Well-being and Equity as a Business Imperative Summary of the Harvard Sustainability and Health Initiative (SHINE) Research on Worker Well-being October, 2020

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Executive Summary

The connection between business and health has become increasingly evident. Fast-moving global trends disrupt production and markets, often disproportionally impacting those who can least afford it, including workers in the apparel supply chain. Investors, consumers, suppliers, workers, communities, governments and civil society are now calling on companies to recalibrate the way they do business. The call is for a shift away from old efficiency models that push material flows in a top-down, linear way to a new model of resiliency that considers the adaptive responses of people in the system and bottom-up solutions.

Because people are foundational to the workings of the system, the resilient business will prioritize well-being, seek to develop peoples' skills, and offer agency to experiment around how work gets done. It will do this by building fair and transparent systems that instill trust among employees. This resilient model also incorporates data across the value chain to connect the dots between people and processes and inputs and impact, which includes people's well-being. These connections will make visible intangible and tangible assets, expose feedback loops, and sense changing conditions early so the business can adapt.

With a long history of social activism and corporate social responsibility, the Levi Strauss & Company (LS&Co.) has long strived for social impact. In 2011, the company launched the Worker Well-being initiative to appreciate how workers in the supply chain were faring and what programs could improve their lives. By 2016, it became clear that a core set of well-being metrics was needed to create a common understanding of drivers, impact, and progress.

Our team at the Sustainability and Health Initiative (SHINE) at the Harvard T.H. Chan School of Public Health developed the metrics and collected data on 13,318 workers in 15 factories and five countries around the world over a three year-period. Through this effort, researchers gained insight about the downstream effects of LS&Co.'s purchasing practices on factory resources and worker well-being. We mapped system-wide impacts according to a broad set of worker well-being and business performance measures. By understanding how business practices impact different components of the production ecosystem, LS&Co. will be able to consider truly sustainable solutions. This means looking into root causes and effects both upstream and downstream. In many cases this will not necessarily mean more investment, but better investment. In all, this sense-making draws an explicit connection between business and health. The findings reinforce the point that people are foundational to business success and that how work gets done deeply affects people's lives. As such, raising well-being and equity among workers helps build resilient supply chains, business success, and further sustainable development.

Key findings

Our research yielded the six key findings below. Each is explored in detail in the body of the report.

- Understanding worker well-being requires direct solicitation of workers' perceptions and consideration of the production system as a whole. Many business practices, performance measures, and drivers of well-being are invisible without collecting these measures and modelling associations between them. In this regard, the data goes deeper than compliance audits and highlights opportunity over risk.
- 2. How work is organized and resourced in factories has a profound effect on health and well-being and affects men and women differently. In many regards, women are disadvantaged.
- 3. **Higher well-being at work improves business performance.** When workers are happy, healthy, and engaged at work, they are most productive.

- 4. How people are treated at work affects their health, well-being and performance. A caring culture—one of trust, respect and fairness—produces well-being and better business performance. Before this research, this important asset was invisible.
- 5. Purchasing practices that result in significant order changes from month to month negatively affect factory culture and pay systems, and ultimately, worker well-being.
- 6. An unpredictable environment between buyers and suppliers undermines trust, and this trickles down to workers. Further, uncertainty in order volumes is offset through pay systems that shift the cost of downturns to workers in the form of piece rate compensation. When business is down, workers bear financial hardship or leave because they cannot produce enough pieces to earn a living. High levels of turnover are accepted practice. Fluctuating volumes also press workers to accept excessive overtime or to come to work even when sick in order to make ends meet.

Recommendations

- Apply a brand-level, systems view across the supply chain that ties worker experiences and wellbeing to other indicators for production, like order placements, product quality, and on-time delivery.
 Emphasize caring cultures as leverage points for high performing production systems.
- Reward suppliers for optimizing worker well-being in addition to product quality and on-time delivery. Incentivize the advancement of women in the workforce—recognized as skill training, promotion or advancement to higher paying positions, pay equity, and improved health.
- Establish trusting, long-term, dependable supplier partnerships by managing order placements to minimize extreme fluctuations in demand that may results in negative worker impacts.
- Test drive new compensation systems, such as hourly wages versus piece rate, to minimize turnover, overtime, worker financial fragility, and to improve overall well-being and performance.
- Invest in well-being because of its outsized impact on women workers—the makers of LS&Co. products who are often disadvantaged in factory floors.

About the researchers:

SHINE is a research center focused on studying the dynamic connections that exist between individuals, organizations, workplaces, and communities and their impact on our well-being. SHINE believes the well-being potential of the individual depends on the environment in which we live and systems in which we operate. And the success of every organization depends on creating opportunities for individuals to thrive and fulfill their potential. SHINE led this research on well-being in the LS&Co. supply chain.

To execute the research in the LS&Co. supply chain, SHINE partnered with Manaus Consulting—a research firm with over 10 years of experience in international development. With Harvard, Manaus led data collection in all factories and the translation of research findings into both supplier and LS&Co. company strategies. Manaus also assisted with the adaptation of the survey to the apparel setting, data analysis, and overall quality checks to ensure the successful implementation of research objectives.

Dr. Eileen McNeely, Dr. Piotr Bialowolski, Dr. Dorota Weziak-Bialowolska, Heloisa Jardim, Karoline Barwinski, Tamar Benzaken Koosed, Carlued Leon, Bryn Philibert were the researchers at SHINE and Manaus who made this work possible. In bold are the researchers who directly contributed to this report.

Acknowledgements: Over the last three years, the research team visited 15 factories in five countries. The insights in this report are only made possible because of the 13,318 workers who shared their fears and desires about their work, lives, and communities and the suppliers who opened their businesses and minds to this approach. It is because of them that we understand how work can be a force for well-being. We thank LS&Co. vendors Apparel International (Mexico), JD United (China and Cambodia), Orit Apparel (Sri Lanka), and LS&Co.'s plant in Plock, Poland for opening their doors to our study.

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Identifying worker impacts: A dashboard for optimizing worker well

A dashboard for optimizing worker well-being and high-performance production systems

In 2016, LS&Co. asked researchers at SHINE at the Harvard T.H. Chan School of Public Health to better define well-being, measure it, and identify what drives it. The work aimed to make well-being increasingly visible for suppliers and brands and guide investments to enhance it. Differently from other approaches, this effort put workers at the center of transformative change and innovation around how the industry will operate in the future. Well-being is understood by enfranchising workers to weigh in about their direct experiences at and ideas for reimaging work. This research was done not only through comprehensive surveys, but also through hundreds of open-ended interviews, written comments, and group conversations. Most importantly, the research triggered a shift in management thinking about worker participation and their contribution for optimizing well-being and its drivers for the business. It challenged the traditional top-down approach on factory floors by making workers' opinions visible and putting them front and center in the decision-making process.

"Now that people feel more confidence in expressing themselves, they have more things to say about what they think is not working, and they're expecting to be heard."

"People feel that it's great that we finally have a chance to speak. They feel that what they think matters."

~Quotes from factory workers about the opportunity to be heard

A broader definition of well-being

Well-being at work is a positive state in which the individual can function at or near their optimal level, defined in terms of physical, mental, emotional, and social functioning, with significant implications for the individual, their family and community, the organization and society at large.¹ In short, well-being at work is defined by workers who are happy, healthy, and engaged.

Traditionally, well-being has been narrowly understood as a person's physical health, often measured in the workplace via injury and disability rates. Well-being, as seen holistically, encompasses several dimensions of the human experience: **physical** (good health and body function, good nutrition, physical safety, and access to good healthcare); **mental and emotional** (feelings of self-confidence and self-esteem, a sense of meaning and purpose, a sense of agency, accomplishment and self-efficacy, emotional resilience, and ability to handle conflict); and **social** (supportive and fulfilling relationships, feelings of trust and cooperation, and a sense of social connectedness).^{1–3} Well-being also encompasses a sense job and financial security.⁴

Culled from decades of management research, the Harvard team also mapped and measured resources known to affect worker well-being and performance to find upstream causes that could be modified. This dashboard of indicators forms the basis of a learning system that makes visible the processes that link to outcomes. In thinking about the system of work as a whole, the important leverage points for well-being and performance can be better understood and managed.

"Systems thinking is a discipline for seeing wholes. It is a framework for seeing interrelationships rather than things, for seeing 'patterns of change' rather than static 'snapshots.' Small changes can produce big results – but the areas of highest leverage are often the least obvious."

The dashboard includes 12 key workplace resources that impact people's well-being at work and in life.^{2,3,6-8}



Caring work climate

Employees feel cared for, treated fairly and respectfully, and are trusting of management.



Supportive relationships

Employees feel part of a team and are able to count on co-workers and supervisors to get the work done and deal with stressful situations.



Manageable workload

Employees feel there is sufficient time to do their job properly, with bearable stress levels, and sufficient rest time.



Work-life balance

Employees feel it is easy to take time-off from work for personal matters and work does not disrupt their family life.



Good physical working conditions

Employees feel that physical conditions at work—temperature, ventilation, noise, work postures—are adequate to do their job.



Job control

Employees understand what is expected from them at work and have a sense of control over how to do their job and their work schedule.



Job security

Employees have a sense of security around their employment status.



Fair wages

Employees feel the pay they receive for the work they do is fair.



Meaningful job

Employees feel their job is meaningful in their lives.



Learning and growth opportunities

Employees feel they can learn new skills and have opportunities for career advancement.



Healthy work environment

Employees feel they have access to healthy food, drinking water, and medical care at the workplace.



Zero harassment

Employees feel they work in an emotionally and physically safe environment free of verbal abuse and sexual harassment.

A broader understanding of well-being enables LS&Co. and the apparel industry to seek beyond maxed-out efforts that have attempted to impact workers' lives—including labor law and code of conduct compliance and stand-alone social programs for workers. While these interventions have often improved physical conditions in factories and enhanced aspects of workers' lives (e.g. reproductive health), they are limited in their ability to impact worker well-being more broadly. Often, conflicting forces in the workplace, like production schedules and worker-manager relations, undermine these interventions and affect previously unmeasured and invisible aspects of well-being.

With a third of our lives spent at work, the workplace can be a powerful platform to enhance human flourishing. By positioning the workplace—and therefore factories—as the origin for impact, brands can impact worker well-being within their immediate sphere of influence. Factories can provide access to essential resources, including safe and healthy conditions, supportive and respectful relationships with peers and supervisors, and opportunities for skills development and career growth. The apparel supply chain can be a platform for people to thrive.

The importance of work for human well-being

After collecting data over three years on 13,318 workers in 15 factories and five countries and applying the learning system that connects the dots between work culture, resources and well-being, we found:

Workplace resources allow employees to thrive inside and out of the workplace. While
accounting for the impact of external characteristics on well-being—like social determinants of

health—this work flips the model and proves that workplace resources are powerful enhancers of well-being at work and well-being in life outside factory walls. This puts businesses back in the drivers' seat and shows their ability to influence well-being.

- **People who flourish at work, flourish in life.** This study shows a strong relationship between life satisfaction and job satisfaction, as well as between happiness at work and happiness in life, each feeding each other. ^{7,8} It proves how work can act as a platform for humanity to thrive.
- What is good for workers, is good for businesses. Flourishing at work and in life lead to
 improved business outcomes, including higher productivity and job satisfaction, as well as fewer
 work injuries, and lower absenteeism. By measuring well-being and mapping it alongside factorylevel business outcomes, the research has proven that what is good for workers is good for
 business.

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Understanding well-being, work systems and the role of gender

Well-being at work

The status of well-being at work in LS&Co. factories show there are opportunities to enhance the lives of people who make the company's products.

Only half of the workforce feels happy and satisfied. Across suppliers, workers report very low levels of happiness at work. Happiness is measured as a collection of positive emotions workers experience during their work day—including feeling happy, calm, energetic, purposeful, optimistic, and close and trusting of others. ^{9,10}

Less than half of workers report good general health. These numbers are particularly startling given the young age of apparel workers. For example, workers' average age is 31 in Cambodia, where general health is the lowest.^{7,10–13}

Despite low levels of happiness and health, the majority of workers are engaged at work and satisfied with their jobs. Workers express satisfaction with their work (74%) and most (67%) remain engaged in what they do.¹⁰

Workplace systems and resources

In the supply chain, two thirds of workers think physical working conditions in factories are not ideal. Workers report that temperature, ventilation, noise, and work postures affect their well-being and ability to do their work. Since physical working conditions predict health, the proportion of workers who experience poor working conditions is the greatest in Cambodia, the country with the lowest health ratings in the study. Some workers (35%) also think their work environment is unhealthy, citing a lack of access to drinking water, healthy food, and medical care at work.^{2,7,10}

Physical working conditions are the top predictor of workers' ability to thrive at work. Inadequate conditions affect job satisfaction, work engagement, productivity, work injury, and general health. On the flip side, good physical working conditions lead to less fatigue, fainting, and pain. Good physical working

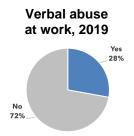
conditions are so powerful, they also impact workers' well-being outside the factory, leading to higher life satisfaction and social connectedness.^{7,10,14,15}

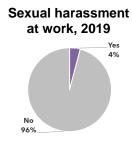
Verbal abuse and sexual harassment happen across suppliers and have lasting, harmful impacts. Despite brands' zero tolerance toward verbal and sexual harassment, workers in the supply chain continue to suffer from these abuses. The abuse arises from poor human resource and management practices, the stresses of meeting high production targets, the abuser's sense of power over others, and, often times, the victim's normalization of violent behavior. The well-being costs of these practices, and associated business losses, are often not visible to factories.

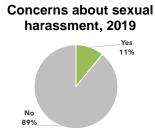
In our study, over 3,700 people report having been verbally abused while at work in 2019 alone. The mistreatment, highest in Mexico, Sri Lanka, and Cambodia (where 31% of employees report verbal abuse), leads to decreased work engagement, work quality, and job satisfaction. Verbal harassment can be so destabilizing that it impairs people's ability to conduct their daily activities, including their ability to perform their work. ^{10,16}

Sexual harassment in the workplace violates the most fundamental rights of people. It often arises from power imbalances in the workplace and a lack of systems to avoid the abuse. Power dynamics can be exacerbated across genders, ethnicities, and socioeconomic status between line workers and their supervisors. Abusers often use sexual harassment to reinforce power imbalance and intimidate workers. Often, the abuse happens when supervisors request sexual favors and, in exchange, give favorable production reports and performance reviews to employees.¹⁷

At work, having experienced sexual harassment, understandably makes employees less focused and leads to more work injuries. Those who suffer the abuse are less satisfied with their jobs and emotionally withdraw from the work they do. Tragically, over the years of our research, of the 758 people who told us they were sexually harassed at work, many had no option but to stick with their employers. They often said they wanted to quit their jobs, but, by tracking payroll data in many factories, we see these men and women do not leave. They are stuck in fear of retaliation and by a lack of options that could offer better work conditions. All this exacerbated by their need to make a living with their factory wages.







Most workers think their workload is manageable, but many have trouble reconciling their work and home lives. A third of workers say their job disrupts their family life and that it is difficult to take time-off to care for personal or family matters. This conflict between work and family often arises from a lack of control workers have over their schedules. They are in factories for long hours and, due to financial or supervisor-imposed constraints, are unable to reject overtime. Feelings of lack of control are also evident in the startling number of workers who fear losing their jobs—50% dread becoming unemployed. Overall, 46% of all surveyed workers feel they do not have control over the job they do.¹⁰

The stresses caused by feelings of lack of control, which often manifest in the ability to integrate work and family life, lead to work injuries, lower life satisfaction, less social connectedness, and financial fragility.^{7,15,18,19}

Workers generally feel more supported by peers than by supervisors. Across suppliers, 73% of workers feel their co-workers are supportive and help them to get their work done, whereas 69% feel the same about their supervisors. These important sources of social support, in the form of good relationships with co-workers and supervisors, predict better health, higher job satisfaction, and decreased intention to resign among workers.^{3,7,9,10,20}

In addition to the workplace resources above, across suppliers, one in three workers think the factory does not **pay them fairly**. This issue is most pronounced in Mexico, where 53% of workers, think their pay is unfair. ¹⁰ Information collected through comment boxes and various group discussions with employees reveal that feelings of pay fairness reflect not just dissatisfaction with the amount of pay received, but also workers' abilities to access the leave benefits that are due to them. Workers also say that their pay is unfair because they often do not receive amounts legally mandated for overtime hours. Finally, workers speak of a general lack of trust in how their wages are calculated by factories, questioning whether their pay reflects all of the pieces they produced during the pay period—the perception that pay is unfair is a common consequence of the complicated piece rate system.

Across suppliers, 68% of workers feel they have opportunities for **learning and growth at work**.¹⁰ The ability to learn something new at work and grow is associated with greater happiness at work, intent to stay, self-reported productivity, and less distraction. ^{7,14,15} Despite these positive outcomes, growth opportunities are rare; only 23% of workers have received a promotion since starting their jobs at the factory.

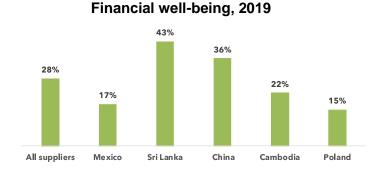
Well-being in life

The benefits of well-being at work extend beyond factory walls. This research shows that well-being at work impacts people general well-being, making the workplace an important nexus for change.

Across suppliers, 68% of workers report feeling **satisfied with their lives**, while 85% feel their lives have **meaning and purpose**. Additionally, 74% of workers report high **social connectedness**. ¹⁰

These measures of well-being in life can be enhanced by positive well-being at work. For example, happiness at work and job satisfaction increase overall life satisfaction, give people a higher sense of meaning and purpose, make them more socially connected, and increase financial well-being.^{7,21}

Despite these encouraging feelings about one's life, the data on financial well-being shows a dire picture of people's ability to provide for themselves and their families. Only 28% of those surveyed report good levels of financial well-being. ¹⁰ They worry about meeting monthly expenses, and are concerned about safety, food, and housing. Only 18% say they have enough money to cope with an emergency.



Gender, work, and well-being

Women are the driving force of the LS&Co. supply chain. Apparel manufacturing has given women an opportunity to seek work outside the home, often for the first time. They have eagerly welcomed the prospect of better providing for themselves and their families and now make up the majority of the workforce in apparel factories around the world. At the five suppliers participating in the study, women represent 60%-80% of the workforce.¹⁰

But women arrive at the job with different lived experiences than men. In our study, women are slightly older than men, but, in most countries, have lower education levels. They tend to be married and support children with their factory jobs, reflecting different responsibilities women workers hold.¹⁰ Women, more often than men, have the added burden of keeping up with unpaid homework, such as cooking, cleaning, and childcare. This limits their leisure time to recover and recharge between shifts.

Once at the factory, women are placed in different work positions than men. Work areas in apparel factories tend to be segregated by gender. This segmentation often comes as a result of social norms, differences in education levels, social benefit structures, discrimination, and stereotypical perceptions by gender—including perceptions regarding men's and women's family life, family responsibilities, and abilities at work.²² In apparel factories, this means women are more likely to work in sewing areas, where the piece rate dominates.¹⁰ Men, on the other hand, are more likely to be found in labor-intensive positions within areas such as cutting, laundry, and finishing. As processes are automated, such as with lasers and dying, men are more likely to receive training for these jobs. This portends poorly for women in a future of increasingly automated work.

Departments dominated by women also tend to offer lower wages. In Poland, around 64% of women work in sewing, compared to 11% of the men. There, where we also have reliable wage data, **women earn 15% less than men**. Women also report lower financial security. We do not see the same differentials in China. In the participating Chinese factory, 52% of women vs. 48% of men work in sewing—a less unequal distribution—and average wages as well as financial security numbers do not differ significantly among men and women. This demonstrates how inequality in socio-economic conditions between men and women and inequalities in how society perceives men and women, in this case as perceived by those hiring and placing employees in job roles, can have an outsized impact on women in the supply chain.

Women also have less opportunities to move out of the jobs they are first placed in. While 30% of men have received a promotion during their job tenure, that number is 18% for women. Average low promotion rates across the apparel supply chain mask the barriers experienced more pronouncedly by women in factories.



Gender differences in well-being

As a result of these multitude of factors, women's well-being at work is often lower than those of men. Women generally feel less happy at work, report poorer health, and are less engaged in their job.¹⁰ An analysis of how workplace resources affect women differently than men helps explain some of these differences:

- A caring workplace climate is especially impactful for women. In most countries, women who say they feel cared for experience higher gains in job engagement than men.²¹
- In Mexico and Cambodia, unmanageable workloads lead more women than men to want to quit their jobs, an obvious outcome given women bear the brunt of homework.²¹ A related measure of volume of work, work-family conflict, also disproportionally affects women, leading to lower levels of general well-being and worst health outcomes.²³
- While reports of poor physical working conditions are similar across men and women, the physical work environment impacts women more. In Mexico, poor physical working conditions increase intent to quit among men by 18% and by 31% for women. Poor physical conditions also impact women's engagement at work, while the same effect is not seen among men. Similarly, a healthy work environment—access to drinking water, clinic care at the factory, and healthy foods—impacts women's health more so than men's health.
- Conversely, sexual harassment at the workplace was found to affect work-related outcomes among men to a greater extent than among women.¹⁶ Given reports of sexual harassment are similar across men and women, it is possible that women normalize these abuses more than men, but those that suffer it still feel its effects.

There are significant barriers women face even before they enter the workforce. Apparel brands can be an equalizing force and factories should not amplify the social inequalities experienced by women outside of work. Ensuring that work areas are diverse, that all employees are paid equally for work of equal value, and that workplace resources are in place and accessible to all can have an outsized impact on women's lives.



Seeking a caring climate: The universal need for trust, respect, and fairness

Among all of the workplace resources that impact well-being, a caring workplace culture emerges as critically important. In the study, workers were asked whether they feel cared for, if they are treated fairly and with respect, and whether they trust those who they work with and for.¹⁰ The collection of these answers is summarized in the caring culture indicator. Companies where a caring culture is present are also those where many of the other workplace resources that drive well-being exist. Effectively, a caring culture represents the cumulative process of implementing the workplace resources, systems, policies, and organization of work that create positive experiences for workers—making people feel cared for—and making the business thrive.¹³ Companies that have a caring culture put workers at the center, listen to their

concerns and ideas, and problem solve together to continuously improve. A caring workplace culture enfranchises workers and gives them voice.

This agency has ripple effects, it pays off, and it is foundational for well-being. A caring company culture protects workers against disability and adverse health outcomes. ¹⁶ In Cambodia for example, men and women who say they are treated with respect and fairness and that trust managers, report higher levels of general health and are more focused on the work they do. Workers who feel their workplace is caring also report higher job satisfaction, engagement, and self-reported productivity, bring positive results to the business. ²¹

But there is still significant progress needed to ensure factories are caring workplaces. Only 56% of workers feel they work in a caring environment.¹⁰ Many feel they cannot trust coworkers, managers, and supervisors and do not feel treated respectfully and fairly.^{2,7}

While it seems obvious that caring workplaces would employ people who are happier and more engaged, this is one of very few studies that demonstrates that a **caring culture is the cause not the consequence of happiness, health, and engagement**. A caring culture does not materialize because those selected for employment are already happy and healthy, it is what leads people to thrive. It is thus foundational for the achievement of higher levels of well-being at work.



Establishing the connection between worker well-being and business performance

Our results clearly show that investing in workers pays off for businesses. The table below summarizes the relationships proven by the research.

Well-being	Decreases:	Increases:
Good Physical and Mental Health 7,12,15,24	Disability days Distraction Work Injuries Intent to quit	Engagement Productivity
Happiness at Work ^{11,14,15,25–27}	Work injuries	Productivity Health
Job Satisfaction ^{11,14,15,25–27}	Work injuries Disability days	Productivity Health
Workplace Resource	Decreases:	Increases:
Manageable workloads 7,15,18,19	Work injuries Intent to quit Disability days	Engagement Health Job satisfaction
Work-life balance 7,15,18,19	Intent to quit Distraction	Engagement
No verbal and sexual harassment	Disability days	Engagement Productivity

Supportive supervisors and peers ^{3,7,14,25}	Work injuries	Engagement Productivity Company loyalty Job satisfaction Mental health
Caring culture ²⁸	Disability days	Health Job Satisfaction Productivity

The costs of verbal & sexual harassment

It is important to highlight that harassment at work, both verbal and sexual, is not only felt at a personal level, at great expense to people's emotional and physical well-being, but it also leads to high business costs. In Mexico, Sri Lanka, China, and Cambodia, experiences of workplace emotional aggression—in the form of both verbal abuse and sexual harassment—reduce work engagement and self-reported productivity. In Poland and Mexico, sexual harassment at work is also associated with increased reports of disability days. In Mexico, workers who experienced verbal abuse are two times more likely to report disability days and three times more likely to say they plan to quit work.

The business benefits of a caring culture

Data from Mexico shows that a caring climate leads to positive business outcomes, including higher productivity, engagement, and work quality. Many studies have shown associations between caring cultures and business success, but the causal direction of the relationship was often unclear. Data collected in the LS&Co. supply chain offers a proof point that a caring culture is responsible for good business outcomes. Conversely, when employees lack trusting relationships, are disrespected, and feel treated unfairly at work, negative business results ensue. The findings challenge existing notions of caring cultures as byproducts of excelling businesses.¹³

Beyond the causal effect of a caring culture, this research finds a feeding mechanism between caring cultures and business success. The data shows that once a caring culture is in place and subsequent business results materialize, business success feeds back into and reinforces a more caring company culture. This points to a multiplying effect of caring workplace cultures.

Well-being & absenteeism

An examination of objective absenteeism data, collected from the payroll files of factories, alongside survey data, reveals no causal relationship between poor well-being and higher absenteeism. This finding is curious given the accepted causal relationship within U.S. offices and business operations. We theorize that for many in the global apparel supply chain, poverty, low wages, and lack of adequate leave protections make showing up for work an over-riding need, even in the face of sickness. In our research, we find evidence that workers' financial fragility is problematic and financial needs are so great that workers find themselves unable to miss work, despite often feeling unwell. We know workers who do not come to work, simply do not get paid.

We see the impact of financial fragility and showing up for work while unwell in other ways. In Mexico, factory data shows that when overtime hours that beget added pay are available, absenteeism falls. There, where 83% of the workforce is financially insecure, extra hours of work and the opportunity to earn more outweigh any physical and social ailments experienced by workers. Interestingly, when overtime hours become less available, absenteeism follows.

Conversely and as further evidence, data from Poland—where leave benefits are mandated and enforced by the government—show absenteeism rates nearly three times as high as those in Cambodia and Sri

Lanka. In Poland, absenteeism stands at 153 days per 100 employees each month, compared to 53.3 in Sri Lanka and 61.2 in Cambodia. ^{29 30} Employees in Poland can afford to stay home without risking lost wages.

In China, we find similar evidence of socioeconomic conditions impacting absenteeism. While we do not have reliable absenteeism data for the LS&Co. supplier there, at a participating non-LS&Co. Chinese factory, only three workers were absent during a three-month period.³¹ Workers often migrate to China's economic development zones to work, they live in dormitories adjacent to the factories, and away from their children and wives. Their sole purpose while away is to work and earn money. This set up is one of the reasons for the incredibly low absenteeism rates for apparel workers in China. Chinese factories also typically offer attendance bonuses to incentivize workers to never miss work.

But **low rates of absenteeism mask business costs associated with workers feeling unwell while at work**—a concept known as presenteeism and often ignored by researchers and managers. Our research measures the number of days, while at work, that workers feel so unwell that their ability to carry out work activities is impacted. Across suppliers, 41% of workers report at least one day in the past month when poor physical or mental health impacted their work.¹⁰ The number of workers reporting not feeling well at work is highest in China, despite low absenteeism.

Spotlight: The costs of distraction and absenteeism in Poland

In Poland, the costs of presenteeism relative to absenteeism can be seen by comparing productivity losses attributed to the two factors. Our analysis shows that low productivity costs the factory nearly US\$1 million per year. Productivity loss is primarily due to distraction (82%) and health-related absenteeism (18%). Distraction is highest in Poland among all surveyed suppliers, with 17% of all workers reporting difficulty focusing at work. Lost productive time and productivity losses associated with distraction were found to cost the factory five times more than absenteeism-related costs. Absenteeism, too is a problem for productivity, though to a smaller degree.

Lack of engagement and concerns about job insecurity are the main factors driving both distraction and absenteeism in Poland.

Turnover

High turnover is generally accepted as a proxy for poor working conditions or lack of resources to do the job. People who get sick, bored, injured, or who feel mistreated, are more likely to leave.

Turnover in the apparel supply is incredibly high. In Sri Lanka, the annual turnover for the participating LS&Co. supplier is a shocking 62%—over half of the 3,000+ workforce leaves in a 12-month period. In China, where monthly turnover hovers between 4 and 5%, there is a spike around the Chinese New Year. Workers go home for their once a year opportunity to be with family and many do not return or switch employment to other factories. The annualized turnover in China in our research period is higher than in Sri Lanka. 31 29

These large turnover figures are part of the story of the apparel supply chain. Manufacturers are in countries where labor costs are low and make up a small percentage of the cost of goods sold. Turnover costs are also never computed by companies. Human resource managers find the barrage of screenings and short interviews, emblematic of apparel factory offices, a nuisance, but the real costs to the company remain untracked. The steady stream of labor supply in these markets masks turnover costs further—making turnover tolerable in the supply chain. All this creates a chain reaction that disincentivizes companies from investing in workers.

But if the costs of turnover were to be tracked, the calculus on investments in workers could begin to change. While our research did not undertake turnover cost estimations, we find indication that the cost of turnover flows back to suppliers and all the way back to LS&Co. In Mexico, we see correlations between higher turnover and increases in order error rates. While the learning curve for workers in these low- to semi-skilled positions is short—the constant churn of new workers with little experience logically must take a toll. Certainly, gaining job experience boosts skills for self-management, finding solutions to problems, and support and cooperation among coworkers.

While a portion of turnover is explained by factors outside the control of factories—monsoons in Sri Lanka, harvest seasons that compete with manufacturing in Mexico, migrant worker status in China, and brand order volumes all around the world—there are connections between workplace resources, well-being, and voluntary turnover that deserve attention. **Investments in well-being can help mitigate the turnover trends and costs seen in the supply chain.**

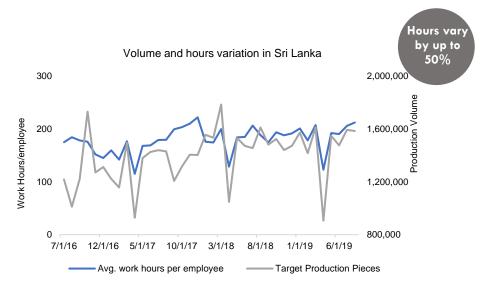
One caveat to the point on voluntary turnover and well-being is that there are **workers** who, because of many socioeconomic conditions, **find themselves unable to leave even when faced by the most difficult work conditions.** For example, our research finds that victims of verbal and sexual harassment at work in Sri Lanka and Mexico say they intend and want to leave the factory after being abused. Depressingly, payroll files show they stay, albeit less satisfied with and more withdrawn from the work they do. It is a sad picture of the lack of alternatives faced by apparel workers and the sacrifices they make for the wages they earn. ¹⁶ This same lack of alternatives likely means workers' reported intention to quit (20% across participating factories) is more representative of their perceived economic and social options, rather than their level of satisfaction with their employers. Nevertheless, poor workplace conditions deserve attention since they can translate into turnover costs or other negative business outcomes.

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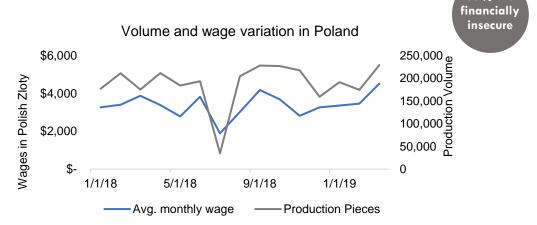
Mapping the relationships between purchasing practices and worker well-being

Our three-year exploration of well-being in apparel factories has been focused on what employers can do to improve the workplace to produce better business results and enhance human flourishing. Throughout this experience, it has become evident that management practices and factory conditions are also highly influenced by the relationship suppliers hold with brands. The order placement process, trust and fairness in the brand-supplier relationship, and reliance on long-term partnerships all enhance or, when they are lacking, constrain factories' ability to manage their businesses and work environment. In our work, we find examples of how upstream brand behaviors are felt by workers' in production lines making LS&Co. clothes.

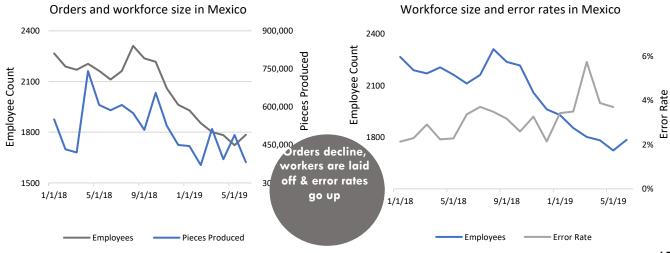
In Sri Lanka, the volume of orders (measured by targeted production pieces) is associated with fluctuations in total work hours and therefore wages earned by employees. For the period when we tracked work hours in Sri Lanka, hours worked per month per worker varied by as much as 50%. With available work hours varying so much month to month, workers often report feeling financially insecure (57%) and fearing they will lose their jobs (25%).¹⁰



In Poland, the same association is observed. When orders vary (measured by units produced), monthly wages also vary. There, in 2019, 85% of workers reported feeling financially insecure and 45% worried about becoming unemployed.¹⁰



In Mexico, the drop in order volumes over the years is correlated with an increase in involuntary turnover, as seen by the decline in the number of people employed in the vendor's factories. In 2019, 83% of workers surveyed in Mexico were financially insecure and 70% worried about becoming unemployed, some of the highest levels recorded in our research. Here, the data also show how orders can have sequential costs to brands. As employee headcounts fall, due to lower volumes, error rates trend up.



It is possible then that the impact of order volatility may go beyond worker and factory-level outcomes, and feed back to brands. Examining these relationships further would make the costs of complexities introduced by brands into the supply chain more transparent and motivate a shift in the relationship with suppliers.

Spotlight: The piece rate as a means to push business uncertainty onto workers

Many factory jobs, usually those occupied by women, are paid by the piece. Each operation needed to assemble a garment has a set value associated with it. Workers count the number of pieces they make during their pay period—a number that, in absence of automation, has to then be approved by supervisors, often leading to conflict and grievances—and receive wages that total the number of pieces made multiplied by the rate set for that operation. Labor laws guarantee that wages not fall below very low minimums, but workers operate swiftly to try to earn more than minimum wages.

The piece rate is often portrayed as a system to incentivize productivity, but it also functions as a way for factories to pay workers an amount commensurate with the volume of orders available in production lines. When orders are down, workers' ability to produce more pieces per hour also falls, impacting their overall wages. It is a mechanism that helps externalize the uncertainty in brand-supplier relations to line workers.

The piece rate system also creates a series of detrimental effects for workers. As rates for each assembly operation are set so low, workers must exert tremendous physical effort to produce as many pieces as they can in an attempt to earn a living wage. Our research numbers on financial well-being and fragility show this is an impossible task for most. But in their exertion and effort to get there, we find that workers paid by the piece experience more negative moods at work, are less satisfied with their jobs, and have poorer health compared to those paid by the hour. At the end, they also earn less than their counterparts.³²

The literature on piece rate systems also finds that workers paid by the piece are motivated to take greater physical risks to achieve production targets, increasing their risk of injury.³³ Piece rate workers also experience poorer mental health outcomes, including higher anxiety and depression.³⁴



Recommendations for resilient supply chains

Levi Strauss & Company's history and brand identity is made up of a series of bold steps to elevate the voices of the most vulnerable in our society. The company's stance toward the women and men who make its products is just as bold. LS&Co. wants workers to be satisfied, healthy, and engaged.

Ensuring these goals are realized will be increasingly vital. In a rapidly changing world, where innovation and global crises force businesses to constantly adapt, prioritizing well-being will bring about resilience. At the core of every working system is its people. By ensuring they thrive, the overall capacity of the system to excel and respond is enlarged.

The past three years have led to many learning and insights that can help LS&Co. push forward this new resiliency model. Because of the evidence compiled, we now know that:

 Understanding worker well-being and building a resilient business requires direct solicitation from workers' and consideration of the production system, including brand practices, as a whole.

- How work is organized and resourced in factories affects health and well-being and affects women and men differently. Women are often disadvantaged in factory floors.
- What is good for workers is good for businesses. When workers are happy, healthy, and engaged, they are most productive.
- A caring culture—one of trust, respect and fairness—produces well-being and better business performance.
- Purchasing practices that result in significant order changes from month to month negatively affect factory culture, pay systems, and finally worker well-being. This unpredictable environment between buyers and suppliers also undermines trust, which trickles down to workers.

These insights support doing away with old top-down ways of making decisions, instead prioritizing partnership, respect and fairness, and extending agency to those who do the work. LS&Co. can continue to lead the apparel industry to change the lives of workers and demonstrate the benefits of this new path forward.

Based on the evidence, below are five innovations that hold the greatest potential for well-being and resiliency that deserve company attention. Beyond their potential impact, these innovations were chosen because they can be applied widely, at the whole production system level and fall mostly under the sphere of influence of LS&Co.

- LS&Co. should consider rewarding supplier partners that invest in the well-being of workers, for example through better contract terms and higher prices for their garments. By incentivizing suppliers to uphold well-being alongside traditional metrics, such as cost, quality, and timing, LS&Co. can share in these investments.
- 2. The company should experiment, together with suppliers, with non-piece rate production and compensation systems. Currently, suppliers perceive a move away from the piece rate as risking productivity losses and higher costs. The supply chain needs proof points that demonstrate workers can earn a better living, experience higher levels of well-being, and produce better business results.
- 3. Create a more caring relationship with supplier partners—one characterized by trust, respect, and fairness. LS&Co. should examine its purchasing practices and consider changes that would make suppliers more resilient and healthier in the long-run. Assurances over continued business are lower volatility in season to season contract volumes are key areas to be leveraged to expand job and financial security of apparel workers.
- 4. Disseminate the well-being framework across the supply chain and apply learning systems more broadly so that worker experiences and other key performance indicators can be tied together and their relationship can be visible. This way the association of material flows—such as order placements, product quality, and on-time delivery—can be understood together with worker well-being drivers and impacts. Highlighting these relationships will help suppliers appreciate, value, and regard worker well-being as an investment and an asset.
- 5. Continue to invest in well-being, because efforts to improve well-being are efforts that increase equality and have outsized impacts in the lives of women workers. How work is organized and resourced is particularly important for women, who the driving force for the supply chain but are often disadvantaged in factory floors.

LS&CO.'s well-being initiative and this research have provided a chance for workers to express their fears, desires, and hopes for the future. It allowed their voices to be heard. It is our collective duty now to listen and respond. Through interviews, hundreds of workers told us they expected no change after their participation in the survey.³⁵ By proving them wrong, LS&Co. can build a movement that lifts up the men and women makers around the world.

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