to the decisions the private sector may demand of them.

The notion that the 'mental bandwidth' of the poor is highly constrained was first introduced by behavioural economists trying to understand the large set of suboptimal decisions associated with poverty in a developed world context. Bertrand, Mullainathan and Shafir point to the fact that 10 percent of United States households (the great majority of which are poor) have no bank accounts, depriving them of beneficial lending and savings options, while uptake for cash transfer welfare programmes hovers at only 45-60 percent of eligible citizens.[42] These researchers advocate understanding such behavioural patterns as resulting from cognitive pitfalls present in any of us, but exacerbated, both in their prevalence and consequences, by the distracting nature of life in poverty. We have already discussed one such harmful common pitfall: a bias toward the present, such that the same good is valued more strongly if received immediately than if received at some stage in the future, even if its objective value in the future is increased. Other well-documented, quasi-universal cognitive heuristics and biases include valuing something more when it is given up than when it is gained (loss aversion[43]), an inclination to prefer default options (status quo bias[44]) an overestimation of the accuracy of one's judgments and the ability to control one's behaviour (overconfidence[45]), and a tendency to respond to decisional conflict, in which one is faced with many desirable options, by refraining from making any decision at all.[46] For those living in poverty, such cognitive habits might translate into a decision not to move towns to gain employment for fear of loss of social ties, to take out an expensive loan one is unlikely to be able to repay, or not to invest in a retirement plan that involves a choice between many fund options.[47] Thus, decision-making habits that affect all of us, many of which depart from probabilistic utility-maximization,[48] are more noticeable and more consequential when made by people who have less decisional slack in the first place.[49]

The 'irony of poverty' is that just as constrained resources increase the costs associated with making bad decisions, so resource constraint actually increases the likelihood of making such bad decisions in the first place.[50] In addition to the effects of stress and lack of control on decision-making, we know that those with a greater amount of things on their mind, what is termed 'cognitive load', are more likely to succumb to heuristics and biases that aren't always optimal.[51] Consistent with the link to life in poverty, the observed incidence of such cognitive pitfalls does vary according to variables such as education and socioeconomic status.[52] For example, loss aversion is found to be more extreme among the less educated,[53] while temporal discounting is consistently observed to be more steep among those with low income or educational attainment.[54] In examining the potentially greater susceptibility of the poor to economically-consequential decision-making biases, Pete Lunn and Seán Lyons highlight how a difference in magnitude of bias will in turn interact with the informational and social environment along socioeconomic lines. Whereas the wealthy may have plenty of time, technological capacity, and educational social networks with which to find out more information that might counter a cognitive heuristic, the poor are often forced to make decisions in a rushed and information-poor setting, in which misleading heuristics generally thrive.[55]

Again moving from correlational to causal empirical techniques, behavioural economists have begun demonstrating such decisional patterns among middle class research participants who are experimentally deprived of resources.[56] Anuj Shah and colleagues had American college undergraduates and online participants play a game in which a random subset of players had very little time in each round, and all players had the opportunity to 'borrow' time from future rounds, at varying rates of 'interest'. Those given the least amount of a resource—in this case, time–borrowed a larger proportion of their budget, and at higher rates, than those given more of that resource. Such excessive borrowing led to worse performance among resource-poor

participants than if they had engaged in little or no borrowing. The authors explain the decision among 'poor' participants to borrow time from future rounds by appeal to a tendency to shift attention toward a limiting resource in the moment, and thus to be distracted from the overall goal of the game.[57]

The consumption of limited mental bandwidth by the concerns of life in poverty may affect economic decisions via interference with executive functioning: that set of high-level cognitive processes which serve to monitor and control thought and action.[58] Executive functions include attentional flexibility and goal focus, precisely the mechanisms needed to overcome decisional conflict,[59] and impaired by scarcity in the studies by Shah and colleagues. It also directs skills such as planning and self-regulation, both of which feed into self-control, and are necessary in order to resist the urge to accept an immediate benefit where a greater benefit is on its way.[60] Indeed, performance on tests of executive function is inversely correlated with susceptibility to decision-making biases.[61] Exploring the role of executive functioning in the poverty mindset, a study by Mani, Mullainathan, Shafir, and Zhao measured inhibitory control—the ability to resist a dominant response in favour of a correct, but less intuitive response—in American participants of various incomes, following exposure to a task of varying financial difficulty. The researchers approached shoppers in a New Jersey mall and asked them to contemplate a life problem (such as repairing a car) involving a financial need that was either small or large, before completing a measure of inhibitory control and of abstract reasoning. Those with low incomes performed as well as those with high incomes when the previous task involved a small financial need, and thus did not create cognitive load for either group. But the low income group performed much worse than the high income group when the previous task involved contemplating a large mandatory expense—a source of cognitive load for them alone A second study presented such quasi-causal effects in a field setting, showing that Indian sugar-cane farmers performed better on similar measures of cognitive functioning when they had been paid after a sugar cane harvest, as opposed to right beforehand, when they were at their most financially constrained. The authors reason that the distraction and cognitive strain of resource scarcity take up limited cognitive resources, impairing poor people's ability to process and manipulate information as well as they could if they were free from poverty.[62]

Finally, recent evidence by Sheehy-Skeffington and Sidanius implies that the causal effect of poverty on cognitive impairments occurs not just because of resource scarcity, but because of relative financial deprivation. In three studies, participants drawn from American college, online, and low income samples, who were led to feel they were at the bottom of the socioeconomic ladder, performed worse in three measures of executive functioning than did those led to feel they were near the top of the ladder.[63]

In sum, whether kicking off with absolute or relative resource scarcity, and operating via lack of control, stress, or consumption of mental bandwdth, it seems that the situation of poverty limits people's ability to perform at their cognitive best. Private sector employers would do well to note that the many distractions characteristic of life as a low income worker will likely lead to failures in attention to daily work tasks, and, unless taken into account, drive down performance and chances of job advancement.[64]

Poverty narrows focus

In considering the pattern of thinking and decision making that is reliably associated with life in poverty, it is clear that being poor does not mean being irrational. On the contrary, the psychological processes outlined above can be understood as rational responses to a stressful situation that imposes considerable cognitive constraints. As one way of gaining a deeper

understanding of the adaptive nature of the poverty mindset, Sheehy-Skeffington[65] has proposed that poverty diminishes one's level of cognitive construal.

To researchers in the field of social cognition, cognitive construal is a general term used to capture the level of abstraction used in information processing. The same set of cognitive stimuli can be thought of in low-level, concrete terms, or in high-level, abstract terms. Thus, the behaviour of making a list of tasks can be framed in terms of the concrete action of 'writing things down on a page', or the more abstract goal of 'getting organized'. Early articulations of this construct claim that engaging a low-level mindset is linked to having a low level of personal agency, being more likely to behave in an impulsive way and more prone to have everyday actions disrupted by situational distractions.[66] More recent theorizing allows for the beneficial potential of a low level of cognitive construal, describing how it prepares one to plan the details of how one will carry out a particular action or goal, as opposed to spending time thinking about why one is engaged in it. Construal level theory outlines how low-level, concrete thinking causes one to focus on stimuli that are proximate on all dimensions of psychological distance: spaces that are close by rather than far away, people who are socially close rather than socially distant, events that are actual rather than hypothetical, and things that are happening now versus sometime in the future.[67]

It may be the case that being in a situation of scarce resources triggers the lowering of one's level of cognitive construal, and that this offers a mechanistic understanding of some of the decision-making patterns of the poor. In particular, the bias toward the present that appears again and again in investigations of low income decision-making may be the result of a general shift in psychological distance, of which proximity in the temporal dimension is just one information-processing outcome. If evidence were to be found that experimental simulations of absolute or relative resource scarcity lead not only to a focus on events that are temporally proximate, but also on people who are socially close and spaces that are geographically near, then many aspects of the poverty mindset might be understood under the umbrella of cognitive construal.

It makes sense that a focus on the here and now might be triggered by such threatening cues as that there are few resources to go around, or that one is low in the status hierarchy of one's community. This focus on the here and now enables one to channel one's physical and psychological resources to avoiding immediate threats and meeting urgent needs, as opposed to wasting time and energy investing in a future about which one has no guarantees. Suggestive evidence for the effect of such environmental cues is found in a recent experiment in which Chinese participants were exposed to images of poverty-related (versus affluence-related) scenes, and subsequently increased their bias toward immediate (as opposed to delayed) rewards.[68] For those chronically living in poverty, it may be the case that the privileging of current over future goals is the result of cues not only in their current life stage, but also in the environment in which they grew up. Indeed, there is a stream of research in evolutionary biology focusing on how individual differences in enduring tendencies to privilege immediate over delayed goals are the result of broad changes in self-regulatory strategy that are set in youth, when the body and brain calibrate according to cues as to the resources and stability of the environment.[69]

Seen through the lens of adaptive responses, the manifestation of the poverty mindset in terms of harmful decisions and behaviours is a result of the neglect of long term outcomes that is inherent in a lowered construal level.[70] Its benefits in terms of immediate survival are less evident in the modern day developing world than are its detrimental impacts on long term economic and health-related outcomes. Yet, there is evidence that such benefits exist: Mullainathan and Shafir outline how the poor reason better than the rich when it comes to

immediate money matters, remembering better the price of items, spotting more easily a case of poor value for money, and more consistently trading off time and effort to save money across different scenarios. Thus, understanding the poverty mindset in terms of underlying mechanisms such as construal level enables us to demystify a puzzling pattern of behaviours and decisions; to move from seeing it as irrational to seeing it as the application of rational shifts in psychological focus to an environment that punishes rather than rewards it.

Conclusion: Addressing enduring constraints on economic decision-making

We have summarized our description of the poverty mindset, as supported by an integration of evidence from behavioural economics with the neighbouring fields of psychology and public health, in Figure 1.

Figure 1. Cycle of poverty and decision-making
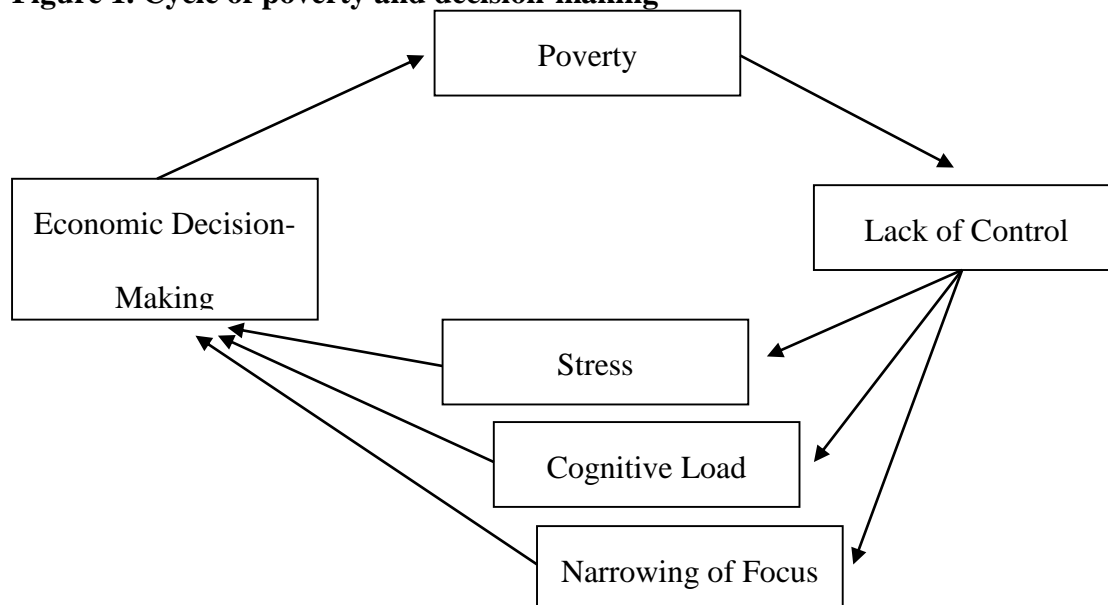
This starts with the observation that living with very little money means having very little control over one's environment and life outcomes, an objective lack of power that manifests as a subjective diminishment in perceived self-efficacy. This absence of control triggers three key characteristics of the poverty mindset, which in turn lead to economic decisions that are often detrimental to long term well-being. Chronic stress, and its resultant elevation in stress hormones, causes the privileging of current over future rewards. The consumption of the mind with resource-related concerns generates a form of cognitive load that distracts one from focusing on making the best decisions at hand, and increases vulnerability to a range of heuristics and biases. The lowering of cognitive construal causes one to focus on stimuli that are proximate on all levels of psychological distance, causing one to neglect goals that are abstract and in the future. The economic decisions that result may ward off pressing threats to survival and lead to immediate benefits. In the long run, however, they may exacerbate the very situation of poverty that caused them, giving real purchase to the notion of a poverty trap.

The conduct of empirical research in this area yields not only greater understanding, but an ability to use this understanding to help battle the persistence of poverty in the twenty-first century. In particular, a focus on the psychological mechanisms underlying economic behaviours associated with poverty can reveal points at which one can intervene to increase the incidence of decisions that enhance long term well-being. We can gain greater confidence in the causal role of such mechanisms, and thus the efficacy of potential interventions available

to both government and private sector actors, with the increasingly common employment of rigorous experimental techniques to study the psychology of poverty. The fruits of this approach are already evident in the work of the Abu-Latif Jameel Poverty Action Lab (J-PAL) at the Massachusetts Institute of Technology. Having conducted a range of field experiments with low-earning communities in East Africa and South Asia, the work of this research centre shows that successful policy interventions can only be designed once donors replace their assumptions about the behaviours of the poor with detailed evidence tailored to specific contexts.[71] This chapter has challenged at least two such assumptions about the personal economic decisions of those at the base of the pyramid: that such decisions are essentially defective, and in contrast, that they can be expected to be as optimal as if made in a decision-making vacuum free of constraints. Rather, the economic behaviours of those living in poverty are best understood by seeing how they share the same underlying psychology as those living in affluence, manifesting in a heavily constrained and present-focused mindset.

The private sector has a vital role to play in enhancing notable progress in the fight against global poverty, and in interrupting the cycles that continue to impede its outright eradication. We close with a set of specific recommendations for how the above insights from behavioural economics might inform this contribution:

- o Most obviously, alleviating resource scarcity, such as through cash transfers programs,[72] neutralizes its psychological consequences at their root.
- o Decreasing the number of important decisions to be made by the poor, by ensuring that many basic provisions are included in retail or employment contracts, mitigates the negative consequence of cognitive load.[73]
- o Taking an empowerment approach to the design and structure of workplace tasks and performance feedback can increase experiences of self-efficacy at work for employees at all income levels.
- o Conducting economic interactions with the poor in a way that allows for high levels of autonomy can increase daily experiences of self-efficacy in the marketplace.
- o Creating a central space for local decision-making and fair trading practices in economic transactions with suppliers from poor areas increases community-level efficacy.
- o Putting in place workplace incentive, monitoring, and grievance processes that are employee-centred can buffer and reduce stress, in an arena where it is often exacerbated.
- o Provision of adequate breaks and quality and variety in tasks, along with counselling programs and support groups, can mitigate job-induced stress.
- o Provision of support services such as on-site childcare and salaried leave for family illness can reduce sources of home-related cognitive load, and the distraction that comes with them.
- o Designing employee and product communications that are clear and concise makes them accessible to those with limited cognitive resources.
- o Instantiating limits on the breadth of the distribution of employee remuneration precludes stark intra-organizational status comparisons.[74]
- o Workplace activities or advertising campaigns can be designed to increase the focus on future goals and outcomes, such as through framing of messages.
- o Community- or work-based financial skills training can provide the knowledge and information needed to focus spending and saving decisions on long-term goals.
- o Employee goal-setting and future focus can be improved by creating professional development schemes and viable advancement opportunities for workers at all

levels.

- o Savings schemes or advertising for future-focused products can be designed so as to create the easiest cognitive route to the optimal decision, thereby bringing behaviour in line with future goals[75].
- o Ensuring that economic interactions and employment systems offer certainty and security in outcomes can decrease the stress of possible job loss or irregular income, and provide environmental cues that trigger elevation in self-efficacy and cognitive construal.
- o Appreciating the greater cognitive performance of the poor on present-focused or resource-related tasks can create the grounds for reverse innovation: the globalisation of innovations arising from the need to achieve goals in environments with extremely limited money, infrastructure, and electricity.[76]

Notes

[1] Seeman 2008.
[2] Rotter 1966.
[3] Pearlin and Schooler 1978.
[4] Bandura 1977, 2001.
[5] Gecas, 1989; Lachman and Weaver, 1998.
[6] Mirowsky and Ross 1986; see also Seeman (2008).
[7] Haushofer and Fehr 2014.
[8] Sheehy-Skeffington and Sidanius 2014a.
[9] Bandura 2001; Legander and Kraft 2003; McAuley, Lox and Duncan 1993; Seeman and Seeman 1983.
[10] Adler and Rehkopf 2008.
[11] Bobak and others 2000; Johnson and Kruger 2005.
[12] Bobak and others 2000; Seeman 2008.
[13] Lachman and Weaver 1998.
[14] Haushofer and Fehr 2014.
[15] Lund and others 2010.
[16] Anderson and Berdahl 2002.
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[22] Keltner, Gruenfeld and Anderson 2003.
[23] Anderson and Galinsky 2006.
[24] Galinsky, Gruenfeld and Magee 2003.
[25] Ifcher and Zarghamee 2011; Lerner, Li and Weber 2013.
[26] Bolton and others 2003.
[27] Osborne Groves 2005.
[28] Cohen and others 2006.
[29] Cohen, Doyle and Baum 2006.
[30] Lupien and others 2000; Saridjan and others 2010.
[31] Evans and English 2002.
[32] Lupien and others 2000; see also Chen and others 2010.
[33] Arnetz and others 1991.
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[43] Tversky and Kahneman 1991.
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[45] Ficshhoff, Slovic, and Lichtenstein 1977.
[46] Botti and Iyengar 2006; see also Scheibehenner, Greifeneder and Todd 2010.
[47] Iyengar, Jiang and Huberman 2004; see also Camerer 2005.
[48] Kahneman and Tversky 2000.
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[52] Lunn and Lyons 2010.
[53] Gächter, Johnson and Hermann 2007; Booij, van Praag and van de Kuilen 2007.
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[59] Botvinick 2007.
[60] Bickel and Yi 2008; Olson and others 2007.
[61] de Bruin, Parker and Fischoff 2007.
[62] Mani and others 2013.
[63] Sheehy-Skeffington and Sidanius 2014b; see also Smith and others (2008) for the damaging effect of low social power on executive functioning.
[64] Banerjee and Mullainathan 2008.
[65] Sheehy-Skeffington, in preparation.
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[67] Liberman and Trope 1988; for a review, see Trope and Liberman 2010
[68] Liu and others 2012.
[69] Kaplan and Gangestad 2005.
[70] Sheehy-Skeffington, in preparation.
[71] See Banerjee and Duflo 2011 for a summary.
[72] See Haushofer and Fehr 2014 for the effectiveness of cash transfer programmes.
[73] See Duflo 2012.
[74] See Frank 1985; Wilkinson and Pickett 2009.
[75] See Banerjee & Duflo, 2011; Thaler & Sunstein, 2008;
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Global health

Malcolm MacLachlan
Eilish McAuliffe
Centre for Global Health, Trinity College Dublin

Abstract

This chapter sets out the case for greater engagement of the private sector in addressing the challenges of global health in low income countries. We outline the origins of the global health movement and the recent revolution in thinking which recognizes the pre-eminence of psychosocial factors in predisposing, precipitating or perpetuating a swath of communicable and non-communicable diseases, and disabilities. We then review some approaches to overcoming barriers to the private sector becoming more engaged in healthcare. We consider a range of supply side options, focusing on three in particular; enhanced occupational health services, the use of new healthcare staff types and the way in which new technologies can be transformative for poor and marginalised groups. Each of these contribute to health systems strengthening, addressing many of the limitations of the narrower 'vertical' approach to healthcare delivery which has often been pursued in the past. They can contribute to making the mechanisms of healthcare delivery more resilient as well as expanding the reach and volume of health services in resource poor settings. We also consider demand side options paying particular attention to the need for a healthy workforce to stimulate social and economic development; a variety of health partnerships that can make investment in this area more attractive and less burdensome; whilst taking account of the growing number of people living with chronic diseases and disabilities in low-income countries, who constitute a significant market for healthcare providers. Investment in health not only responds to demand but also creates new demand and opportunities for private sector development. We conclude that by considering psychosocial aspects of demand and supply for health in low income countries, we can facilitate greater private sector engagement in a more effective and sustainable manner.

Global health

To appreciate the perspective of global health it is useful to compare it with public health and international health. Public health in Europe primarily developed in response to the need to address infectious epidemics, poor sanitation and living conditions, particularly associated with greater industrialisation. The focus was particularly on community interventions and the national structures needed to sustain them. International health, while often adopting a similar ethos and range of techniques, was particularly concerned with death and disease, especially "tropical diseases" in foreign countries; and it thrived during the late 19th Century as a concomitant of European Colonization..[1]

Global health's reach combines the local with the international, but also goes further; recognising that all diseases, disorders and disabilities have commonalities across the globe, and being patterned by social factors just as much, or even more, than by biological factors. Global health aspires to cooperation at the international level, rather than bi-laterally between governments. Global health places particular significance on the notion of 'the right to health for all'. In order to achieve this it prioritizes equitable access to health (people should be able to access health services that are appropriate to their needs, with equivalent ease.[2] Another distinguishing feature of global health is perhaps the range of disciplines that can make a legitimate claim for their relevance to global health; in particular the breadth of social sciences disciplines engaged in addressing the broader social determinants of health.[3] In addressing how globalization affects health; global health is concerned with a wide range of complex and embedded problems, such as increased viral mobility with more people travelling greater distances; the increased mobility of health workers being drawn towards rich countries with relatively less health burden and away from poorer countries with a relatively greater health burden; to the impact of social inequality and absolute poverty on health and access to healthcare. Although the global health agenda clearly has relevance to all countries, its

particular concern with the right to health and equity of access, means that much of its focus is on addressing the inequities and gaps in service in low and middle income countries and with marginalized and vulnerable groups. The need for healthcare amongst this 'bottom billion' is of such a scale that it requires a concerted effort by all who have something to contribute. Health is an asset that drives development and economic and social growth, and is therefore of interest to all actors, whether in the public or private sector. No country maintains the health of its population by relying purely on public resources and the best health systems are those that combine public and private funding and provision. The potential for private sector contribution to health in resource poor settings is largely unexplored and under-appreciated, yet substantial.

The social determinants of health

The landmark WHO Commission on Social Determinants of Health (2008) report: "Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health" has establish the veracity of an understanding of health problems that is much more grounded in social issues, as the ultimate causes of proximate diseases, disorders and disabilities. The report also championed the idea that a society can – and should – be judged by "how fairly health is distributed across the social spectrum" and the extent to which protection from disadvantage is provided as a result of poor health. Three principles of action were identified in the report: 1) to improve the conditions of daily life – the circumstances in which people are born, grow, live, work, and age; 2) to tackle the inequitable distribution of power, money, and resources – seen as the structural drivers of the conditions of daily life, at the local, national and global levels; 3) to increasing resources to allow better measurement of the problem and evaluation of actions taken (expanding the evidence base); and to develop a workforce trained in the social determinants of health, and raise public awareness about the social determinants of health.

The more 'socialized' view of health, one calling for greater social justice and equity in resource distribution in poor countries, does not seem to be integrating with the private sector in obvious ways. Yet a wide range of private sector initiatives are active in low income countries.

Furthermore the Rio Declaration (2011), a high-level declaration of intent, following from the 'Closing the Gap' Report, included a commitment to "Foster collaboration with the private sector, safeguarding against conflict of interests, to contribute to achieving health through policies and actions on social determinants of health". In order to foster such collaboration, it is important to first explore the healthcare challenges and proposed strategies for addressing these in resource poor countries in the next decade.

Health and sustainable development

Anticipating the post-2015 agenda for international development is the aspiration to "Achieve Health and Wellbeing at All Ages."[4] The report recommends "Universal health coverage, at every stage of life, is to be achieved by strengthening primary health services and by promoting the inter-sectoral nature of health and wellbeing". The report highlights reproductive and mental health as areas of particular focus. It also stresses that all people should receive quality services without financial barriers prohibiting access for the poor. It is recommended that "Countries Implement policies to create enabling social conditions that promote the health of populations and help individuals make healthy and sustainable decisions related to their daily living."[5] These aims are to be achieved by adopting four key principles:

1. The "Life Course Approach" emphasizes health and well-being across the life span; recognising that people go 'in and out' of health and well-being, and that people with a range of conditions can and should be able to live well, into old age.
2. Adopting Universal Health Coverage (UHC) with primary health care being the priority; moving away from narrow vertical treatment programmes focusing on single diseases and instead developing horizontal programmes mindful of the need to strengthen health systems. The diverse challenges of insufficient human resources, essential medicines and nutrition must be addressed for this to be successful.
3. Action on a variety of determinants and dimensions of health should be taken through multi-sector initiatives; incorporating diverse stake holders, including government, civil society, private industry, media and academia.
4. Equity through models of financed protection, including models of subsidized healthcare. The focus here is on the protection of poor and socioeconomically disadvantaged groups; seeking to provide greater resources for those most deprived, in order to counter the higher healthcare costs associated with their greater burden of disease.

The Report recognises that health systems challenges as well as the socioeconomic inequities predispose, precipitate or perpetuate the health problems that vulnerable individuals and populations experience, and therefore these that are the major barriers for achieving health for all.[6] Overall there has however been progress in the health-related millennium development goals (MDGs); reducing the incidence of HIV/AIDs, TB and Malaria (MDG6), and reductions in child (MDG 4) and maternal (MDG 5) mortality. Also critical for improving health are the MDGs related to the building blocks of health and well-being, such as the empowerment of women (MDG 3), provision of primary education (MDG 2) and reducing hunger (MDG 1). However, the progress has not been uniformly good and, understandably those who have been easier to reach have been the greatest beneficiaries of improvements in health; while those who have been marginalised by society have benefited least. There must therefore be increased emphasis on strengthening health systems, not just to increase the numbers served, but also to reach the 'hard-to-reach.'[7] Reaching the 'hard-to-reach' does not necessarily sound like a very attractive proposition for the private sector. Some consideration of the risks associated with private sector involvement seems relevant here.

Risks of private sector involvement in health in low income settings

The Structural Adjustment Programmes (SAPs) of the 1980s were an attempt to introduce greater neo-liberalism into the development programmes of low-income countries. In the health sector this meant encouraging private service providers to step in when the State was prevented (by the conditions of the SAP loans) from providing subsidies to support basic healthcare. The results in some countries, like Zimbabwe, was a rapid rise in maternal mortality, as the private sector didn't necessarily invest in the market 'opportunities' that arose from State subsidies being withdrawn from maternal healthcare.[8]

Poverty Reduction Strategy Papers (PRSPs) replaced SAPs as the instruments to drive development in low-income countries. PRSP's set out a country's development plans and priorities over a 4 or 5 year period; while every low-income country has a PRSP, in some countries they have a different name but achieve the same aim; for instance in Malawi the PRSP is referred to as the Malawi Growth and Development Strategy (MGDS). International aid assistance to such countries is intended to be directed at achieving the MDGs through the mechanisms outlined in the PRSPs. These documents are in theory drawn up by governments, in consultation with other development partners; including civil society, bilateral and

multilateral donors, philanthropy and the private sector. Philanthropy may be considered a special case because it represents private-sector profits that are apparently directed towards social gain. At least on the surface philanthropy seems to be a 'gift' from the better off, to the worse off. However, philanthropy generally favours high-tech solutions (discovering new vaccines, for instance for HIV/AIDS) for health problems over approaches that favour addressing their social determinants, countering inequity or marginalisation or the more complex challenge of strengthening health systems; i.e actions that are now the consensus within the health sector and development community, regarding what is needed to counter the poor health of citizens in low-income countries. Indeed, it has even been argued that the 'big-business' weight of philanthropy has had an undue influence over national development policy in low income countries and has (often through leveraging government 'matched' funding commitments) directed funding away from more fundamental public health approaches towards high-tech biomedical science seen to be providing a clever technical solution to problems of health inequality. [9] Thus the "predominant paradigm continues to support a biotechnical/clinical health model that privileges pharmaceutical treatment of individual diseases."[10] To promote private sector engagement in the health sectors of poor countries without acknowledging the harm that has resulted from the actions of some pharmaceutical companies would be to turn away from a fundamental challenge.

Private sector involvement in low-income countries has a difficult past beyond which, it is in everyone's interest to move. This historic involvement can perhaps be described as 'extractive', be it in terms of mining, oil or pharmaceuticals. Because pharmaceuticals are more explicitly aligned with health, it is worth briefly noting some of the problems that have been created by the conduct of members of this industry. For example, Pfizer conducted trials of the drug Trovan (trovafloxacin) on children in Nigeria during a 1996 meningitis outbreak, allegedly without receiving adequate prior consent. Tragically, 11 children who participated in the trial died, and others were left with serious disabilities; although Pfizer has argued that this was due to the meningitis and not the drugs. Only in 2011 – did Pfizer settle out of court with the victims' families and established a Trust to manage payments.[11] There has been a perception that multinational companies may seek to conduct drug trials in poorer countries because their less sophisticated regulation offers a less restricted 'test-bed', a view which members of the pharmaceutical industry would of course dispute. There is a clear need for regulation that encourages organisations to develop or provide products in a responsible and ethical manner. Clearly companies also have an ethical and a commercial interest in producing reliable data from high quality trials that will be acceptable to regulators around the world.

Another example illustrates demand and supply factors and how the pharmaceutical industry has chosen to respond to these in the case of the HIV/AIDS epidemic in South Africa HIV positive people can be effectively treated – and their lives saved - with anti-retrovirals (ARVs). In the 2000s at the height of the South African HIV epidemic the pharmaceutical industry sought to keep the price of the ARVs high, despite rapidly increasing demand. While it may be argued that an increase in demand due to epidemic conditions could result in an increase in the cost of a product with limited supply-chains or production facilities, in the South African case alternative supply and production mechanisms appear not to have been the issue, The broader lesson to be learned is the need to develop partnerships between the private sector, government and civil society (who are often a vital part of the supply chain) which can respond to increased demands in an integrated way that addresses the bottom-line of each of the stake-holders. In response civil society organisations in South Africa, and beyond, launched a campaign to promote equitable access to ARVs and sought to invoke the provision in the Trade Related Intellectual Property Rights (TRIPS) agreement that allows for patents to be overridden in the case of a national health emergency. Other – indigenous - pharmaceutical companies had

indicated that they could make the same ARVs at a fraction of the price. Eventually the pharmaceutical companies conceded, though some suspect this was motivated less by humanitarian concerns than the prospect of losing profits if the South African government did declare a national health emergency and allow mass production of the drugs locally, at a much lower price. Again it is in the interest of all stakeholders that partnerships be developed that respect the social and commercial value of drug research and development; as well as supply chains and health systems that can support the maintenance of long-term drug supply to the poor, who have the greatest burden of disease.

These two examples serve as illustration of the risks and are not necessarily representative of the pharmaceutical or other private sector actors as a whole in the health field. But once bad practice – or even the perception of bad practice – is attributed to any organisation, the reputational damage can quickly spread within the industry.

Returning to the opportunities for private sector engagement, we give an example of a positive contribution from pharmaceutical companies. In 2012 some of the world's major pharmaceutical companies partnered with governments and leading global health organisations in order to donate drugs and scientific understanding to help control or wipe out 10 neglected tropical diseases by 2020. 14 billion doses of medicines will be given away by the end of this decade, in order to treat diseases such as Guinea worm disease, leprosy and sleeping sickness.[12] This sort of charitable behaviour is certainly praiseworthy and may well reflect a greater commitment to equity and social justice on behalf of some pharmaceutical companies, however it is not necessarily the most sustainable approach to providing vital medicines to the poor and marginalised. There also needs to be a strengthened health system to make the supply and delivery of treatments more efficient and effective. This is also recognised and addressed in the London Declaration 2013 regarding the donations to treat the 10 neglected tropical diseases. Addressing some of the systems-related barriers to healthcare can be done both from the supply and from the demand side.

Demand and supply barriers to healthcare in low income countries

Jacobs et al. (2012) systematically reviewed the literature to establish the major barriers for accessing health services in low-income Asian countries, and they partitioned these factors into availability, affordability, acceptability, and geographic accessibility. They then proposed supply and demand side factors that could address these issues. Some of these are relevant to our concern for how to encourage the private sector to engage with health in low-income settings.[13]

In terms of geographic accessibility services are often located far away from potential service users. This distance and dispersion requires service users to pay substantial costs of transport, and so there are real opportunity costs both in terms of time and money. We need to find ways in which services can be more broadly dispersed and which don't require lengthy or costly travel.

In terms of availability, health workers, drugs and equipment are generally insufficient to meet demands and there can be long waiting times to see staff who may be demotivated by lack of resources, poor professional support or little opportunities for their own advancement.[14] Sometimes health posts may not be staffed, and sometimes workers in the public sector may run private clinics or reduce the waiting times for those willing to pay "under the counter" fees.

This clearly then also relates to affordability and the reality that providing quality healthcare to poor and marginalised groups is often too expensive to rely on public taxes or insurance as the only source of funding.

The fourth barrier, acceptability, refers to both the characteristics of the health services offered and the attitudes and expectation of the potential service users. This could be cultural issues of acceptability of some services or personnel; fear of being in the same location as people with stigmatised conditions; or people with such conditions feeling that they will not be treated fairly by staff, or shunned by other service users.

While all of these are specific barriers or problems, they are also symptomatic of a system of healthcare delivery which is not fit for purpose. The way in which healthcare is 'supplied' in many low income contexts mimics models of healthcare delivery developed in high-income contexts, where, arguably, they are inefficient, making healthcare expensive and often with insufficient quality coverage of the poor. The solution to these barriers is not to 'fix' one and then another, but to redesign the approach using a systems perspective that recognises the reality and complexity of the problems such as a limited human resources pool, unequal distribution of resources, hugely varying population densities and inaccessible terrain. Improving and strengthening systems requires more than increasing the quantity of care delivered. Continuing to deliver care in ways that are not optimal for the context is not a solution – instead we need to re-imagine a better system of healthcare delivery. But this requires us to 'let go' of the idea that there is one 'right way' of doing it, or that the 'optimal way' should look something like 'our way'. This is psychologically difficult for planners, managers, clinicians and patients, because it requires moving away from a currently unobtainable but familiar idea of what a health system should look like and embracing unfamiliar ideas that may well challenge our own comfortable assumptions about the sort of qualifications and training necessary to provide specific interventions, or the role of communities in providing their own healthcare.

Some supply side opportunities for greater private sector engagement in healthcare in low income countries

A better supply side systems means markets can be reached more reliability, which means it becomes more realistic to provide large numbers of people with products at lower prices, making them more affordable. A review of all the possible supply side factors is beyond our scope here and so we highlight three particular issues: new staff types; new health technologies; and a new ethos in occupational health.

New health staff types

Resources in many low-income settings are insufficient to support scaling up the health workforce to the levels required to address population needs using the staffing configurations commonly used in high income countries.[15] An alternative is to move away from reliance on the traditional roles of 'doctor' and 'nurse'; and while accepting the reality of a reduced number of these traditional healthcare cadres, focusing on the pragmatic production of health workers with skill sets more focused on addressing a country's particular burden of disease.[16] Many poorer countries have now developed health systems that rely on so-called 'mid-level cadres', such as medical assistants, clinical officers and enrolled nurses (who have shorter lengths of training than doctors or registered nurses), to provide more equitable distribution of human health workers with context-specific skills.[17]

WHO (2008) has noted that over 100 different categories of mid-level workers have been used to provide health care, particularly to marginalised communities. The use of midlevel workers is increasing both in high- and low-income countries. This is often referred to as 'task shifting' where a range of tasks are shifted from a cadre of health workers who usually require a longer period of training (for instance, vaccinations being administered by medical doctors who have

extensive training across a broad range of specialties) to another group requiring shorter training to complete a specific range of tasks (for instance, enrolled nurses or healthcare assistants trained in health promotion and disease prevention, which includes vaccines administration). There is now good evidence for the clinical efficacy[18] and economic value[19] of mid-level cadres with most of this research being undertaken in the area of emergency obstetric care. For example, in Mozambique nurse midwives are now performing caesarean sections as well as all of the other tasks in emergency obstetric care. One of the challenges is therefore to establish the optimal configuration and the optimal methods to recruit, retain and support these cadres in order to build the capacity of health systems in low-income countries.[20]

Dubois and Singh (2009) suggest that we think less about staff types and more about staff skills: "in order to use human resources most effectively, health care organisations must consider a more systematic approach – one that accounts for factors beyond narrowly defined human resources management practices and includes organisational and institutional conditions."[21] Dubois and Singh also stress the importance of "skill management"; an organisations ability to optimise the use of its workforce, seeking to "optimise patients' outcomes while ensuring the most effective, flexible and cost-effective use of human resources."[22] Once again the critical issue is developing an effective over-all system, which may be comprised of different components in different contexts.

The twin development of new staff types and new health technologies present exciting opportunities to strengthen health systems; providing new types of healthcare delivery platforms and reaching populations previously marginalised, both geographically and socially.[23] From the perspective of healthcare investors, this means that there are now unprecedented opportunities to supply healthcare products to a vastly increased market of people who might benefit from them.

New health technologies

Health technologies can dramatically change individual's capabilities. For instance, ultrasound scans which once required travel to centralised clinics can now be provided through sensors linked to a laptop computer operated by one person in remote locations and the image transferred for diagnosis in the clinic. Health technologies are transforming health systems; this means that we need to think of healthcare being provided differently; not necessarily in terms of 'more' or 'less', or in terms of number of nurses and doctors per population; but in the system itself being reconfigured and redesigned. For instance, the operator of the mobile ultrasound scanning device needs to be able to distinguish between the presentation of a healthy well developing fetus, and a problem or high-risk pregnancy; they may also need to know how to transmit an image from their mobile laptop to a midwife or doctor for a specialist opinion; but they do not necessarily need to be trained in the full range of diagnostic skills themselves.

The current enthusiasm around mobile health (mHealth) has sparked international interest and large investment across the government, NGO, and private sectors alike. According to the International Telecommunications Union, so-called "developing" countries had over 4.5 billion mobile subscriptions in 2011, representing 76% of global subscriptions; similarly, 80% of rural communities across the globe have access to a mobile network.[24]. The potential to utilize this network to influence health is unlimited. For example, the field of non-communicable diseases has received relatively little funding, especially in low- and middle-income countries where infectious diseases have dominated health agendas. Due to the successes of economic development, family planning, maternal and child health programs, and HIV/AIDS, malaria and TB prevention and treatment efforts over the past 20 years, millions more people are living longer than ever. But with extended lifespans comes a rise in diseases

of lifestyle and aging. Non-communicable diseases are now the leading cause of death globally, accounting for 63% of global death in 2008[25] and the prevalence of NCDs is predicted to increase significantly over the next years. According to the global status report on NCD,[26] the top four killers are cardiovascular disease, cancers, diabetes and chronic lung disease. Mobile technology has the potential to play a critical role in increasing positive health behaviors in people at risk for non-communicable diseases (NCD) as well as reducing associated adverse events.

Among other things, mHealth has the potential to improve timely health data collection and transfer, allow for more efficient diagnosis and disease surveillance through strengthened health information systems; improve case-management, leading to enhanced quality of care; and improve working conditions, supervision and support of health workers, helping to address the severe shortage of skilled health workers in these contexts.[27]

An example of how this might be achieved is evident in an mHealth project is Sierra Leone that is a collaboration between an academic partner, an NGO and a private technology company. The project has trained community health workers (CHWs) to utilise a custom designed mobile application to collect health data, monitor health indicators and encourage women to attend health clinics for antenatal care and delivery as part of a timed and targeted counselling programme that contains 7 and 11 health education messages targeted at pregnant women and children's health respectively (7-11ttC) The app is an iteration of two existing, field-tested, open source applications including the Grameen Foundation's MOTECH (back-end) and Dimagi's CommCare (front-end). The MOTECH Suite will allow CHWs to view which households visits are due, to register pregnant women for 7-11ttC, to make emergency referrals to their affiliated health centre, to track their own progress, and to collect household data for transmission to the health facility to support clinical and managerial decision-making. This will happen through using the application as leverage to expedite three major processes: the registration process, the visits and services process, and the referral and counter-referral processes.

The MOTECH Suite has the potential to address many of the common human resources for health issues present among community-level health programmes. First, the application provides important job support through acting as a resource or job-aid for alternative, informally trained, cadres of health workers. It allows CHWs to better manage their tasks and the households that have been assigned to them; facilitates the registration process for pregnant women; provides important feedback and progress monitoring; and results in CHWs feeling more strongly connected to the health system. Moreover, it shortens the delay for emergency referrals to an affiliated health centre, and means that CHWs no longer have to travel long distances, under the weight of paper forms, to transmit data to the health facility and to support clinical and managerial decision-making. More importantly, when combined with a strong supportive management system, the introduction of technology has the potential to increase CHW job satisfaction, increase supervision, and ultimately contribute to CHW retention.[28]

New initiatives in occupational health

The World Health Organisation has developed a new framework to promote healthy workplaces.[29] It describes key avenues of influence in the workplace, the processes for influencing them and core principles of operation (see Figure 1). There are a range of reasons why corporations may want to create a healthy workforce and these can be captured under three broad themes. First, it is the 'right' thing to do from a moral point of view; employers are part of the ethical framework of society. Second, it is the 'legal' thing to do; with increased worker rights and international labour conventions, organisations that ignore or undermine workers'

health are open to litigation and media scrutiny, which may create negative publicity for the organisation. Third, it is the 'smart' think to do, as businesses that promote workers' health tend to be among the most successful over time.[30]

The proposed framework distinguishes between contributions that can be made in the psychological work environment (for instance, rewarding good performance, not tolerating bullying, recognising the need for work-life balance) as well as the physical work environment (for instance, avoiding toxic chemicals, installing good ventilation systems, wearing protective equipment where necessary). Personal health resources (such as a no-smoking environment, providing healthy food and fitness facilities) and the involvement of the community (perhaps through providing affordable primary healthcare to workers and their families or supporting literacy initiatives) are seen as the four key domains.

Within the framework there is also a process model and importantly, this is not a linear model suggesting an ideal end state, but a circular model, indicating that achieving a healthy workplace is a process of continuous improvement. This requires organisations to begin by mobilising, working though implementing and evaluating, furthering improvements and contributing to enhanced mobilisation. For all of this to work meaningfully and effectively requires the engagement of business leaders alongside the involvement of workers and their representatives (see Figure 1).

Figure 1: WHO Healthy Workplace Model
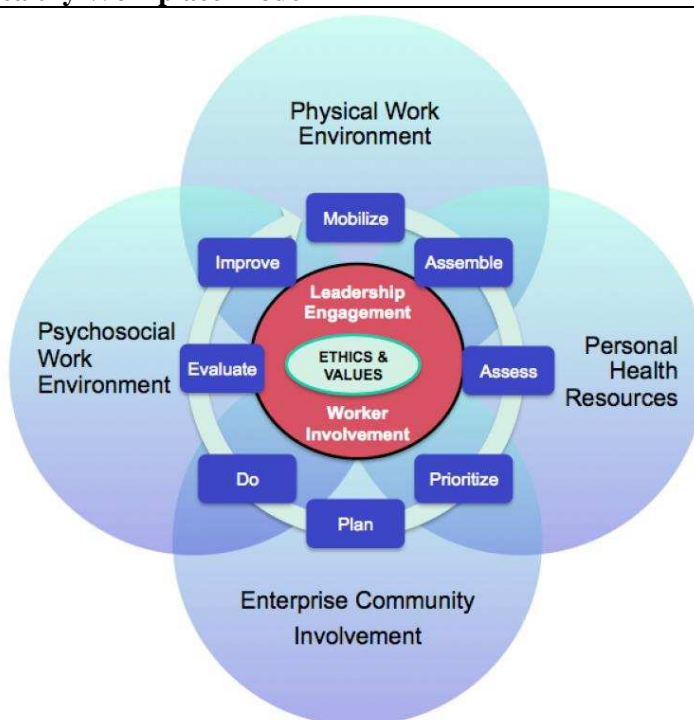
Source: Burton, J. (2010).

It is worth pondering the business case for a healthy workforce in low-income countries, because the perception that this sort of investment is too expensive or not necessary (perhaps because of less stringent regulation) may discourage companies from investing in their workers' health. A healthier workforce is a more productive one. Recent tragedies, such as the collapse of a building in Dhaka, Bangladesh, which killed over 1,000 textile workers and injured many more, strengthened concerns about worker exploitation in 'sweat shop' conditions. There is increasingly recognition that a move from a more combative worker's-right- to-health perspective to more inclusive public-health-for the community-perspective is desirable (Burton, 2010). This is a new ethos. There is also a clear business case for having

healthy workers, and this is summarised in Figure (2). Essentially, unhealthy or unsafe workplaces can cause stress and are associated with greater accidents and injuries, reduced organisational commitment, increased job dissatisfaction, depression and burnout; which can lead to lower productivity, absenteeism, disability, insurance claims, union action and high turnover rates. This in turn increases costs and may decrease both the quantity and quality of production. Unhealthy workplaces may also result in chronic and non-communicable diseases which have similar effects.

Figure 2:WHO Business Case for Health
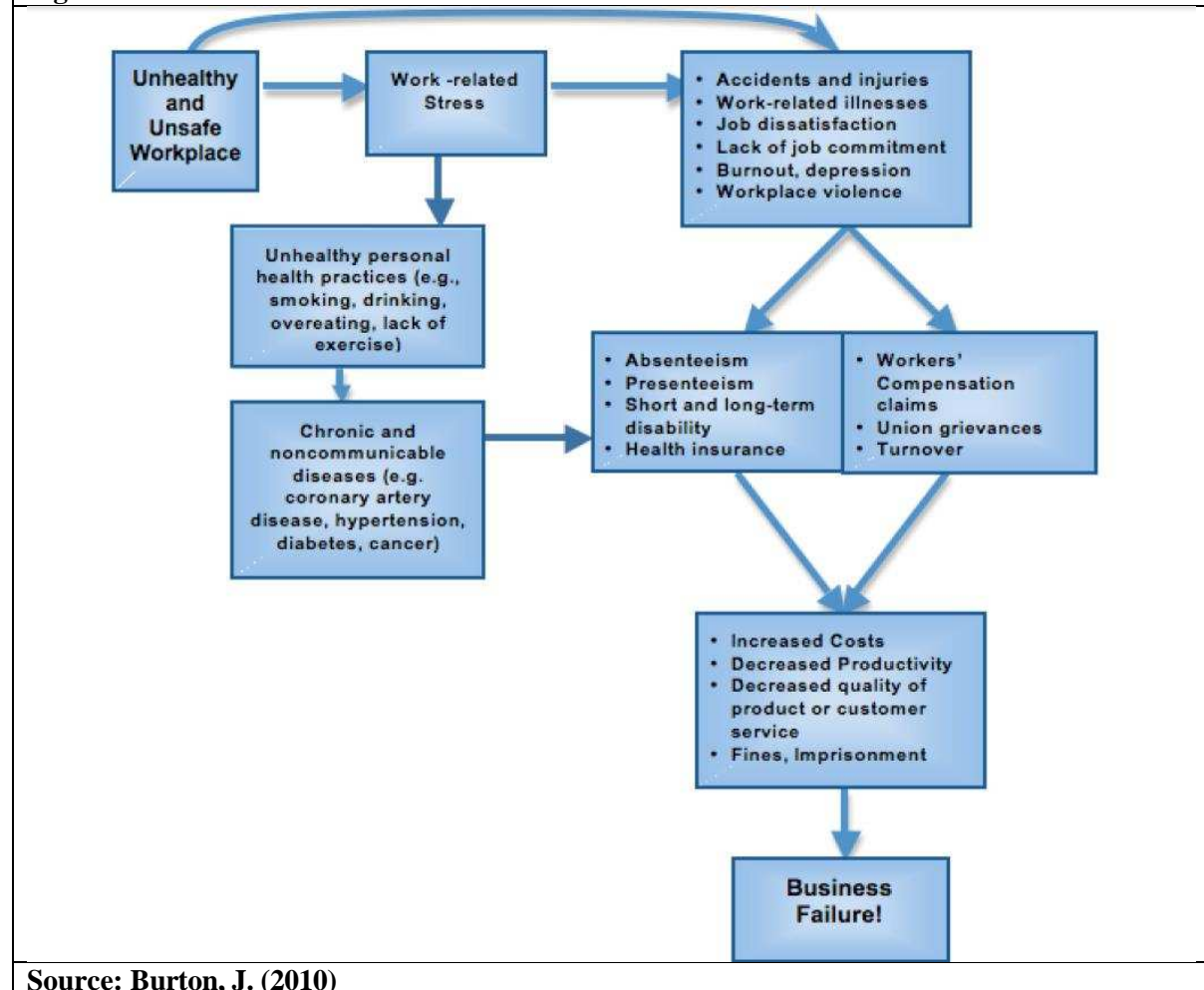
Source: Burton, J. (2010)

New initiatives in occupational health are progressing a much more positive vision of work and health in low income countries; recognising that competitiveness in the world economy requires a healthy workforce and that the workplace setting can be a major driver for achieving this. Some of the world's leading companies are embracing this ethos and indeed have been major driving forces behind it. Boxes 1 and 2 illustrate examples of good practices from the 'indigenous' Sudanese Kanana Sugar Company and from Dow Chemicals, a major transnational corporation.

Box 1: Kenana Sugar Company, Sudan

Kenana is the largest sugar production facility in the world (www.kenana.com). Its commercial success is one of the big success stories of Sudan. Situated 270km south of Khartoum, Kenana Sugar Company lies on the fertile and well watered plains that lie between the Blue Nile and the White Nile. However, Kenana is not just a sugar production complex, it is a town within a large agricultural estate, where the basic needs of the staff and their dependents are met by the company.

The occupational health services provided by Kenana are extensive, consisting of Kenana Referral Hospital at the production site; Kenana Health Centers in related Kenana's areas, Kenana Diagnostic Center, ,Kenana Commercial Pharmacies , Kenana Environmental Health promotion and Kenana Health Insurance scheme. This insurance scheme is funded by the company and salary contributions (x percent of salary).

Dr. Khalid Habbani, the Head of Occupational Health Services at Kenana, explains that the scheme offers free health services to the employees and their families. This includes worker's parents, wife (or up to four wives), sons up to 18 years old and daughters until they get married. This range is not only appropriate to the cultural setting of Kenana but also extensive and may cover 20 or more people. Employment at Kenana is highly valued not only because of its associated income but also because of the contribution Kenana makes to workers families and therefore the community.

Kenana patient statistics from November 2013 suggest that 3,434 people attended General Practitioner Clinics and 2,506 attended Health Centres (run by Clinical Officers - a mid-level cadre with 3-4 years training experience, providing most of the services a general practitioner normally provides); there were 470 people accommodated in-patient facilities (a 40% bed-occupancy rate); 251 attended for emergencies, 365 had ultrasounds, 295 had x-rays, 54 had ECGs, 241 received physiotherapy services and 395 received dental services. Kenana pharmacies supplied 7,966 patients. Although ophthalmology services were not available in November, 259 people received these in the previous month. These extensive services represent not just an investment in the well-being of the Kenana workers, but also in the Kenana community, spreading well-beyond immediate workers, as described above.

The Kenana Hospital recently updated and upgraded its facilities to address the increasing number of chronic and non-communicable diseases, providing more advanced and sophisticated hospital services at both secondary and tertiary (specialty) levels for Kenana workers and their relatives.

Kenana Health promotion Unit aims to promote a healthy Kenana town. For instance, it has participated in improving the overall White Nile State environment; through establishing a hydro-flume irrigation system that reduced the incidence of Malaria, Bilharsiasis and reduced water loss; also gaining more land for agriculture.

It is clear that not only is Kanana investing in health for the organisation's own strategic advantage of having healthy workers, but it is also contributing to community health more broadly. Having a job with Kanana means being able to provide access to good healthcare for an extended range of family members; strengthening identify with the company and also likely increasingly the likelihood that employees will think twice before moving to another company which may not offer these benefits.

Source: www.kenana.com

Box 2: Dow Chemicals

Dow Chemical is a big company: with annual sales of circa of $60 billion, Dow employs approximately 52 thousand people across 197 sites in 36 countries; producing some 5 thousand products based on specialty chemicals, advanced materials, agro-sciences and plastics. Its approach to inclusion and health are at the cutting edge of good workplace practices; and while Dow engages in philanthropic and Corporate Social Responsibility initiatives; its approach to inclusion and health are seen as clearly contributing to their 'bottom line'. Dow's Gerard van de Ven says that "we want our workforce to reflect the markets we sell in to, and that mean diversity". Dow believes that innovation is fuelled by the differing experiences, backgrounds and perspectives which a diverse workforce embodies. Dow also sees the success of the communities in which it works – while worthy in itself – to also be to the strategic advantage of the company, ensuring a pipeline of motivated and engaged workers.

Dow has developed three "Diversity Goals" to assess their progress in building and sustaining a diverse and inclusive culture:

1. "To be the "Employer of Choice" in strategic markets where we recruit talent".
2. "To develop a workforce that reflects the populations we recruit from in the places we do business today and tomorrow. This includes, but is not limited to, ensuring that women, ethnic minorities in the U.S., people with disabilities and Asian citizens are represented in our leadership levels".
3. "To measure and contribute to creating a workplace characterized by respect and where people value diverse perspectives."

To oversee these goals Dow has established an Executive Network Council tasked with ensuring that their workforce "reflects a truly diverse and inclusive environment similar to our stakeholders, customers, and communities where we operate. The Council will meet regularly to review progress, examine ways to collaborate in these efforts, and remove barriers that could impact the successful accomplishment of this goal."

Dow's inclusive practices include partnering with a private company (Serasa Experian) to promote training and inclusion of people with disabilities in their workforce: A four-month training program prepares participants for the workforce, and also enhances and enriches their professional identities. Another workplace initiative (Equal & Out) promotes safe and equitable workplaces for lesbian, gay, bisexual and transgender (LGBT) people.

As well as promoting inclusive workplaces, Dow has also gone to lengths to ensure that their workforce is in good health. While again this is a worthy goal in itself, it is also seen as contributing to the 'bottom' line. The AIDS/HIV epidemic in Africa has taken and threatens millions of lives. Having a productive and reliable workforce that you can retain, requires that they are healthy, indeed, reliably healthy, and that they value your workplace. In South Africa Dow faced the prospect of a workforce that was suffering ill health, absence, and low productivity, much of it arising from HIV/AIDS.

Dr. Murray Coombs, is the Health Director for Middle East & Africa oversees the workplace HIV/AIDS program that has resulted in lower rates of new infections for Dow employees in Africa, and zero employee deaths from the disease for five years. This programme was awarded a "commendation" in the Workplace/Workforce Engagement category of the 2011 Business Action on Health Awards. Dr. Coombs credits the early commitment from Dow's top management as a critical factor in ensuring that there were few barriers in developing and launching the program. Dr Combs notes that challenges still remain: "Stigma is an issue that needs continual attention. Early detection and treatment have to be reinforced regularly", and of course such programmes require continual and reliable funding.

Dow has also used some of its own direct expertise in chemical engineering to help improve the characteristics of the Jaipur foot (www.jaipurfoot.com), a low-cost prosthetic foot developed in India and now used internationally. Down offers an example of good practice in health because it 1) has embraced the idea and practice of social inclusion, 2) has invested in the health, reliability and sustainability of its workforce, and 3) has looked to its own intrinsic strengths to identify how what it does can add value to some of the values it espouses – the improved Jaipur foot promotes health, wellbeing and social inclusion.

Source: www.dow.com

Some demand side opportunities for greater private sector engagement in healthcare in low income countries

There is clearly and increasing demand (market) for healthcare. In low-income countries this is shifting form acute infection diseases to non-communicable chronic diseases and disabilities; in effect to 'longer lasting' and therefore more reliable markets. With a plethora of public-private partnerships, we consider briefly the most ambitious of these; the Global Compact and how this relates to the burden of health. Initiatives such as the Global Compact constitute powerful incentives – demands – for providing healthcare to the 'bottom billion'.

Health as a good investment

While our focus in this chapter is on how barriers to Private Sector involvement in health in low-income contexts can be addressed, we also want to briefly consider the benefits of government investment in health, from an economic perspective. Government invests in a broad range of activities – health, education, protection, justice. One way of assessing the impact of these (and only one way!) is the multiplier effect that an investment of $1 has in stimulating further economic activity; the "return on investment" or "fiscal multiplier". In a study of 25 EU countries from 1995 to 2010, Reeves et al. (2013) reported that the average multiplier across all government departments was 1.61 (with 95% confidence intervals of 1.37 to 1.86). Health and Social Protection has above average multiplier effects; for government expenditure on health the multiplier effect was 4.3 (95% CI: 2.5 to 6.1), while on social protection it was 1.96 (CI 0.97-2.95). By contrast, it was 0.87 for Economic Affairs and -7.28 for Defence. Reeves et al. suggest that these different multiplier effects are primarily explained by the degree to which spending in different sectors can be absorbed into the domestic economy. In short, across a range of EU countries spending 1 Euro on health will create a further 4.3 Euro expenditure in the general economy. In fact, according to this research in Europe, expenditure on health seems to be a better way of growing the economy in general, rather than expenditure on economic affairs per se.

Clearly absorptive capacity of government investment may vary by type of government, level of average income, distribution of income, and a range of other contextual resources. In 2008 at a Global Development Network meeting one of us asked two leading economists in a Panel Discussion whether, to achieve economic growth they felt it was better to invest in the health sector or the economy, in low-income country contexts.[31] They both agreed it would be better to invest in the health sector – the multiplier effect would be greater in the health sectors of low-income countries. The idea of health being a good investment – both morally and economically – encourages common cause between Private and Public investments in health.

Chronic illness and disability

The increasing chronicity of disease and disability, and the call for greater commitment to addressing the surge in number of people surviving with chronic disease in low-income countries– Copenhagen Consensus 2012 – presents a much more attractive market for the private sector. Globally life expectancy has increased by around 3 months per year over the last 4 decades; while much of this is accounted for by reductions in child mortality, rates of adult mortality has also reduced – people are living longer.[32] Of the estimated 2.9 billion adults aged 30-69 in low and middle-income countries, approximately 40 million people a year die; 70% of whom from "non-communicable diseases"; from chronic illnesses. While there are clearly costs associated with the treatment of these illnesses, there are also the costs of loss of output. Indeed, over the period 2011-2030 the loss of output from the five major NCD

conditions (cancer, cardiovascular disease, chronic obstructive pulmonary disease, diabetes and mental health) is projected to be close to US$47 trillion worldwide; or around 5% of global GDP in 2010.[33]

We have argued that the increase in demand for healthcare requires innovative approaches to providing it, including leveraging some private funds into health systems strengthening; allowing policies, infrastructure and practices to be developed that will facilitate the provision of long-term healthcare for millions of people in low income countries. This approach contrasts with the psychology and economics of vertical programmes which has often characterised previous Private Sector Engagement.

One area of considerable opportunity for private sector development is in the production and supply of assistive technologies. The World Health Organisation's GATE (Global Initiative on Assistive Technologies) is motivated by recognition that there are approximately 1 billion people living with disability now and this is forecast to increase to around 1.4 billion by 2050.[34] The majority of these people – some 80% - live in low or middle income countries; where poverty and disability are a vicious circle of exclusion and limited means.[35] There are now 700 Million older people, and this number is projected to rise to 2 billion by 2050; at least 80% of them need assistive devices – some need more than one.[36] At present, it is estimated that there are around 1 billion assistive devices now, with nearly 3 billion being required by 2050.[37]

In low-income countries, only 5-15% people in need, can access assistive devices; constituting a huge unmet need for such devices.

AT (Assitive Technology) is the gateway to inclusion, allowing people with impairments arising from chronic disease and/or disabilities to realise their right to social inclusion and fuller participation in society; in short, AT is about fulfilling people's human rights. Importantly ATs can also enable their users to become net contributors to economic growth. This is symbolically very important, as one of the greatest barriers for people with disability is stigma and opportunities to counter such stigma are offered by AT.

Access to AT needs to be affordable, but the products also need to be quality products that are reliable and reasonably robust, given the environments that many of them will be used in. Filling the gap in assistive technology will require both products and services. This gap can only be addressed through partnership.

Engagement of the private sector in promoting health and well-being should not be seen as a trade-off between investing in a healthy workforce or seeking to exploit market opportunities; it can be both. Rather like tarmacking – where a machine lays the road which itself drives on – the provision of healthcare can both fulfil and stimulate demand.

New international ethos

There are many initiatives to promote private sector engagement in low-income countries. Here we review only one, the Global Compact, which is arguably the most ambitious and relevant to our interested here. The United Nations Secretary-General Ban Ki-moon, states that: "The Global Compact asks companies to embrace universal principles and to partner with the United Nations. It has grown to become a critical platform for the UN to engage effectively with enlightened global business." The 'compact' between private sector organisations and the United Nations, asks corporates to sign up to ten principles derived from existing international conventions and declarations covering human rights, labour, the environment and anti-

corruption. The UN Global Compact asks companies to embrace, support and enact, within their sphere of influence, the ten principles (see Table 1).The Global Compact has the potential of enticing corporates into a frame of positive practice and being given a stamp of approval through their association with the United Nations.

There are however criticisms of the Global Compact particularly because it is not a regulatory instrument. It is a forum for discussion, with a network of governments, companies, labour organisations and civil society organizations. However, even if companies sign up to the Global Compact it doesn't means that they companies are certified or that they have fulfilled the Compact's principles, rather merely that they agree to be part of the network. Until very recently, the Global Compact had no mechanism to sanction non-compliance with the principles, and corporation's continued participation did not require that they demonstrates progress. This led some to talk of corporates 'bluewashing'' (as in UN blue) their images[38] as well as accusations that the Global Compact does not address fundamental power imbalances that allow corporates to perpetuate inequalities.[39]

Table 1: The Ten Principles of the Global Compact
Human Rights: The Universal Declaration of Human Rights • Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and • Principle 2: make sure that they are not complicit in human rights abuses. **Labour:** The International Labour Organization's Declaration on Fundamental Principles and Rights at Work • Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; • Principle 4: the elimination of all forms of forced and compulsory labour; • Principle 5: the effective abolition of child labour; and • Principle 6: the elimination of discrimination in respect of employment and occupation. **Environment:** The Rio Declaration on Environment and Development • Principle 7: Businesses should support a precautionary approach to environmental challenges; • Principle 8: undertake initiatives to promote greater environmental responsibility; and • Principle 9: encourage the development and diffusion of environmentally friendly technologies. **Anti-Corruption:** The United Nations Convention Against Corruption • Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.
Source: www.unglobalcompact.org

Recently the Global Compact has sought to address these criticism by, for instance, expelling 107 companies in the latter half of 2013, because of their failure to communicate progress for at least two consecutive years. These 107 represent 2% of the 4,416 participants who were due to submit a Communication on Progress (COP) within the last six months of 2013. During this period 2,605 companies did submit a COP, with 180 of them achieving the Global Compact Advanced level, reflecting a greatly increased commitment to transparency, compared to the

first six months of the Global Compact's operation. New companies continue to join the Global Compact, with 707 companies joining the initiative from July through December 2013. The Global Compact Strategy for 2014-16 states that "The Global Compact will seek to improve the quality and quantity of partnerships by its participants to advance UN goals, to enhance the UN system's capacity to partner more effectively with the private sector, and to illustrate ways that the Business Engagement Architecture can contribute to the Post-2015 Development Agenda."

The aim of the Global Compact is to engage the private sector in a discourse about development which is different from those that have prevailed before. How to get powerful players to 'play differently' has been an implicit challenge within the domain of international development for decades.[40] The behaviour of the private sector, but also the donor community and civil society, has sometimes being characterised by self-interested dominance of development agendas, resulting in unjust 'developments' which undermine the capacity, and indeed the very identify of individuals, communities and whole countries.[41]

Without doubt those in privileged positions are often very reluctant to give up those positions and so it becomes difficult to 'bounce' large transnational corporations into positions radically different from those which may have led to their success. Clearly illegality should not be tolerated, but there is a distance between what is illegal and what is undesirable. Initiatives like the Global Compact seek to get organisations sign-up to a set of principles and then to examine how these principles should be incorporated into their own actions. This approach accords will with the idea of incremental improvement;[42] of moving in progressive smaller steps, rather than the large leaps of change that some would understandably call for. However, moving more incrementally also allows for the results to be more effectively incorporated into an organisation's practices and to meet with less resistance to change internally.

The approach of the Global Compact – as a sort of discussion forum for putting into practice good principles – could be strengthened by helping organisations identify how to get started on, or progress with, initiatives which achieve these ends. There are clearly several possible levels of entry, one of which is the policy level. Working with governments we have sought to get them to promote human rights and social inclusion in health policies by securing their passive support (often just informing them that we are doing it) to review their existing policies. Using a methodology called EquiFrame, a tool to evaluate and revise the extent to which human rights and social inclusion feature in health policies,[43] we have been able to review over 70 national, regional, international and donor policies; highlighting to government how they could improve these policies, or create new ones[44] and to bring them in line both with principles of the Global Compact and with some of the anticipated features of the forthcoming Sustainable Development Goals, such as social inclusion, which will form a central pillar in the post-2015 development agenda. While there is clearly a place for lobbying and pressure groups in this area, that has not been our approach; rather – like the Global Compact – we have tried to get governments to buy-in to the principles of human rights and policy inclusion in a rather abstract and non-threatening way; and then to highlight opportunities for them to enact these principles.

In 2013 the Government of Malawi launched its first National Health Policy, which was guided by our EquiFrame; and the Ministry of Health in Sudan has recently adopted EquiFrame to guide the country's future health policy developments. We envisage the possibility of a similar approach to the policies adopted by transnational corporations, where buying-in to the 10 Principles of the Global Compact could be facilitated by firstly assessing the match between these and the organisation's operating principles and policies and then monitoring and evaluating their successful implementation. We anticipate that this collaborative and partnering

approach to organisational change is likely to be most successful.[45] We do however suggest that where corporates behave illegally with regard to human rights, exclusionary or other destructive practices, legalistic and/or combative approaches may not only be necessary, but also more desirable; in that they can provide a public marker for other corporations to take note of.

Conclusion: Addressing content, context & process to overcome barriers

We have argued that encouraging the engagement of the private sector with the health of the 'bottom billion' is not simply a matter of doing more, or spreading it further. But rather, doing things differently, and in particular adopting a systems-perspective rather than attempting to break down one barrier at a time. The development of new health technologies can have profound effects both at the individual level and at the systems level. New technologies can change individual's capability to cope with tasks which they could not have competently managed before. But technology also has the potential to be transformative; to change the format of how we work, of how and what individuals contribute to a new type of system.

Change in healthcare will have to go along with change in the multitude of factors that interact with healthcare, and these include change in society, and the positions of individuals and professions within society. Health can be characterised as having upstream-midstream-downstream determinants, and each of these are strongly influenced by a plethora of psychosocial factors (see Figure 3).

Figure 3: Upstream, midstream, and downstream determinants of health requiring multisectoral action
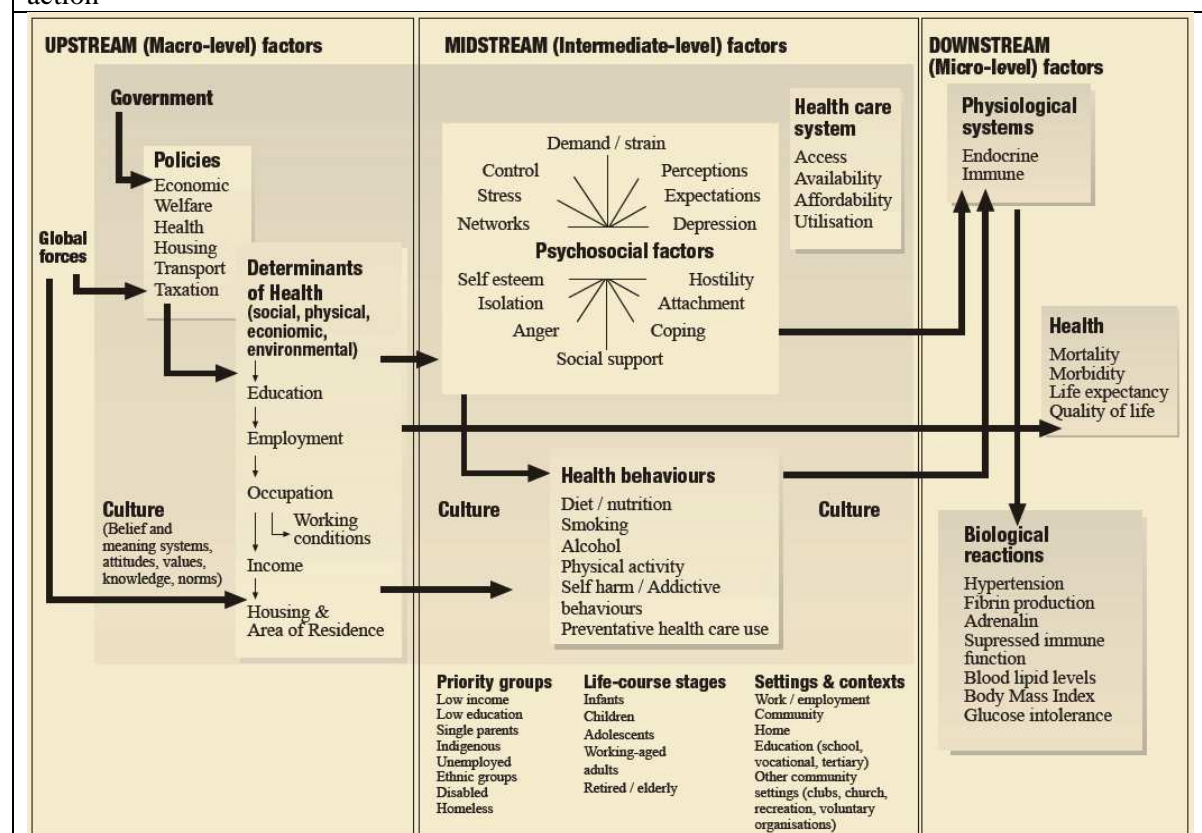
Source: Turrell, G. (1999). Queensland University of Technology, School of Public Health, Centre for Public Health Research.

Psychology is in a unique position to contribute to these sorts of change and development processes now needed because it can contribute to the three interlocking components required:[46] knowledge of what needs to be done (in terms of the specific content of health-related interventions), knowledge of how it should be done (in terms of individual and organisational behavioural processes most likely be effective) and knowledge of where interventions need to be modified to be effective (taking into account contextual factors such as poverty, culture, climate and how these affect the capacity for behaviour change.[47] The integration of different types of knowledge across different sectors and engaging with the complexities of health systems has been the greatest barrier, not just to private sector engagement, but to the effective capacity building of the sector as a whole, for decades. These perennial challenges now combine with new opportunities and a new ethos, positioning the private sector much more advantageously than ever before.

Notes

[1] MacLachlan 2014.
[2] MacLachlan and Mannan 2012.
[3] Koplan and others 2009.
[4] UN SDSN 2014.
[5] UN SDSN 2014
[6] UN SDSN 2014.
[7] MacLachlan, Khasnabis and Mannan 2012.
[8] McAuliffe and MacLachlan 2005.
[9] MacLean and MacLean 2009.
[10] MacLean and MacLean 2009, p. 361.
[11] Berkrot 2011.
[12] Kelland 2012.
[13] See also Peters and others (2008).
[14] McAuliffe and others 2010, 2013; Bradley and others 2013.
[15] Costin and others 2012
[16] Huddart and Picazo 2003.
[17] Buchan and Dal Poz 2003; McAuliffe and others 2013.
[18] Chilopora and others 2007; McCord and others 2009.
[19] Kruk and others 2007; MacLachlan 2012.
[20] McAuliffe and others 2009; MacLachlan, Mannan and McAuliffe 2011.
[21] Dubois and Singh 2009, p. 1.
[22] Dubois and Singh 2009, p. 13.
[23] MacLachlan 2012.
[24] Global Mobile Statistics
[25] WHO 2010.
[26] WHO 2010.
[27] Vallieres and others 2013.
[28] Vallieres and others 2013.
[29] Burton 2010.
[30] Neira 2013.
[31] MacLachlan and others 2010.
[32] Jha and others 2012.
[33] See Jha and others (2012) for a detailed discussion.
[34] WHO 2013.
[35] WHO 2011.
[36] Khasnabis 2013.
[37] WHO 2013.
[38] Bruno and Karliner 2000.
[39] Knight and Smith 2008.
[40] MacLachlan, Carr and McAuliffe 2010.
[41] MacLachlan, Carr and McAuliffe 2010.

[42] MacLachlan 1996.
[43] See also Amin and others (2011); Mannan and others (2014).
[44] MacLachlan and others 2012.
[45] Coughlan and McAuliffe 2003.
[46] MacLachlan 2009.
[47] MacLachlan 2006.

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Social barriers to poverty reduction

Heather E. Bullock
University of California – Santa Cruz

Poverty remains among the greatest social and economic problems facing contemporary society. Globally, more than one billion people live in extreme poverty.[1] Poverty is multifaceted extending beyond lack of adequate income to also include "human deprivation in knowledge, health, dignity and rights, obstacles to participation and lack of voice."[2] The damaging consequences of poverty and economic inequality are amply documented, yet comprehensive, sustained poverty alleviation efforts remain elusive. Indeed, poverty is often misperceived as being an inevitable consequence of economic progress, or an issue better left to the poor themselves to overcome through personal initiative.

Social barriers to reducing poverty, although often overlooked, are crucial to transformative change efforts. They include a complex mix of attitudes, beliefs, and behaviours that devalue people who are poor. Individual-focused attributions for class position equate economic security with personal merit and effort, and poverty with laziness and a lack of interest in self-improvement. Cognitive biases render structural sources of inequality difficult to "see." Prejudice against racial, ethnic, gender, religious, and low-income groups limits opportunity. Intergroup differences in power and privilege make forging strong cross-class alliances difficult.

Classism, a major obstacle to poverty alleviation, refers to a network of attitudes, beliefs, behaviors, and institutional practices that recreate and legitimize class-based inequalities that systematically advantage middle- and high-income groups over poor and working class people.[3] It encompasses prejudice (i.e, negative attitudes toward poor and working class people); stereotypes (i.e., widely endorsed, socially sanctioned beliefs about the poor and working class people); and discriminatory behaviors and practices that distance, avoid, or exclude poor and working class persons.[4] Classist prejudice, stereotypes, and behaviors are interrelated and may co-occur but also operate independently of each other. For example, it is possible for an individual to strongly endorse classist stereotypes and never act on them.

Classist discrimination takes many forms and occurs in many different contexts. One context is interpersonal, through one-on-one interactions that distance or devalue low income individuals and groups.[5] Another is institutional, through restricted access to valued resources, such as high-quality healthcare, safe housing, education, business opportunities and secure well-paying employment.[6] Classism involves partial and/or full exclusion from citizenship rights, the labor market, and cultural and social institutions.[7] Ranging from subtle to blatant, classism can be covert such as ignoring or not making eye contact with an individual due to her or his socioeconomic status.[8] Or it can be overt, such as verbal put-downs, refusing to hire someone, or denying medical care based on the ability to pay for services. Even seemingly overt classism may be difficult for privileged groups to recognize as problematic because society's devaluation of people who are poor normalizes mistreatment and exclusion.

Fundamentally, classism is about power and oppression. As Prilleltensky explains, class-based power is the "power to fulfil basic needs, to restrict access to basic resources, and to resist forces of destitution."[9] The remainder of this chapter focuses on illuminating class-based power dynamics, the inhibiting effects of classist beliefs and behaviors on transformative economic growth, and strategies for dismantling classism in its many forms. Attention is directed toward understanding classism, however, it is important to note that classism intersects with racism, sexism, and other forms of discrimination, frequently blurring distinguishable boundaries between biases.

The importance of legitimizing beliefs in justifying poverty and economic inequality

"No persisting structure of economic and social inequality has existed in the absence of some kind of meaning system(s) which seek both to explain and justify the unequal distribution of societal resources."[10] Beliefs about social class and economic mobility are foundational to understanding responses to economic inequality and poverty. Indeed, a central facet of classism is "the systematic assignment of characteristics of worth and ability based on social class."[11] Analysis of ideology surrounding class status lends insight into the devaluing of people who are poor, the privileging of non-poor groups, and the far-reaching consequences of these biases.

Beliefs about social class, individualism, and meritocracy

Social class unlike gender, race, and ethnicity, is often believed to be an earned rather than ascribed status.[12] As a consequence, poverty and wealth are frequently misperceived as being largely under personal control and a reflection of individual motivation and effort rather than the result of complex structural and economic factors. A Pew Charitable Trusts' poll illustrates this tendency.[13] More than 80 percent of U.S. respondents rated individual factors such as hard work and ambition as primary sources of class mobility. And, while access to education was also viewed as central, fewer than half regarded growing up in a "good" neighbourhood as important.[14] Respondents also believed that a young person with drive, ambition, and creativity who grows up in a poor neighborhood is more likely to succeed than someone raised in a wealthier neighborhood without these characteristics.[15] These perceptions stand in sharp contrast to research showing that economic mobility is contextually influenced, varying considerably by state, locality, and neighborhood.[16] Nevertheless, belief in individual control over class status persists, appearing to thrive in societies in which opportunities for upward mobility are viewed as widespread.

Individualism reinforces understandings of class as an earned status and poverty as a reflection of personal shortcomings. Individualism emphasizes personal responsibility for success and failure, and is embedded in understandings of human behavior as independent, freely chosen, and contingent on personal preferences.[17] By contrast, collectivism and collective models of human behavior emphasize interdependence, connection, and shared responsibility.[18] Individualism and collectivism, although often conceptualized as opposites, are better understood as worldviews that emphasize the salience of different issues and values.[19]

Cross-cultural research documents the prominence of individualism in western nations such the United States, Australia, and some European countries, and greater collectivism in Latin America, Africa, and East Asian nations like China. It is important to note that both collectivism and individualism can co-exist, and that considerable diversity of beliefs is present within any given country or region.[20] An analysis of 15 African countries illustrates these complexities with 46 percent of respondents endorsing the belief that "each person should put the well-being of the community ahead of their own interests" and 50 percent endorsing the statement that "everybody should be free to pursue what is best for themselves as individuals."[21] Cape Verdeans and Batswana expressed strong individualism while Malians and Senegalese were more communal.[22]

Individualism also appears to be more prominent in wealthy, industrialized countries than in "developing" countries.[23] Although causality is difficult to determine, national wealth is posited to facilitate increased cultural individualism, with discretionary capital and affluence driving increased social independence.[24] The consequences of individualism are far-reaching, extending to cognition, emotion, self-concept, intergroup relations, and values.[25] In terms of

intergroup relations, individualism may encourage greater competitiveness, a focus on the self rather than others, and resistance to working in teams.[26]

Complementing individualism, meritocracy refers to the belief that people "get ahead and earn rewards in direct proportion to their individual efforts and abilities," with wealth, jobs, and other valued resources distributed on the basis of merit (e.g., intelligence, effort, education) rather than gender, ethnicity, or family socioeconomic status.[27] Meritocracy is widely idealized as fostering social mobility and as bias free because those who rise to the "top" of the class structure are assumed to have done on so based on their ability and effort not unearned advantage.[28] By the same token, failure to excel is viewed as reflecting lack of effort.[29] Implicit in meritocratic ideology is the assumption of a "level playing field" or that all "players" have an equal chance to succeed, with talent and drive being what sets people apart rather than structural barriers to economic opportunity.

Considerable variation exists in the extent to which meritocracy is embraced as a societal ideal, the degree to which social mobility occurs in a given society, and the extent to which individuals believe that upward mobility is possible. Public opinion polls such as the Latinobarómetro, Eurobarometer, and Afrobarometer are important sources of information for gauging these beliefs. For instance, analysis of the 2000 Latinobarómetro reveals considerable scepticism among Latin Americans regarding meritocracy and mobility experiences.[30] 74 percent of respondents regarded opportunities to overcome poverty as unequal and only slightly more than half (53.8 percent) believed that hard work guarantees success.[31] In terms of perceived socioeconomic mobility, 47 percent of respondents placed their parents and themselves as sharing the same status, while 33 percent perceived themselves as having experienced downward mobility.[32] Only 20 percent of respondents believed that they had surpassed their parent's position. Expectations for future upward mobility tend to be stronger. In 2013, over 40 percent of Latin Americans in 14 countries expected their personal economic situation would improve in the future.[33] Similarly, optimism for the future was found in 15 African countries with respondents expecting their children to move out of poverty and up the socioeconomic ladder.[34]

One reason that beliefs about mobility are important is their relationship to support for poverty reduction efforts. Specifically, support for redistributive policies may be weaker when upward mobility is perceived as being individually controlled and readily possible and stronger when avenues to upward mobility are perceived as blocked. A study of Latin American countries found strong support for income redistribution among those who expected their children to be worse off than themselves.[35] People who are dissatisfied with their current and future economic prospects are also likely to perceive greater unfairness in the distribution.[36]

Meritocratic beliefs do not necessarily align with real opportunity, a point amply illustrated by the United States, a country that ranks high in endorsement of meritocratic ideology but low in upward mobility. In one international study, two-thirds of U.S. respondents - the highest percentage of the 27 countries surveyed - agreed with the statement "people are rewarded for intelligence and skill."[37] In another poll, 68 percent of U.S. respondents reported that they had achieved, or expected to achieve the "American dream" and 54 percent believed they would be better off within the next ten years.[38]

Mobility rates, however, tell a different story. There is a stronger connection in the U.S. between parental education and children's economic, educational, and socioemotional outcomes than in the UK, France, Germany, Sweden, Italy, Australia, Finland, Denmark, and Canada.[39] Notably, 43 percent of Americans who grow up in the bottom quintile remain there as adults, and 70 percent never rise to middle class status.[40] Race, educational attainment, and number of household earners all influence the likelihood of moving out of the bottom quintile of earners, with whites, the college educated, and families with multiple earners more likely to

be upwardly mobile than African-Americans, those without a college education, and single earners.[41] Thus, in some nations, belief in meritocracy appears to be stronger than rates of mobility warrant.[42]

Ultimately, individualism and meritocratic beliefs can be characterized as system-justifying beliefs because of their potential to legitimize economic inequality and maintain the status quo. According to system justification theory, "people are motivated to justify and rationalize the way things are, so that existing social, economic, and political arrangements tend to be perceived as fair and legitimate."[43] System justification occurs via stereotyping and the endorsement of particular ideologies, the legitimation of institutions and policies, rationalization, and the denial or minimization of structural problems and inequalities.[44]

The mismatch between objective (e.g., income, education) and subjective rankings of social class brings system justification into sharper focus. While poorer individuals have been found to sometimes self-identify with a higher class ranking than is indicated by objective indicators (e.g., income, education), richer individuals may underestimate their position in relation to objective status.[45] An analysis of 16 Latin American countries revealed the wide range of factors other than income that underlie self-assessments of class status.[46] Completing secondary education, owning a car, washing machine, television, and freezer, and access to running water, a telephone, and financial services all increased the odds that a poor person identified as middle class.[47] Lacking a computer and limited education raised the odds that a rich person identified as middle class.[48] Ultimately, the tendency to overidentify with the "middle class" may play a role in justifying the status quo and reduce support for poverty reduction initiatives.

Motivations for endorsing system-justifying beliefs are diverse, ranging from a general tendency to rationalize the status quo to enhancing one's sense of self to desiring cognitive consistency to protecting an advantaged position within the social hierarchy.[49] Both advantaged and disadvantaged groups have been found to engage in system justification albeit to varying degrees and guided by potentially different motives. For advantaged groups, system justification may help maintain a positive self-concept and preserve perceived adherence to dominant social values. These motives are documented in a series of studies by Knowles and Lowery in which strongly meritocratic European Americans denied racial inequity in order to continue seeing themselves as meritorious and their own advantaged position as deserved.[50] Minimization is illustrated by the finding that 65 percent of financially secure Europeans believed that poverty is widespread compared to nine of ten European respondents who have difficulty making ends meet.[51] The downside of this adherence is that privilege remains unquestioned, and support for social change and redistributive efforts remains limited.

 Members of disadvantaged groups may also engage in system justification despite seeming to run against self-interest or producing negative group consequences. However, system-justifying beliefs can serve a self-protective function in the face of economic hardship. Individualistic beliefs, for instance, may allow low-income groups to maintain a sense of self-efficacy in their ability to move out of poverty rather than feel overwhelmed by structural obstacles to upward mobility.[52] Nevertheless, such beliefs may still extract a high "price" by diminishing participation in collective mobilization, decreasing identification with other disadvantaged group members, and reducing support for anti-poverty initiatives.[53]

Other core system-justifying beliefs

Individualism and meritocratic ideology are part of a larger network of system-justifying beliefs, including social dominance orientation, economic system justification, belief in a just world, individualistic attributions for poverty and wealth, and classist, racist, and sexist stereotypes. Correlations among these beliefs are amply documented in capitalistic Western

societies, reflecting their shared ideological function – to legitimize existing social and economic relationships and systems.

Social dominance orientation. Social dominance orientation (SDO) refers to the "degree to which individuals desire and support group-based social hierarchy and the domination of 'inferior' groups by 'superior' ones."[54] Rather than treating SDO as a unitary construct, more recent conceptualizations approach SDO as comprised of two related but distinct dimensions, SDO-Dominance (SDO-D) and SDO-Egalitarianism (SDO-E).[55] Consistent with early definitions of SDO as "a generalized imperial imperative," SDO-D focuses on "support for group-based dominance hierarchies in which dominant groups actively oppress subordinate groups" and is overt in the of these beliefs, including the limited distribution of resources to "inferior groups."[56]

SDO-E focuses on "opposition to group-based equality," and includes "an aversion to the general principle of equality and to reducing the level of hierarchy between social groups."[57] Unlike SDO-D, SDO-E is believed to be more "subtle" in the expression of prejudice by focusing on social and economic exclusion rather than overt hostility. SDO-E has been found to be more strongly associated with support for legitimizing myths such as the Protestant work ethic and opposition to redistributive social policies that aim to increase equality and reduce group boundaries, whereas SDO-D was more strongly associated with overt prejudice, support for war, and zero-sum competition.[58]

Economic system justification. Economic system justification (ESJ) refers to the belief that inequality is natural and inevitable, and that economic outcomes are just and deserved.[59] Reviewing the items social scientists use to measure support for ESJ lends insight into the nature of these beliefs (e.g., "Laws of nature are responsible for differences in wealth in society;" "it is virtually impossible to eliminate poverty;" "social class differences reflect differences in the natural order of things;" and "economic positions are legitimate reflections of people's achievements").[60] Support for ESJ and related constructs have been found to be stronger among higher status (e.g., European Americans, higher income groups) than lower status groups (e.g., African Americans, low income groups).[61] Support for ESJ is associated with political conservatism and rejection of public assistance programs and policies that target economically and socially disadvantaged groups. [62]

Belief in a just world. Belief in a just world (BJW) is predicated on the assumption that the world is a fair, predictable place in which people get what they deserve.[63] Among strong just world believers, poverty and other hardships may challenge one's sense of fairness, and to protect this worldview, responsibility for negative outcomes may be attributed to the individual.[64] A study by Appelbaum, Lennon, and Aber illustrates this tendency.[65] Participants were asked to read a vignette describing a hypothetical mother named Lisa who was struggling financially. The vignettes varied in terms of Lisa's demographic characteristics (e.g., marital status, immigration status), barriers to employment, and the degree of effort being put into moving out of poverty (e.g., looking for work, trying to improve job skills). The researchers found that the greater Lisa's efforts to improve her situation, the less deserving of government assistance she was judged to be.[66] However, this was only the case for strong believers in a just world. These findings highlight the psychological threat poverty poses to strong believers in a just world, particularly when overt exit efforts are being made, and the use of distancing and derogation to maintain a sense of fairness.[67] Not surprisingly, BJW is positively associated with individualistic explanations for poverty and a tendency to blame the victim.

It is informed by diverse factors and motivations, and serves other functions as well.[68] In Wu and his colleagues' study of adult and adolescent earthquake survivors living in a poverty-stricken area of China, belief in a just world was found to be associated with resilience.[69] The

researchers speculate that BJW may promote acceptance of uncontrollable events such as natural disasters as well as poverty and economic hardship. Importantly, such findings make clear that system-justifying beliefs are a double-edged sword, potentially serving as both a coping mechanism and a deterrent to collectively challenging the status quo.

Attributions for poverty and wealth. Causal attributions for poverty and wealth are yet another type of system-justifying belief. Explanations for poverty and wealth fall into three general categories: individualistic, structural, and fatalistic.[70] Individualistic attributions for poverty (e.g., laziness, lack of motivation, an anti-work mentality) and wealth (e.g., risk taking, intelligence, perseverance), in particular, are considered legitimizing beliefs. Both emphasize the role of personal merit in economic status, albeit in very different ways, with low-income groups positioned as "undeserving" failures and the wealthy as "deserving" of their status. Individualistic attributions are positively correlated other legitimizing beliefs (e.g., belief in a just world, meritocracy) and negatively associated with support for anti-poverty policies and spending on the poor.[71]

Structural explanations for poverty (e.g., low wages, discrimination, underfunded schools) and wealth (e.g., connections, privilege, inheritance) challenge the status quo and are considered hierarchy attenuating beliefs. Structural attributions are correlated with increased spending on the poor and support for anti-poverty policies, and reduced support for legitimizing ideologies.[72] Fatalistic explanations draw attention to factors beyond individual control; in the case of poverty, unfortunate circumstances (e.g., bad luck, a disability) and in the case of wealth, positive events (e.g., winning the lottery).

Patterns of support vary across countries and demographic groups, underscoring the complexity of attributions for poverty and wealth and the influence of sociopolitical culture and group membership on these beliefs. Among European Union countries, more developed countries favour individualistic and fatalistic causes for poverty, whereas less developed countries emphasize social injustice.[73] Poverty beliefs in western European nations tend to be more structural than in the United States.[74] In one comparison of beliefs about poverty and wealth in the United States, West Germany, the Netherlands, Hungary, the Czech Republic and Russia, 71 percent to 83 percent respondents in postcommunist societies believed that wealth is obtained through dishonest means whereas less than half of Western respondents endorsed this belief.[75] In Latin America, poverty is predominantly attributed to external circumstances rather than a lack of hard work.[76] Similarly, among Sub-Saharan Africans from Nigeria and South Africa, poverty was more likely to be attributed to unfairness in society (71.3 percent) than laziness (28.1 percent).[77]

However, it is not simply a matter of knowing which beliefs dominate in a particular society but also demographic patterns of beliefs within societies. In the United States, for instance, more powerful groups (e.g., men, European Americans, higher income groups, political conservatives) tend to endorse individualistic explanations for poverty more strongly than structural attributions whereas less powerful groups (e.g., women, African Americans, low-income groups, and political progressives) tend to favor structural causes for poverty over individualistic attributions.[78] In a comprehensive 49 country analysis, respondents who self-identified as politically on the left, believed in the need for greater equality, perceived themselves as having low socioeconomic status, and/or were more likely to perceive poverty as chronic.[79] Other studies also support these trends. In European Union countries, individuals experiencing greater economic hardship attributed poverty to social causes more strongly than those who were financially and socially secure.[80] Broader economic trends are influential as well with poor people in wealthier Latin American countries more likely than other groups to perceive the distribution of resources as unfair.[81]

The endorsement of individualistic beliefs by those with greater social, political, and economic power (and potentially greater distance from poverty) has important implications for the potential institutionalization of these beliefs and for intergroup relations. Support for individualistic attributions for poverty is associated with restrictive welfare policies and reduced spending on social welfare programs. An analysis of 363 policy makers spanning 5 regions (Africa, the Arab states, Asia and the Pacific, Europe and Central Asia, and Latin America and the Caribbean) found that a majority (63 percent) accepted income inequality if it was due to differences in individual efforts and if it was grounded in fair competition.[82] 43 percent of respondents regarded increasing inequality as acceptable if a guaranteed minimum standard of living was in place, and 39 percent accepted growing income inequality if poverty was decreasing.[83] Although access to health care (51 percent) and justice (57 percent) was perceived as unequal, only 28 percent of policy makers reported high inequality in access to public administration services, 37 percent perceived high inequality in access to education, and 41 percent regarded access to services related to economic activity as unequal.[84]

Classist, racist, and sexist stereotypes. Undergirded by individualism, meritocracy, and other system-justifying ideologies, classist stereotypes portray people affected by poverty as lazy, lacking intelligence, disinterested in education and self-improvement, unable to defer gratification, and as holding morals and values that clash with mainstream society. Low-income groups are more likely than their middle class counterparts to be perceived as engaging in criminal behaviors and be described as lazy, immoral, dirty, and stupid.[85] The poor are well aware of their devalued status, bearing both the burden of economic hardship and the stigma associated with it.[86] Classist stigma is so strong that in a study examining responses to 17 stereotyped groups, Fiske, Xu, Cuddy, and Glick found that only welfare recipients were both disliked and disrespected, and were uniquely perceived as lacking both warmth and competence.[87]

Classist stereotypes operate independently and intersect with other forms of bias. Intersections of classism, sexism, and racism are evident in stereotypes of welfare recipients, particularly single mothers, as lazy, sexually available, irresponsible parents who choose to receive public assistance rather than work outside the home. Intersecting classist and racist stereotypes portray welfare recipients as lacking a strong work ethic and sexist beliefs about single mothers depict poor women as devaluing marriage and two-parent families.[88] These beliefs are borne out in anti-welfare attitudes and treatment of low-income women when they seek support.[89]

Ultimately, stereotyping constitutes a form of "othering" – a process that involves constructing one's identity in opposition to believed differences from oneself.[90] Whether intentional or unintentional, othering both reinforces and reproduces positions of domination and subordination.[91] Further explaining this process Lott observes, "Treating poor people as other and lesser than oneself is central to the concept and practice of classism. Through cognitive distancing and institutional and interpersonal discrimination, the nonpoor succeed in separating from the poor and in excluding, discounting, discrediting, and disenabling them."[92] Not surprisingly, financially vulnerable people are more likely to report feeling left out of society than people who are financially secure.[93] Experiences of and responses to social exclusion are likely shaped by the economic systems and interdependencies on which communities and societies are based.[94]

Cognitive biases

Cognitive biases make challenging classist beliefs especially difficult. Even when presented with information that contradicts dominant stereotypes, people are more likely to recall information that supports their pre-existing beliefs rather than newly introduced, contradictory

information.[95] For instance, after viewing a videotaped vignette, Gilliam found that white respondents were less likely to remember seeing a white than an African American welfare recipient.[96] Information may even be misremembered to maintain consistency.

Illusory correlations—the perception of relationships between phenomena when, in fact, they are limited or nonexistent—are also common. It helps explain why highly sensationalistic news stories about poverty may serve as fodder for stereotypes about the poor, contributing to the overestimation of poverty with negative behaviors such as fraud. For example, a British survey found that respondents believed that £24 of every £100 of benefits is fraudulently claimed but official estimates are 34 times lower at only 70 pence in every £100.[97]

In Western countries, the fundamental attribution error is used to help explain the general tendency to make individualistic rather than structural attributions for poverty The fundamental attribution error refers to the tendency to "underestimate the impact of situational factors and to overestimate the role of dispositional factors in controlling behavior."[98] Generating situational explanations for negative outcomes may require greater effort than constructing individual-focused explanations, meaning that a greater "cognitive load" is associated with situational than individualistic attributions.[99]

Intergroup relations and power dynamics in the workplace

Fundamental intergroup processes, notably the social categorization of diverse groups into "ingroups" and "outgroups," separate the poor and nonpoor from each other physically, psychologically, and economically. Gray and Kish-Gephart observe, "class is likely to function as a status characteristic within organizations such that class differences carry with them performance expectations that generate 'self-fulfilling effects on people's behavior and judgments of one another, creating a corresponding influence hierarchy among them'… As a result, lower class individuals will be judged to be less competent than higher class ones (simply because of their social class)."[100] Power asymmetries allow alleged these class differences (communicated via stereotypes and other legitimizing-myths) to harden into distinct, enforceable boundaries, concentrating political voice and other valued resources among elites.

The workplace offers one example of the enforcement of class-based boundaries that occur in the private sector. Workplaces are often highly class segregated and even socioeconomically diverse businesses frequently separate workers from one another on the basis of social class either via location, building, and/or meeting space (e.g., separate entrances, different eating areas for workers, distinct "staff" versus "professional" meetings), work hours (e.g., having janitorial staff clean at night when other workers are not present), and benefits (e.g., retirement packages, accrual of vacation time, flexible hours). Although some functional reasons for these practices may exist, they nevertheless reinforce separation and convey powerful messages about status, autonomy and "belonging" in the workplace.

Classist, racist, and sexist stereotypes prevent low-income workers from being hired and staying employed. Women, in particular, may be perceived as less dependable workers because of assumed child care and parenting responsibilities. Pregnancy discrimination is a major problem. Common forms of pregnancy discrimination include testing and interviewing job applicants to determine their pregnancy status, denying jobs to pregnant applicants, and firing or mistreating pregnant workers to encourage their resignation.[101] Moreover, a history of unemployment, particularly for longer periods of time, may be stigmatized and perceived as a marker of "failure," contributing to a vicious cycle that makes it difficult to be hired.[102] Receiving public assistance carries its own negative associations of poor work ethic, with

people of color particularly vulnerable to stereotyping and discrimination. In a study of hypothetical hiring decisions, Jacob's found that welfare recipients and African Americans were less likely than whites and non-recipient applicants to be recommended for an administrative assistant position than for a fast food cashier position.[103] Racism is also evident in findings from a field experiment by Pager, Western, and Bonikowski in which Black men were half as likely as equally qualified white men to receive a return call or job offer for a low-wage position.[104] Indigenous people are also the frequent targets of bias in the workplace. For example, interviews with 550 business owners in Guatemala City revealed that on average only 12 percent of employees in small and micro-enterprises were indigenous people, and just 20 percent of employees in medium and large businesses.[105] Moreover, slightly over half the business owners interviewed (52 percent) reported that they did not pay mixed ancestry and indigenous people the same wages for the same work as other employees.[106]

Collectively, these findings highlight some of the biases facing low-wage workers, particularly women, people of color, and indigenous people, in gaining employment. Although the focus here is on power dynamics in the workplace, discrimination that occurs in other contexts (e.g., housing, education, health care) also limits employment opportunities and workforce participation.

Gender inequality and sexism

Gender inequality is a major driver of high rates of poverty around the world. Discrimination, limited access to resources (e.g., education, property, and health care), segregation into low paid, devalued jobs, inequities in family and household responsibilities, and violence all contribute to disproportionately high rates of poverty among women.[107] The scope of disparities is far reaching, with poor rural women less likely than urban rich women to receive care from a skilled heath professional during childbirth,[108] and women around the world continuing to struggle for basic legal rights and protections.[109] In the national constitutions of 191 UN member states, "women are explicitly guaranteed some aspect of equality in 81% of constitutions, some aspect of political equality in 32%, marital equality in 27%, some aspect of work equality in 26%, and educational equality in just 9% of constitutions."[110]

Much of the systematic gender differences in material well-being are due to the composition of social, economic, and political hierarchies: "Social norms, cultural traditions, patriarchal attitudes and ideology, gender stereotypes and discrimination… are at the root of gender based social inequalities that benefit men and boys [over women and girls]."[111] Gender stereotypes characterize women and men as fundamentally different from each other. Men are stereotyped as aggressive, agentic, physically strong, analytical, and better suited for political and workplace leadership, whereas women are stereotyped as nurturing, communal, emotional, and better suited for family and home.[112] The perpetuation of such norms maintains women's subordinate status in society and heightens the vulnerability of girls, influencing their access to resources and by extension, their livelihoods and agency.

Sexist attitudes and beliefs, while showing variability in strength and form across nations and across racial, ethnic, and religious groups, persist around the world and share a core devaluation of women.[113] Even seemingly "positive" stereotypes obstruct gender equality. Benevolent sexism, which encompasses paternalistic beliefs (e.g., women require protection), complementary gender differences (e.g., women have skills in domestic or caregiving arenas that men typically do not possess), and idealized beliefs about heterosexual relationships, justify and maintain patriarchal social and economic structures.[114] Sexism fuels the practice of treating caregiving and household labor as under and/or uncompensated, a tradition that greatly increases women's vulnerability to poverty. Benevolent sexism as well as overtly hostile sexist

beliefs are system justifying and maintain the legitimacy of the gender inequities.[115] Moreover, even if they are not personally endorsed, gender stereotypes influence household dynamics, workplaces and labor markets, and educational and legal systems.[116] For example, employers in capital-intensive firms may be unwilling to hire women if they believe they will have to leave the labor market due to pregnancy or care responsibilities.

Parents, peers, media, schools and other institutions communicate gendered beliefs about skills, competencies, and characteristics of women and men. Basic gender stereotypes develop by three years of age.[117] Children and adolescents tend to hold the same beliefs as their parents, illustrating the important role of families in gender socialization.[118] Schools also play a pivotal socializing role, both challenging and reinforcing gendered inequalities. Although considerable progress has been made in reducing global gender inequality in total years of education, significant obstacles remain.[119]Female Zambian students report being the targets of teachers' derogatory statements about girls' inferior academic performance, and that male students receive preferential treatment.[120] 69 of 105 respondents reported personally experiencing or knowing a girl who had been harassed by a male student.[121] Male dominance is also communicated in more subtle ways such as the underrepresentation of women in textbooks.[122] Outside the classroom, household and caregiving responsibilities fall primarily to girls, leaving less time to pursue their studies.[123]

Female to male employment-to-population ratios are increasing, but remain below parity in the majority of countries.[124] And, work outside the home does not guarantee that women will exit poverty. A complex interplay of gender role beliefs and discrimination contribute to the persistence of gender segregation in the workplace and women's overrepresentation in vulnerable, informal work.

> "Global factories reproduce... models of organization wherein women dominate the lowest levels both of pay and authority, whereas men occupy most positions of supervisory and managerial rank… Indeed, it is the hegemonic capacity of patriarchal norms to define women's labor as not only 'cheap' but socially and economically worthless (and therefore less worthy of equitable pay and other treatment) that makes a gendered labor force so crucial to the accumulation strategies of global capital."[125]

Shut out of formal labor market, women in the informal sector have limited opportunities for advancement, few protections, and low pay.[126] Moreover, gender segregation remains problematic with women who work outside the home disproportionately employed in low-paying, traditionally "feminine" domains (e.g., domestic labor, secretarial work, teaching).[127]

Looking across countries, women's pay lags 10 to 30 percent behind men's earnings,[128] and gender inequities persist across women's life course, including benefits after retirement.[129] Even when women and men perform comparable work and/or have equivalent levels of education, women tend to be paid less.[130] In the United States, female full time workers earn 77 cents for every $1.00 earned by men.[131] This gap widens when race and/or ethnicity are taken into account revealing, with women of colour particularly hard hit. On average, African American women earn just 64 cents and Hispanic women 54 cents for every dollar paid to white, non-Hispanic men.[132] The extent to which the wage gap is perceived as "fair" or problematic is influenced by a wide range of factors including pay expectations, gender role orientation and gender composition of employment, and marital status, as well as educational and occupational status.[133]

Part-time work, often the only option for women with caregiving and other family responsibilities, means lower earnings and increased risk of poverty for women in the short run and long run. This problem is vividly illustrated by difficulties facing the predominantly female

Chilean agricultural workforce in terms of qualifying for a state pension.[134] Workers must contribute the equivalent of 20 years to the system to be eligible for a minimum state pension. This target would be out of reach for a worker primarily employed during a four-month harvest period, requiring an estimated 60 years of work.[135] In the United States, time spent outside of the paid labor market caring for children or family members results in both lower earnings and Social Security benefits.

In addition to meeting key social justice goals and strengthening intergroup relations, gender equality would strengthen the economy. It is estimated that closing the gap between women and men's employment rates would boost the United States' gross domestic product (GDP) by 9 percent, the Eurozone's GDP by 13 percent, and Japan's GDP by 16 percent.[136] Per capita income in 15 developing economies would rise by 14 per cent by 2020 and 20 percent by 2030.[137] And eliminating discrimination against female workers and managers would dramatically increase per worker productivity.[138] Gender equality thus becomes key to transformative change in other domains, as social practices reflecting female-friendly norms can trigger types of growth that have a strong impact on reducing poverty – for example, by improving child mortality and nutrition. Equally crucial is the full-scale adoption of family friendly policies to reduce work-life conflict. While some private and public employers provide informal accommodations, these are neither sufficient nor institutionalized, with the burden placed on women to request them.[139] Doing so will require not only challenging beliefs about gender, family, and work, but also social class, race, and ethnicity.

Limited trust and social cohesion

Barriers across social classes. Ultimately, classist stereotypes and behaviors, whatever their form or motivation, drive wedges between diverse socioeconomic groups. Not surprisingly, low-income groups, may be reluctant to enter into partnerships with higher income groups who not only hold greater social, political, and economic power, but also reap the benefits of policies and practices that create and maintain poverty (e.g., low wages, job insecurity, limited educational opportunities, restrictions on land ownership). Higher income groups may distance themselves from low-income groups on the basis of classist stereotypes, assuming limited shared interests or benefits of building interclass relations.

Residential, occupational, and social segregation reinforce these lines, with negative consequences for individual and societal health and well-being. Low-income groups bear the brunt of inequality, however, a growing body of evidence reveals that income inequality is problematic across the socioeconomic spectrum. High rates of income inequality are associated with infant mortality and compromised child well-being, mental health issues, reduced social mobility, increased violence, and adolescent pregnancy.[140] Less egalitarian societies are also less trusting and less socially cohesive than more egalitarian societies. As Wilkinson observes, "that income inequality is related particularly closely to deaths from homicide, accidents (unintentional injuries), and alcohol-related causes also points toward pathways mediated by failing social cohesion."[141]

Other aspects of reduced social cohesion also bear noting. In a longitudinal analysis by Uslaner, rising income inequality was associated with both declining trust in one's fellow citizens and in the government.[142] Uslaner summarizes, "When overall inequality is highest and when the people at the top of the economic ladder fare the best, we become more pessimistic—overall, about our social ties, and about our political system."[143] Collectively, findings in this area reveal how economic inequality erodes social ties and connections, damaging our trust in each other, our health, and our social relations.

Concern about declining social trust may also provide an opportunity for building support for redistributive policies. An analysis of data from 40 countries found that perceived social conflict, defined broadly as rising social tensions and the breakdown of societal trust, influenced support for redistribution more than perceptions of fairness and social mobility.[144] These same findings held true even when controlling for potential personal gains or losses from redistribution. Notably, the effects were stronger at lower levels of actual inequality and actual social conflict, leading to the conclusion that "governments and practitioners interested in acting upon inequality need to act quickly when inequality is starting to rise in order to capitalise the support towards redistributive policies."[145]

Racial and inter-ethnic conflict. Poverty and economic inequality contribute to increased racial and inter-ethnic conflict, and racism and ethnocentrism deepen poverty. "When other groups are seen as threatening, or engaged in zero-sum competition for limited resources, descriptive and injunctive norms both can be aligned to favor conflict."[146] Perceived threat, whether real (competition for resources) or symbolic (threats to values and beliefs) are associated with prejudice and intergroup hostility. "Threat" comes from many sources ranging from competition for land, clean water, jobs, housing, and education to the symbolic threats posed by differences in language, religion, and cultural practices. Bias against ethnic and racial minorities, immigrants, indigenous groups as well as others who are perceived as taking jobs and drawing on resources is widespread.

It is important to note that "threats" are complex, and may be both symbolic and real. Language offers one example. In a study of stereotyping of immigrants in Switzerland, locals in a German-speaking Swiss region perceived German immigrants as posing greater competition and therefore as less warm, whereas in a French-speaking Swiss region, French immigrants were perceived as posing greater competition and, consequently, as less warm.[147] Language, however, also functions as a symbolic threat. This is evident, for example, in the concern that accommodating Spanish language speakers erodes U.S. culture. And, in education, language may serve a gatekeeping function. For instance, children in francophone Africa who speak French can participate in the education process, while those who do not are excluded.[148] In Latin America and the Caribbean, the majority of indigenous women do not speak the predominant languages, and the availability of translation and culturally appropriate services are limited.[149]

Social psychological research documents that competition over resources incites powerful motives to favour ingroups and derogate outgroups. Ingroup favouritism, the tendency to favour one's own group, involves seeing greater similarity amongst ingroup than outgroup members.[150] "The extension of trust, positive regard, cooperation, and empathy to in-group, but not out-group, members is an initial form of discrimination."[151] Perceived disadvantage relative to other racial and ethnic groups can feed outgroup bias. While the majority of respondents (45.5 percent) in an Afrobarometer survey perceived their ethnic group to be equal in socioeconomic terms to other ethnic groups, 33.7 percent perceived their ethnic group as (much) worse off in relation to other groups. Only 20.7 percent of respondents perceived their ethnic group to be (much) better off.[152] Such beliefs may contribute to racial and ethnic tension and distrust. In another analysis of Afrobarometer data, Africans were more likely to attribute social conflict to economic than ethnic causes, citing "land," "boundaries," "natural resources" and "poverty" before "tribalism."[153] Nevertheless, considerable variability in perceived sources of conflict across African countries was documented.

The economic climate may even influence how race is perceived. In a series of experimental studies examining the effects of economic scarcity, white participants perceived African American faces as "darker" and more "stereotypically Black" when resources were scarce, and this visual misperception was associated with the allocation of reduced resources to African

American recipients.[154] One of the researchers concluded that, "People typically assume that what they see is an accurate representation of the world, so if their initial perceptions of race are actually distorted by economic factors, people may not even realize the potential for bias."[155]

Strategies for challenging social barriers and promoting economic inclusion

Social barriers to adopting comprehensive poverty alleviation initiatives are numerous, but not insuperable. Two areas are particularly promising with respect to strengthening interclass relations and generating greater private sector engagement: (1) poverty education efforts designed to reduce stereotyping and discrimination and (2) the use of structured intergroup contact to reduce prejudice. These approaches are discussed independently; however, they are not mutually exclusive and are frequently employed together.

Education-based interventions

Education-based interventions seek to increase structural understandings of economic inequality and break down race, class, gender and other boundaries via programmatic curricula (e.g., books, films) and other activities (e.g., intergroup contact, service learning, empathy and/or perspective-building exercises). Program goals are diverse and multifaceted, and may include the following: breaking down "us" versus "them" distinctions (i.e., cognitive restructuring); the adoption of hierarchy-attenuating beliefs (e.g., structuralism); rejecting classist, racist, and sexist stereotypes and other legitimizing beliefs (e.g., social dominance, meritocratic ideology); fostering inclusive multiple social identities; enhancing empathy for disadvantaged groups; and encouraging inclusive behaviors, practices, and policy support. Exposure to counter-stereotypical conceptualizations of poverty in conjunction with deep self-reflection and critical analysis of class privilege are central to these initiatives.[156]

The potential enhancement of systemic understandings of oppression is a core benefit of such initiatives. For example, in one study, counselor trainees who had completed more multicultural workshops and reported more sensitive racial attitudes were more likely to endorse structural causes of poverty. [157] Attending fewer multicultural workshops and less sensitive racial attitudes predicted greater support for individualistic explanations. In another study, mentors who worked with students attending under-resourced schools reported that this experience heightened awareness of their own class privilege, deepened their understanding of poverty and economic inequality, and contributed to acknowledging personally held stereotypes.[158]

Nevertheless, fostering increased support for structural understandings of poverty and the broader limits of opportunity can be challenging. After participating in a one-week program to increase sensitivity to poverty and economic inequality, Mistry and her colleagues found that upper middle-class eighth grade students in the United States were more likely to emphasize fatalistic attributions and less likely to mention individualistic attributions for poverty than they were before instruction.[159] Yet, structural sources of poverty were rarely cited and individual effort continued to be identified as the most important factor in determining success.[160] Related limitations are observed in Seider's study of high students' beliefs about homelessness and economic inequality.[161] Participants articulated more complex understandings of the causes of homelessness after completing a course unit about the challenges of homelessness and economic hardship, but their beliefs about the U.S. opportunity structure remained largely intact and respondents' drew upon legitimizing beliefs to justify their own class position.[162]

Collectively, such findings speak to the potential for attitude change but also the need for programs and initiatives that are strong enough to penetrate deep-rooted beliefs, not just about

poverty, but social class and opportunity more generally. It is important to note that anti-discrimination learning and attitude change can occur across the lifespan, and while much of the research literature focuses on interventions with children and young adults in educational settings, this does not preclude successful anti-bias interventions with diverse groups in other settings, including the workplace. Of critical importance is expanding the "scope of justice." As Opotow explains, "We have a sense of moral obligation, responsibility, and duty toward those within our scope of justice; they are morally included. Those outside the scope of justice, however, can be seen as morally excluded and of no concern."[163] The successful crafting of justice expanding programs will need to take into account practical aspects such as optimal length (e.g. a single or short program may not result in attitude change) and potential benefits of communicating consistent anti-bias messages via diverse media and formats (e.g., group discussions, films, experiential learning) as well as more substantive issues such as how to approach intersections of class with other core identities without losing a social class emphasis.[164]

Intergroup contact

Intergroup contact theory is based on the premise that negative affect and stereotypes can be reduced through structured interactions that meet optimal conditions for contact. These conditions include equal status between the groups, a common intergroup goal, interacting in a context that promotes cooperation and the potential to disconfirm stereotypes, and supportive norms, customs, and/or authority.[165] Because prejudice and discrimination inherently involve power and status differences, creating these conditions in "real world" settings is likely to be very difficult.[166] While early conceptualizations of intergroup contact posited that these conditions were essential to prejudice reduction, more recent research indicates "that these conditions form a package that facilitates the effect but is not essential for reducing prejudice."[167] Lee, Farrell, and Link's evaluation of the effectiveness of the contact hypothesis in interactions that did not meet optimal conditions supports this point. Specifically, they found robust support for the effectiveness of contact in improving attitudes toward people who are homeless.[168] These positive effects held up whether information was obtained from third-party sources (e.g., the media), observation in everyday settings, face-to-face interaction, or personal/family exposure to homelessness.[169]

A large body of research documents the positive effects of intergroup contact on intergroup prejudice, with effects typically generalizing to the entire outgroup.[170] Both direct and indirect contact has been found to be effective.[171] Originally designed for reducing racial prejudice, contact theory has now been employed with diverse groups in a wide range of settings including desegregated classrooms, service learning and volunteer programs, and empathy building "walk a mile in my shoes" demonstrations (e.g., programs in which poor and nonpoor community members are partnered to raise awareness of economic hardship among advantaged groups). Improving attitudes toward low-income groups and reducing stereotypes are crucial to building greater support for poverty alleviation efforts and progressive social policies.

Despite a large body of evidence documenting contact theory's positive impact, several caveats warrant mention. First, the impact of such interventions may be uneven in their impact. For example, Seider, Gillmor, and Rabinowicz (2011) found that a one-year college course involving interactions with low-income children and adults increased the salience of structural understandings of poverty among participants, but the program's impact differed significantly across business and non-business majors.[172] Business students demonstrated a deeper appreciation of structural privilege; however, their fundamental belief in the U.S. market system appeared unaltered as evidenced by a small increase in just world beliefs. The researchers posit that business majors resisted translating structural causes of poverty into a

larger critique because, "As young men and women preparing for careers in which they expect to be highly compensated by the market system, these students have a strong incentive to maintain their conception of America's economic system as a just one."[173] These findings underscore the need for targeted, contextualized interventions, especially when working with groups with deep connections to individualistic ideology.

Other limitations have also been noted. Even when intergroup contact reduces classist and racist stereotypes, policy attitudes may remain unchanged.[174] For instance, Robbins found that interracial contact was associated with stronger endorsement of external attributions for racial disadvantage among white respondents who reported being satisfied with their neighborhood and working collaboratively with their African American neighbors.[175] However, these positive interactions were uncorrelated with support for supportive government policies to assist African Americans.

Nevertheless, exposure to accurate information about inequality, in and of itself can have a powerful impact.[176] For example, when respondents with economically biased perceptions were presented with accurate information about their position in the income distribution, greater support for redistribution efforts was expressed. More specifically, participants who believed that they were relatively better off than they were in actuality were more supportive of redistribution after being presented with accurate information. To the extent that this information corrected biased perceptions, these findings can be taken as evidence of the impact of misperceptions on political and economic attitudes.

Policy and research directions for enhancing the role of the private sector in poverty alleviation efforts

Significant poverty alleviation requires sustained, multipronged efforts involving both government and private sector investment. The research reviewed here lends insight into social barriers to poverty alleviation, with the aim of sparking new anti-poverty initiatives and motivating private sector action. Although the barriers described in this chapter – system-justifying beliefs, cognitive biases, and discrimination – are significant, they are not insurmountable. Indeed, a wealth of social science research provides insight into strategies for attitude change, prejudice reduction, and strengthening intergroup relations.

Interventions to educate the privileged groups about the structural roots of poverty and importance of inclusion, debunk classist, racist, and sexist stereotypes, and promote the benefits of "base of pyramid" inclusion efforts are greatly needed. Classist ideology and stereotypes act as barriers to inclusion by depicting low-income groups as undeserving and without their reduction, momentum building will remain difficult. That said, education about poverty and economic oppression, in and of itself, may not be sufficient to spur widespread institutional change or overturn class-based power dynamics, however, it may provide a much-needed foothold in the struggle to focus attention on this global crisis. Communication of shared benefits to health, well-being, and social inclusion and cohesiveness associated with reduced income inequality should be emphasized.[177]

Demonstration projects that systematically nurture cross-class interactions within informal and formal markets are vital to building private sector engagement in poverty alleviation initiatives. The basic tenets of intergroup contact offer useful insights into fostering positive, counter-stereotypical interactions. Interactions that transcend stereotypical boundaries and involve shared power and equal status have the potential to break down traditional class boundaries and reduce prejudice. However, class, race, and gender segregation and the hierarchical nature

of intergroup relations discourage such interactions from taking place. Contexts that minimize these differences and allow for positive contact to take place must be created.

Further research is needed to help advance these goals. Much of what we know about classist attitudes and beliefs is general and decontextualized. Public opinion polls and national surveys, for instance, typically ask respondents about their overall attitudes toward the poor and their support for anti-poverty programs. While essential, questions remain about how these attitudes and beliefs play out in specific settings in which poor and nonpoor groups interact (e.g., hospitals, schools, workplaces) with specific low-income groups (e.g., women, people of color, indigenous people, immigrants). Much remains to be known about how these boundaries are maintained and/or challenged in private sector settings. Gaining a better understanding of class relations in market and organizational contexts is crucial, particularly the relationship of biased beliefs to discriminatory treatment.[178] The role of social class in hiring, retention, and other business practices and decisions, the prevalence of interpersonal classism, and strategies for enhancing class diversity in occupational settings all warrant further investigation. Case study analyses of successful private sector engagement with these issues are essential to establishing widely adoptable practices.

Many interventions aimed at improving intergroup relations take place in educational contexts and involve students. Less research has examined the effects of such efforts in other contexts with other populations. Of particular importance is applying contact theory to social policy.[179] As Pettigrew observes, "practical applications require a multilevel, structural context for intergroup contact policies...Just how do you structure optimal contact situations in concrete institutional settings?"[180] Answering this question is essential to expanding the potential of intergroup contact to reduce class-based prejudice and spur private sector engagement in anti-poverty efforts. It is equally important that increased attention be given to how both advantaged and disadvantaged group members experience intergroup contact, rather than focusing only on privileged group members. Reducing social barriers to poverty alleviation undoubtedly requires attitude change among advantaged groups, however interclass relationships are bi-directional. Learning more about how prejudice-reduction interventions are experienced by and influence attitudes among less powerful groups is crucial. Programs that are experienced by low-income groups as stressful, unsafe, or stigmatizing cannot be regarded as "successful." Tropp found that even one experience of prejudice negatively affected how members of devalued groups felt in intergroup contexts and their expectations for future interactions.[181] Longstanding power differences create barriers to open communication and trust that may be difficult to overcome because histories of prejudice and discrimination run long and deep.

Ultimately, full social, economic, and political inclusion of low-income groups will require challenging legitimizing beliefs about poverty and social class, and the adoption of interpersonal and institutional practices that reduce bias, create opportunity, and promote inclusion. The adoption of a wide range of social responsibility practices, including affirmative action, family friendly, fair pay, and anti-discrimination policies are essential. The private sector should work within a strong regulatory and accountability framework, complying with international labour standards, creating decent jobs, paying taxes and ensuring they inflict no ecological damage. A comprehensive understanding of social obstacles and opportunities for transformation is a crucial first step toward fostering private sector leadership in this arena.

Notes

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[57] Ho and others 2012, p. 585.
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Precluding poverty through social inclusion

Laura Smith
Teachers College, Columbia University

Alisha Ali
New York University

When so many of the world's citizens stand ready to offer help to those living in poverty, why does our help often seem to create so little change? The answer to this question is complex and multifaceted, but at least part of it may derive from common and limited perceptions of what poverty is – and what constitutes help for the poor. In this chapter, we will show how a particular conceptualization of poverty – poverty as social exclusion – can serve to frame fresh perspectives on efforts to address poverty eradication. Building on this perspective, we will propose that, by helping to preclude poverty through social inclusion, the private sector can play a key role in creating a world economic community where no one is kept on the outside looking in.

Conceptualizing poverty

It will be useful to begin the discussion by briefly outlining a familiar conceptualization of poverty that we hope to move beyond. Although precise definitions and calculations vary around the world, there are many similarities in general understandings of poverty. The associations that come to mind may include images of hungry children, or families living in substandard housing, or homeless people we have passed on the street. These and other images convey one of the most readily observable realities of poverty: financial and material deprivation. People living in poverty are without enough income to support their own or their families' basic needs, and the resulting deprivation and stress causes damage to the physical and emotional well-being of poor children and adults.

Given the obvious, concrete impact of deprivation in the lives of the poor, it is perhaps not surprising that most scientific studies of poverty address it from this perspective – in other words, by examining particular aspects of scarcity in poor peoples' lives and tracing out the particular kinds of damage that result from it. Researchers may go on to propose programs or mechanisms by which relevant aid can be supplied to the poor, and/or study the beneficial impact of its provision. Examples might include studies of the depression rates of mothers who live in homeless shelters, or documenting the reduced academic achievement of children who come to school hungry; subsequently, human services programs that can help poor families gain access to medical treatment or feed their children or find permanent housing can be shown to help alleviate specific harmful effects of deprivation. This approach to the conceptualization of poverty represents a well-worn path for social scientists and public health experts, and has resulted in a mountainous, little-contested body of evidence attesting to the harmfulness of poverty to the well-being of children, adults, and communities.

The same conceptualization of poverty is also commonly reflected in organized efforts to help the poor, whether by individuals or by charitable foundations. Altruistic individuals may donate money or time to charities or volunteer organizations that bring needed resources to the families that do not have them. Charities and philanthropic organizations organize fundraising events around the need for aid or sustenance in particular communities, and such campaigns may be the source of valuable services for poor families: a low-fee or no-fee medical service, a breakfast program for pre-schoolers, coat drives in the winter, food drives at any time of the year. These important resources help support the day-to-day survival of the adults and children who receive them, making charitable organizations valuable contributors to global efforts to aid the poor.

As depicted through these examples, the harm that results from the financial and material deprivation of poverty is certainly obvious, relevant, and undeniable, and organized giving campaigns can be valuable in addressing the damage that has been done – yet there are additional, superordinate dimensions of poverty that transcend this perspective. This dimension has been touched upon by some of the most influential economists of our time, dating back at

least as far as Adam Smith's 1776 publication, The Wealth of Nations. At that time, Smith clarified that a crucial element of poverty is the marginalization of the poor in public life and the ongoing social shaming that they experience as a result. Stein Ringen, a professor of sociology and social philosophy at Oxford University, struck a similar chord in characterizing poverty as a restricted, marginalized, disempowered social location:

> The problem of poverty manifests itself in the lives of persons and families as an enforced lack of basic material power to live as one wants or as reasoned fear that one might fall into that situation. It is to live under the dictatorship of material necessity without choice and control in one's daily life. That's what poverty is, it's about freedom and power and the lack thereof.[1]

Perhaps most influentially, Nobel Prize winning economist Amartya Sen[2] has argued against concrete, resource-related calculations (such as poverty lines) in delineating poverty, emphasizing that money and resources are crucial precisely because they enable people to participate in social relationships in safety, dignity, and freedom. Sen emphasized that the exclusion of poor people from such participation constitutes a primary deprivation in itself, and that it moreover catalyzes other deprivations such as unemployment. The impact of Sen's theorizing can be seen within policy statements such as the UN's 1997 Human Development report, in which poverty was conceptualized as not just poverty of income, but "as the denial of choices and opportunities most basic to human development – to live a long, healthy, creative life and to enjoy a decent standard of living, freedom, self-esteem, and the respect of others."[3] The report went on to suggest strategies for addressing poverty within this context, including the eradication of gender inequity (given that, as the result of inequity, most of the world's poor are women and their children), pro-poor economic growth priorities, and ensuring poor people's participation in the decisions that affect their lives.

Poverty as social exclusion

One of the Sen-inspired strategic elements offered by the UNDP's 1997 report – ensuring poor people's opportunities for social, economic, and political participation – corresponds to a framework for poverty that has garnered attention in Europe in recent years and which we explore here: social exclusion theory. According to Silver,[4] social exclusion theory emerged from French political debate of the 1960s, during which vulnerable social groups such as poor people began to be referenced as les exclus. This discourse was adopted in other European countries and formalized in 1989 when the Council of Ministers of Social Affairs of the European Community resolved to fight social exclusion as it worked toward a "Europe of Solidarity." Silver listed some of the social, economic, and political opportunities whose relative unavailability can constitute social exclusion:

> Consider just a few of the things that the literature says people may be excluded from: a livelihood; secure, permanent employment; earnings; property, credit, or land; housing; the minimal or prevailing consumption level; education, skills, and cultural capital; the benefits provided by the welfare state; citizenship and equality before the law; participation in the democratic process; public goods; the nation or the dominant race; the family and sociability; humane treatment, respect, personal fulfillment, and understanding.[5]

A social exclusion perspective encompasses material deprivation, but brings the relational aspects of poverty to the foreground. It brings a focus to the relationship between the poor and the rest of us – in particular, to our extensive, unremitting, and mostly unexamined exclusion of the poor as we go about the everyday business of conducting our interpersonal lives, being

workers and consumers, establishing and running companies, and governing our cities and nations. The consequence of this relational exclusion is that poor people are relegated to a social space outside mainstream culture, outside access to mainstream opportunities and protections, and outside full democratic participation in society more broadly. A derivative consequence is, as Sen contended, that this outsider position catalyzes material deprivation, in that exclusion from the resources that support employment, enfranchisement, and health perpetuates income inadequacy. Consequently, our primary contact with the poor is to encounter them as "the needy:" the children's faces shown to us by charitable fundraisers, the hands extended by the homeless, the emaciated families in news reports of global famines. The charitable outreach that is engendered by such encounters is certainly genuine, but it typically does little to mitigate the overarching exclusion of the poor.

Not only does social exclusion catalyze material deprivation, there is reason to believe that the very experience of exclusion itself constitutes a unique source of harm to poor individuals. A decade of laboratory research[6] indicates that when subjects experience exclusion in the form of social rejection, the consequences are striking: such subjects behaved more aggressively, made more high-risk, self-defeating decisions, gave up sooner on frustrating tasks, and even showed decrements in logic and reasoning. Moreover, socially-excluded participants were more likely to agree that "life is meaningless," to have a distorted sense of time, to avoid emotional language, and to face away from mirrors. Clearly, laboratory results should not be overgeneralized to complex, real-life situations, yet it also seems extreme to reject completely that this evidence is applicable to actual experiences of social exclusion. What the evidence suggests, therefore, is that the fact that we allow people to be excluded is a form of violence on its own – and every day that we stand by and leave people on the outside looking in, we participate in the assault. The eminent French sociologist Pierre Bourdieu[7] had a name for this: symbolic violence.

What would it mean to address exclusion itself – to direct our actions toward increasing the social inclusion of the poor? One of the first challenges would be to see the signs of exclusion all around us, signs to which we have become so accustomed that they are nearly invisible to us.[8] For example, many of us who are not poor take for granted that we do not live next door to poor people or have very poor people as close friends. In fact, many of us live much of our lives without ever venturing into the communities where poor people live. The result is that we know little about what their lives are actually like, a knowledge vacuum that becomes filled with the negative poverty-related assumptions and stereotypes that abound in society. What if society were not segregated in this fashion? What if we reorganized our social and institutional worlds so that concentrated areas of poverty did not exist, so that we literally saw poorer families as part of our socioeconomic world?

This inclusive re-visioning process would mean reinterpreting for ourselves the indispensible contributions made to the smooth running of societies by the lowest-wage workers. Such labor is frequently devalued by people in more privileged social classes when they notice it at all, but most of us who stop to think about it will quickly realize that we rely daily upon the contributions of people at the bottom of the economic hierarchy. The people who harvest food around the world, who cut meat in plants and sew garments in factories and clean our offices, the people who provide domestic and caregiving services – these people carry our nations along on their shoulders. Not only that, the fortunes acquired by people with more socially-accepted occupations have often literally been made with the hands of poor workers all along the corporate supply chain. The rest of us need poor working people to come to work every day, and an inclusive vision calls us to see the value of their labor and to find in ourselves (and encourage in each other) a respect for what all workers add to the global community. If such a vision of mutual inclusion and respect can be achieved, it would seem a short step to consider

next that all workers' compensation should, at minimum, reflect a living wage in their locality. After all, what does it mean to acknowledge that we require someone's labor, but are unwilling to pay them enough to live decently because we can get away with that – because they are constrained to accept what little is offered?

Increasingly, "constrained" is an appropriate word, in that growing numbers of poor people around the world are on the brink of complete exclusion from the world of work – the world from which basic socioeconomic inclusion derives. In today's globalized economy, billions of new workers are attempting to enter the workforce from formerly closed or developing countries such as China and India, resulting in a global oversupply of labor.[9] Such an oversupply is generally considered to depress wage structures, resulting in what has been called a "race to the bottom," but the burgeoning labor oversupply threatens not only wage sufficiency – it is also reflected in the social safeguarding (or lack thereof) of the civil liberties of workers. Davies and Vadlamannati set out to investigate whether transnational corporatization might also be accompanied by a gradual decrease in the protection of workers' civil rights, such as freedom of association and the freedom to join workers' associations and unions; as the study's authors pointed out, all other things being equal, "mobile investment would prefer a location with weaker standards and lower costs."[10] They used econometric spatial methods to demonstrate that when worker protections decline in one country, there tends to be a subsequent related decline in others, a trend that threatens to spiral ever downward. This decline seemed related not to the presence of protective regulations and laws in a given locality so much as to the enforcement of regulations where they did exist. In other words, the formal existence of appropriate national civil rights statutes has not protected workers from a creeping decline in standards.

Reduced protection of workers' rights is just one aspect of the complex local and national sequellae of economic globalization around the world. In fact, globalization's still emerging economic and social reverberations are so complex that many influential economists disagree as to its overall impact on the poor. Some have focused on the potential of globalization to benefit the poor as it improves the economic outlook of a nation as a whole,[11] while others identify econometric flaws in such analyses[12] and/or explain that such improvements frequently still leave the poorest people behind.[13] Complete explication of this debate is beyond the scope of this discussion, yet it seems safe to say that globalization, technological advancements, and an oversupply of labor threaten to undermine the wages and working conditions that many of the world's poor working people must accept when they can find employment.

Moreover, it appears that even these employment opportunities are reduced in number: referring to the world's current unemployment situation as a crisis, the 2013 Global Employment Trends Report from the International Labour Office (ILO) estimated that 197 million people were without a job in 2012, a number that is expected to rise to 205 million in 2014. Moreover, the ILO reported that increasingly, the world's unemployment is long-term in nature and likely to be characterized by a mismatch between skills, education, and emerging job sectors. Notably, the same trends that are exacerbating the exclusion of the poor are further enhancing the good fortunes of those of us closer to the centers of socioeconomic power: researchers at the Gerald R. Ford School of Public Policy have estimated that corporate globalization is increasing executive-to-worker pay differentials and fueling the growing equity gap between the world's haves and have-nots.[14]

The world's poor, then, survive in some of the outermost regions of socioeconomic exclusion. They are often outside global workplaces and outside the educational and commercial opportunities that could serve as pathways to contemporary occupations. Many are too poor even to be significant to the rest of us as consumers. One consequence of this is the inadequacy

of available products supplied worldwide for the poor (in terms of functionality, pricing, accessibility and desirability). We must ask: to what extent does the private sector consider the poor in formulating their products and services? Additionally, the global levels of extreme poverty globally are staggering: the World Bank estimated that 2.4 billion people lived on less than US $2 a day in 2010, and their most optimistic prediction for 2015 is that approximately one billion people will be living on less that US $ 1.25 per day.[15] These numbers loom as living evidence of the impact of unchecked economic globalization. As George noted, globalization sounds like a process by which all people around the world are increasingly united within a growing, ever more inclusive socioeconomic sphere; in fact, it is a somewhat paradoxical trend:

> [M]illions of people suddenly discover that they have become superfluous, unnecessary both to production and consumption. Whereas progressives used to rail against exploitation, today it's almost a privilege to be exploited – at least you still have a job and a role. Although these redundant multitudes are now living all over the planet, they might as well be invisible.[16]

Addressing social exclusion begins with noticing and interrogating the "invisibilization" of the poor. It begins with conscious, deliberate questions about who is not in the room, who is not included in social and commercial spaces. It requires us to ask, who is not part of this civic decision-making process? Who is not part of this workplace? Who is not represented within our sociocultural world? The answers to these questions will almost always point to poor people; they will also undoubtedly point to people of color, women, sexual minorities, people with disabilities, and other groups who experience relative amounts of marginalization. With regard to poverty, consideration of the issues discussed in foregoing chapters of this report can be comprehensively integrated within a social exclusion perspective, yielding a wide-ranging compendium of the forms that exclusion takes in the lives of the poor:

- Exclusion from basic mainstream services and resources: Health, developmental, and cognitive research has revealed that, in creating stressful environments and obstructing poor families' access to mainstream services, poverty damages the bodily health, the emotional well-being, and the cognitive functioning of poor children and adults.

- Exclusion from the social protections and safe life spaces that permit the development of roles in the broader economic world: Behavioral economists have illuminated the connections by which the marginalized, depleted, stressful environments of poverty preclude the development of long-term economic decision-making and other work-related human capabilities

- Exclusion from mainstream educational, training, and vocational gateways: Building upon the foregoing by explaining that, we know that not only do stressful environments undermine the best efforts of the poor to move beyond poverty, the pathways by which the rest of us access economic opportunities are frequently barred to them

- Exclusion from global reserves of human resources and entrepreneurship: Empowered global citizens comprise the worldwide human capital/human resources that lie at the heart of economic development. The community of people who make up this resource can be seen as both contributors to and beneficiaries of their participation in this system – their participation as workers and consumers is essential to a nation's economy, and it also enfranchises them as world citizens. Poor people are currently largely excluded from such enfranchisement.

- Intergroup and interpersonal exclusion through social "othering": Society's continuing marginalization of the poor is supported by a constellation of attitudes, assumptions, stereotypes, and biases that deepen, perpetuate, and sanction their exclusion. Moreover, gaps in understanding and empathy characterize the interactions of mainstream

individuals with the poor – gaps that can render even the most well-intentioned efforts to help as ineffective, shortsighted, and patronizing.

We can see, therefore, that poor people's social exclusion encompasses both the tangible and intangible harm exacted by poverty. Moreover, each form of exclusion tends to exacerbate other forms, making pathways out of poverty ever more elusive. From their disenfranchised position on the margins, it is difficult to imagine that poor people can turn back these broad global trends solely through their own undertakings, even with the well-intentioned but short-term support offered by conventional charitable giving. What is needed is collaboration by the rest of us: first, a decision to refute the continuing exclusion of the poor and second, deliberate action to bring them in. What might constitute such action? The second half of the chapter explores this question.

Beyond charity: A seat at the table

Undertaking to address an issue as vast as global poverty obviously calls for collective worldwide effort. As noted, our point of departure for this effort is freighted with conceptual and pragmatic challenges -- it is characterized by entrenched thinking about poverty, help, and charity, as well as a mismatch between the notion of an inclusive socioeconomic world and the traditional administrative hierarchies within most charitable and private sector enterprises. Nevertheless, as the engine of and gateway to socioeconomic participation, the private sector has a critical role to play in enacting social inclusion. Social, cultural, educational, and governmental entities must act as full partners in this endeavor in that, even if economic and democratic gateways could be flung open tomorrow, many poor workers will benefit from training, support, and oversight of their navigation of them.

A framework for thinking about corporate social responsibility (CSR) initiatives within the private sector has been referred to as the triple bottom line (TBL) approach to accounting. According to this framework, profit is one of three bottom-line criteria according to which corporate citizens can evaluate their effectiveness. The three criteria are profit, people, and the planet – the three Ps that refer to the financial, social, and environmental outcomes of corporate activity. Certainly, the two non-traditional Ps are the most difficult to measure, and the Indiana Business Review (IBR) reported that proposed metrics for people have included such indices as unemployment rate, median household income, relative poverty, and health-adjusted life expectancy measured at the local, state, and/or national levels.[17] As no agreed-upon set of metrics yet exist, corporations who espouse CSR have created templates of their own. A model created by Cascade Engineering, a US manufacturer comprised of 13 different businesses, includes such variables as welfare-to-career employee retention, and was cited by IBR as an example:

> At Cascade Engineering, we define sustainability as the Triple Bottom Line – Social Capital, Environmental Capital and Financial Capital. We think of the concept of sustainability as the three interconnected gears in motion. Each category is an interdependent, innovation-enabling mechanism. The three gears (Social, Environmental and Financial) cannot exist independently; each in turn, provides momentum and innovative thought to the next. To drive one forward is to drive all three forward; the result is a sustainable system where innovation begets innovation… From the beginning, our purpose has always been to demonstrate how sustainability can be a powerful vehicle for societal change and have a clear business purpose as well.[18]

Optimizing the TBL through social inclusion

Although full optimization of the triple bottom line is aspirational at this point, helpful signposts and early approximations – like the one provided by Cascade Engineering -- can be identified, testifying through their success that an inclusive TBL world is attainable. Along these lines, in a report on pro-poor business strategies, the UNDP cited engagement of the poor as individuals as a key guideline for private sector poverty initiatives.[19] The report described engagement through such examples as including the poor in market research and development, training poor individuals to be trainers, and co-creating products and business innovations with the poor – all examples whereby the poor can be included within the very business of doing business. These are the kinds of initiatives that promise more than "help" for people living in poverty – they offer the poor an opportunity to enter the social and economic spaces where the rest of us live our lives. They are corporate practices that truly counteract the social exclusion of the poor.

Grameen Bank. Bangladesh's Grameen Bank may provide one of the better-known example of social inclusion, as its founder Muhammed Yunus won the 2006 Nobel Peace Prize. Grameen's operations center on the provision of small microloans to people living in poverty, a focus that stems directly from the institution's stance on poverty:

> Grameen believes that poverty is not created by the poor, it is created by the institutions and policies which surround them. In order to eliminate poverty, all we need to do is to make appropriate changes in institutions and policies, and/or create new ones. Grameen believes that charity is not an answer to poverty. It only helps poverty to continue.[20]

With a mission to be one of these changed institutions, Grameen grounded their business model in making a mainstream resource -- the opportunity to borrow and repay money – accessible by the poor. Despite the visionary sound of their language, Grameen has demonstrated through its own accomplishments that ending the financial exclusion of the poor is no daydream. Grameen's loan recovery rate stands at 96.67 percent, and the bank has shown a profit nearly every year since it came into existence in 1976 (the exceptions being 1983, 1991, and 1992). In proving the naysayers wrong, Grameen's inclusive approach has resulted in a win-win situation for the organization and its creditors.

> The assumption is that if individual borrowers are given access to credit, they will be able to identify and engage in viable income-generating activities -- simple processing such as paddy husking, lime-making, manufacturing such as pottery, weaving, and garment sewing, storage and marketing and transport services… [I]t had earlier been thought that the poor would not be able to find remunerative occupations. In fact, Grameen borrowers have successfully done so. It was thought that the poor would not be able to repay; in fact, repayment rates reached 97 percent. It was thought that poor rural women in particular were not bankable; in fact, they accounted for 94 percent of borrowers in early 1992. It was also thought that the poor cannot save; in fact, group savings have proven as successful as group lending. It was thought that rural power structures would make sure that such a bank failed; but the Grameen Bank has been able to expand rapidly.[21]

Fair trade practices. Corporations that identify themselves as fair trade organizations endorse commitments to safe working conditions, fair wages, and inclusive trade practices at every level of their supply chains. Creating opportunities for poor people to find inclusion and success within global trade networks is an integral part of the fair trade mission. In describing a fair trade organization, the World Fair Trade Organization stated:

> Poverty reduction through trade forms a key part of the organization's aims. The organization supports marginalized small producers, whether these are independent family businesses, or grouped in associations or co-operatives. It seeks to enable them to move from income insecurity and poverty to economic self-sufficiency and ownership. …The organization trades with concern for the social, economic and environmental well-being of marginalized small producers and does not maximize profit at their expense.[22]

When consumers catch on to the global impact of a particular fair trade product, they vote for CSR with their wallets – and everyone stands to benefit. Coffee is an example of a product that has been prominent in fair trade supply chains, with major marketers such as Starbucks now reporting that 93% of their coffee sold in 2012 was ethically sourced.[23] The efficient enactment and monitoring of fair trade practices is a work-in-progress, and it remains to be seen whether these practices can approach the cross-generational effectiveness achieved by various micro-credit initiatives that allow women to feed and educate their children. However, fair trade practices offer corporations an approach to poverty eradication that brings poor working people directly into the world marketplace:

> Representatives from Starbucks, Peet's, and Green Mountain Coffee Roasters (which owns such brands as Caribou Coffee, Tully's, and Newman's Own) all report a push from consumers for more transparency of contract and socially responsible business practices. It is rare to find a coffee roaster or retailer these days that does not address social issues in some way. Some do so by offering Fair Trade coffee. Others, however, have sought out other solutions, such as adopting other certifications or by developing their own programs.[24]

Husk Power Systems. India's Husk Power Systems (HPS), an electric power company, has as its primary focus a form of inclusive rural development that aims to initiate self-sustaining business ecosystems in the poor villages that it serves. Through its business of rural electrification, HPS has re-invented conventional approaches to providing electricity, developing the capacity to deliver electrical energy to the very poor. In so doing, HPS has reduced air pollution and improved living conditions in the areas they serve by cutting the use of kerosene and diesel, and has provided training and income generation opportunities to local farmers and entrepreneurs:

> HPS is a revolution in progress that attempts to channelize the largely dissociated efforts of various stakeholders - communities, investors, entrepreneurs, businesses, government and the society at large - to bring the worldwide impoverished and under-served rural population from the bottom to the top of the list of priorities.[25]

Another world is possible if….

The title of this section is taken from George's 2004 book by the same name in which she discussed the challenges of initiating sea-changes in global socioeconomic systems, presenting it as difficult, yet ultimately achievable: "[A]nother world is indeed possible, but only if the greatest possible number of people with many backgrounds, viewpoints, and skills joining together to make it happen. Things change when enough people insist on it and work for it."[26]

We can think of this diverse, creative, dedicated working group of people as slowly building its membership around the world – although these founding members are not all aware of each other's efforts. It already includes visionary corporations such as those mentioned above; it also includes non-profit and NGO entities, civic leaders, and academic researchers like the social scientists represented in this report. Notably, it also includes poor people themselves,

both as individuals and as members of coalitions such as the Poor People's Economic Human Rights Campaign, which is "committed to uniting the poor as the leadership base for a broad movement to abolish poverty everywhere and forever":

> The Poor People's Economic Human Rights Campaign includes people of many backgrounds. We are mothers, fathers, children, and grandparents; we are the unemployed, the working poor, the downsized, the homeless… we are social workers, religious leaders, labor leaders, artists, lawyers, and other people of conscience; we are young and old; we live in rural areas and in urban centers…. We do not seek pity. We do seek power to end conditions that threaten all of us with economic human rights violations denying us our birthrights to Life, Liberty, and the Pursuit of Happiness.[27]

Local organizations by and for poor people are often poorly resourced and therefore difficult to sustain and publicize. This means that they may be unknown to non-poor people, yet they are indispensible contributors to an inclusive re-visioning of socioeconomic life. Although there will likely always be haves and have-nots, an anti-exclusion working group need not be satisfied with a system that increasingly relegates the have-nots to the margins. Is there an easy solution? No – but our nations have tacked complex problems before, the private sector has demonstrated its ingenuity again and again, and the world is brimming with untapped creativity in people of every walk of life.

The practical challenges in enacting social inclusion as part of CSR are just part of the work that lies ahead for this group. Other elements of the project are more attitudinal in nature; for example, research has demonstrated that negative stereotyping characterizes commonplace attitudes toward the poor and exacerbates their social exclusion, and even helping professionals and other well-intentioned non-poor people can expect to have been affected by these pervasive biases to some extent.[28] These biases are, in turn, related to another issue: the lack of widespread popular awareness of the systemic contributors to poverty, which supports negative stereotyping by creating the impression that poverty is solely the result of poor people's individual deficits. This phenomenon corresponds to an emerging structural competency paradigm in medical training and practice, a model by which harm to physical and emotional well-being are understood to be influenced by the "downstream implications of upstream decisions" within social infrastructures.[29] These upstream decisions include a range of outcomes such as unequal access to the workforce, unfair policies in the distribution of resources such as housing and food, and the lack of educational opportunities and health services to meet the needs of the poor. Coordinated efforts to educate society regarding these attitudinal and conceptual elements will be foundational to social inclusion interventions; they will also indirectly benefit poor people's social and emotional well-being as they counteract marginalization.[30]

Challenging questions also hang over CSR and the triple bottom line more generally. Will there not be corporate costs to the social inclusion initiatives inspired by the endorsement of a TBL model? Of course there will – just as there have been costs associated with the environmental element added to the traditional single bottom-line formula. To be permitted to do business free of concern for damage to the environment would certainly enhance the profit margins of many corporations. Shareholders' bank balances could be expected to grow significantly if industries did not need to spend any money managing the potentially harmful effects of pesticides, radiation, solid waste, toxic substances, river and ocean dumping, and other environmental concerns. Safeguarding people's ability to live safely on the planet, however, is not only a generally-recognized ethical imperative, it is necessary to the long-term survival of society. As such, it seems safe to say that most global citizens recognize that environmental standards

represent a situation in which corporate profits cannot be automatically and inflexibly prioritized over every other consideration.

We may be unaccustomed to thinking of poverty as threatening society as a whole in a way that compares to environmental damage. A social exclusion perspective, however, invites consideration of exactly where current socioeconomic trends are leading. As mentioned, the equity gap – the gap between the wealth and incomes of the richest and poorest segments of society – is widening at an escalating rate. A recent UNICEF analysis of the global inequality gap sounded an alarm:

> Overall, the extreme inequality in the distribution of the world's income should make us question the current development model (development for whom?), which has accrued mostly to the wealthiest billion. Not only does inequality slow economic growth, but it results in health and social problems and generates political instability. Inequality is dysfunctional, and there is a grave need to place equity at the center of the development agenda.[31]

The vision that emerges is that of a gated community within which a relatively small privileged, economically-included social group resides -- while outside, the excluded masses steadily grow. The ethical concerns that arise from this disparity are obvious enough, but moral arguments aside, it also does not sound like a viable long-term arrangement for world commerce or human society. Of course, some members of the gated community will be unwilling to take a long-term perspective, as the current state of affairs may seem to present a favorable existence for them for the duration of their lifetimes. Again, a comparison to the environmental movement is apt: protection of the environment has also required from us an ability to commit to the long-term good, to the survival of the planet and its inhabitants in millennia that we will never see. Not every member of society will be able to find personal value in such a stance, but that has not prevented the world's nations from creating and enacting forward-looking environmental strategies. Analogously, the fact that not every corporation will be willing to integrate TBL accounting into its business model need not deter other global citizens from being part of an inclusive solution to poverty.

Concluding thoughts

What is help for the poor? Certainly, there is a time and a place for bandaging the damage done by poverty, but true help will consist of counteracting the exclusionary socioeconomic trends that push poor people to the social margins -- outside commerce, outside social protections, outside full democratic participation in society. The vision of an inclusive global economic community dovetails with existing CSR and TBL initiatives, and in this discussion, we have hoped to bring social inclusion to the forefront as a framework that can unite the best efforts of people throughout the public and private sectors who are working toward the eradication of poverty. As mentioned, members of this theorized pro-inclusion, anti-poverty working group already exist – but they are scattered throughout nations, continents, communities, public institutions, and private corporations. We need to know about each other and join forces.

We have also hoped to convey that although private corporations may not be the first entities to come to mind in association with poverty eradication, they are essential members of this group. As important arbiters of the socioeconomic world, their contributions stand to benefit humanity (both now and in the future) as well as their own enterprises (both now and in the future). Moreover, there are indications that these are the corporations to which the best and brightest young professionals will be attracted: a recent survey found that the young people who will make up the work force of 2020 overwhelmingly wish to work for a company that

cares about its impact on society. In fact, 35% said that they would take a pay cut to work for a company that was committed to CSR.[32] A socially-inclusive socioeconomic world is not yet close at hand, but it is possible. We cannot bring it into being tomorrow, but we can set our compasses today and begin directing our steps toward an equitable world.

Notes

1 Ringen 2009.
2 Sen 2000.
3 UNDP 1997, p. 5.
4 Silver 1994.
5 Silver 1994, p. 541.
6 See Baumeister and others 2005; Baumeister, Twenge and Nuss 2002; Twenge and others 2001; Twenge, Catanese and Baumeister 2002; Twenge, Catanese and Baumeister 2003.
7 Bourdieu and Passeron 1997, 1990.
8 Smith 2013.
9 Hockett, Alpert and Roubini 2011.
10 Davies and Vadlamannati 2011, p. 2.
11 Dollar and Kraay 2000; Wolf 2005.
12 Lukber, Smith and Weeks 2002.
13 Stiglitz 2003; Sachs 2006.
14 Ma 2013.
15 World Bank 2014.
16 George 2004, p. 6.
17 Slaper and Hall 2001.
18 Cascade Engineering 2013.
19 UNDP 2008.
20 Grameen Bank 2011b.
21 Grameen Bank 2011a.
22 World Trade Organization 2013.
23 Starbucks (n.d.).
24 Haight 2013.
25 Husk Power Systems 2014.
26 George 2004, p. xii.
27 Poor People's Economic Human Rights Campaign 2012.
28 Smith 2010.
29 Schneider 2013.
30 Ali, Hawkins and Chambers 2010.
31 Ortiz and Cummins 2011, p. vii.
32 Meistner 2012.

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