

THE MEANING OF WORK IN CONSTRUCTION: AN INDIVIDUAL WELL-BEING PERSPECTIVE

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ABSTRACT

Scholars for decades have shown an interest in the meaning that work holds for individuals. In terms of meaning of work in the context of the construction industry, research points to challenges faced by workers and managers that may compromise health and well-being. A major concern faced by this industry globally is a shortage of labor. Research shows that this apparent impact of such labor shortages has implications on society, industry, projects, and individuals. In this paper we shed light on the opportunities and challenges inherent in construction work and discuss how the Last Planner System[®] (LPS) can act as a catalyst to creating a meaningful and prosperous work life for construction project participants. We also argue that improving the well-being of construction workers depends on several factors, one being the understanding and deployment approach to LPS. Our perspective in the discussion on the connection between experiencing a meaningful work life and the use of LPS in construction projects is that of the individual worker. As a result of our discussion, we offer suggestions for questions to be explored in future research.

KEYWORDS

Belonging, Last Planner System[®], motivation, respect for people, well-being

INTRODUCTION

Work has a profound meaning to individuals, both in terms of economic security and as a means to self-actualization, a source of identity, and social belonging and relatedness. Such needs have been illustrated by Maslow's ontology depicted in his hierarchy of needs (Maslow, 1943). Work can provide individuals and environments in which all the above can be fulfilled. An increasing amount of research has drawn attention to the well-being of workers, even so in construction. Research by Gomez et al. (2024, p. 1116) indicates that team behaviors are intertwined through social interactions, as psychological safety promotes respect and vice versa. Skinnarland and Bølviken (2023, p. 986) also underlined the interweaving aspects of collaborative behavior as influencing and reinforcing each other both positively and negatively. Initiatives such as project kick-off workshops in which participants get to know each other both professionally and socially positively affect trust levels in projects. Likewise, being involved positively in a social community affects one's willingness to commit, support the community, share pains and joy, and ultimately promote well-being.

In general, people behave in accordance with how they perceive the situation and how they feel in a certain environment. In their investigation into Lean, psychological safety, and

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behavior-based quality (BBQ), Gomez et al., (2020, p.106) stress an important point that although Lean as a philosophy often emphasizes the end customer as the number one priority, they remind us that in the highly co-dependent construction industry, there is also a need to “account for all project participants (internal and external customers) because of the role they play in achieving the success of the project.” The Lean community often refers to the concept of respect for people to highlight this social need.

The ability to actively engage in open and honest discussions, and participate in activities that support safety and well-being, are major components of systems that value worker engagement as plans are developed, implemented, and analyzed. Within the Lean Construction literature, the Last Planner System® (LPS) is a socio-technical system whose foundations are based on ‘management as planning’ and ‘management as organizing’, with strong participation from those doing the work and revisiting their assumptions in short cycles of commitments based on reliable promises made to teams (Koskela & Howell, 2002). LPS-related practices, and the networks formed in construction projects, interact to support better project performance (Liu & Ballard, 2008; Castillo et al., 2018), and the strengthening of these networks have a synergistic effect in terms of supporting better communication, promoting trust among project participants and improving reliability (Priven & Sacks, 2013).

Using the LPS to serve as the basis for a discussion about the meaning of work, in this paper we discuss the opportunity inherent to the LPS to enable Lean principles impacting people and thus promoting a work environment in which workers may experience a fulfilling, prosperous and meaningful life through work. However, while discussing the positive impacts of the LPS in the meaning of work for the construction workforce, the paper also challenges the notion that there is a natural and automatic relationship between LPS and individual well-being. In fact, the paper argues that conscious and explicit attention to the human side of production is needed for LPS to function as a driver for prosperity and fulfillment of our workforce.

In the next two sections we delve into the historical perspective on the meaning of work in general and in the context of construction projects. The discussion section which follows focuses on the relationship between LPS and the inherent opportunities for experiencing a meaningful work environment, before we conclude and offer suggestions for future research questions to further fill the knowledge gap.

THE MEANING OF WORK THROUGH TIMES

Reker and Wong (1988, p. 221) define personal meaning as “the cognizance of order, coherence, and purpose in one’s existence, the pursuit and attainment of worthwhile goals, and an accompanying sense of fulfillment”. Thus, the concept of personal meaning is a multi-dimensional construct with three related components. One is the cognitive dimension (making sense of life), the second is the motivational (values that dictate our lives), and the third is the affective component (feeling of satisfaction and fulfillment) (Reker & Wong, 1988, p. 220).

Throughout history, though, the meaning of work has differed in understanding, bearing on cultural, religious and economic perspectives. In Catholic traditions, work was often viewed as a deed of necessity, a duty to be paid. Through work man supported himself while at the same time contributing to the common good. He demonstrated sorrow for his sin and devoted himself to showing service and obedience to God’s will. Work was a way to grow spiritually giving work meaning to honor and to serve God. Pope John Paul II wrote in his 1981 encyclical *Laborem Exercens* (On Human Work), that work is a fundamental dimension of human being, and that besides that “Through work man must earn his daily bread” (p. 1), man must “serve to realize his humanity, to fulfil the calling to be a person that is his by reason of his very humanity” (p. 8).

Martin Luther’s conviction, during the Protestant reformation in the 16th century, was that work, besides being a job, was a calling to serve God. Later, the Protestant tradition

strengthened the emphasis on work as a calling and a moral justification of worldly activities. Max Weber, one of the founding fathers of sociology, built a theory on this Protestant view in his book "The Protestant Ethic and the Spirit of Capitalism" (Weber, 1904). Weber explained the protestant belief in hard work and refraining from luxury by saying: "A rational conduct of life, determined by the idea of calling, was born from the spirit of Christian asceticism" (Weber, 1904, p. 118). Rather than indulging in luxury for themselves, individuals reinvested their income to the good for their work or communities, and Weber further linked work to individuals' feeling of identity and moral responsibility. By working hard, protestants believed that they were chosen by God. Hard work felt meaningful, due to the connection to spiritual purpose, and "[t]he individual [...] feels a moral obligation to consider himself chosen and to combat all doubts as temptations of the devil" (Weber, 1904, p. 60). As such, Weber questions Karl Marx's concept of historical materialism as the main foundation of the capitalist system but proposes the Calvinist views of the nature of work and its moral beliefs as the predominant driver of the capitalist economy. Marx's suggestion of class struggles within the means of production was felt at the turn of the 20th century during the early establishment of scientific management, when Frederick Taylor proposed a system to manage work that clearly established responsibilities between the manager and employees. Taylor (1911, p. 38) stated: "[i]t is also clear that in most cases one type of man is needed to plan ahead and an entirely different type to execute the work". To Taylor, work was a means to an end and the quicker and more effectively one could achieve their objective, the better it was. Following in the footsteps of Taylor, Dr. Lilian Moller Gilbreth was concerned about the well-being of workers in the modern production environment. As she indicated in her first thesis called *The Psychology of Management* (Gilbreth, 1914, p. 138): "That is to say, unless the mind is kept in the right state, with elimination of worry, the body cannot do its best work, and, in the same way, unless the body is kept up to the proper standard, the mind cannot develop". Gilbreth is believed to be one of the first to introduce psychology to production management. Her seminal work on the subject is believed to have led to the Hawthorne Studies of Western Electric in the 1920s and 1930s. Further connection can be drawn between such work, the American Training within Industry (TWI) program in post WWII, General MacArthur and the occupation of Japan, when early seminars were delivered to corporations in Japan post WWII.

A more contemporary and distinct scholar who has reflected on the meaning of work is Csikszentmihalyi (1990). As one of the co-founders of positive psychology, Csikszentmihalyi explored how individuals, when pursuing their activities, and particularly so in the workplace, can reach a state of flow, into which they are deeply immersed and satisfied. The state of flow, and the best moments in our lives, Csikszentmihalyi (1990, p. 3) argued, "are not the passive, receptive, relaxing times... but the ones when we are actively engaged in a challenging task". For these moments to arrive, the right mindset towards work is needed. Tasks need to be structured appropriately to balance the level of challenge with skills. It is with this engagement in tasks that challenge one's skills, that work can change from an obligation to self-growth, creativity, and self-expression.

Two of the most cited scholars in the field of psychology and social sciences are Richard M. Ryan and Edward L. Deci. Their Self-Determination Theory (SDT) offers fundamental insights into the meaning of work (Ryan & Deci, 2017). The SDT theory highlights three profound psychological needs; autonomy, competence, and relatedness in developing intrinsic motivation, personal well-being, and meaningful experiences of work. When driven by intrinsic motivation work becomes a meaningful aspect of our lives as we find joy and purpose in the work processes themselves, rather than the extrinsic rewards and outcomes from work. Ryan and Deci (2017, p. 64) state that "Intrinsic motivation represents the most autonomous form of motivation and is associated with high-quality engagement and deep satisfaction". Individuals who find work to be meaningful will grow as they pursue their abilities, thus reinforcing their

own belief in their ability to complete tasks or achieve goals. Work is meaningful also in the sense of relatedness and social connection offered in the workplace. This profound feeling of being connected with others “in the workplace satisfies the need for relatedness and supports well-being and motivation” (Ryan & Deci, 2017, p. 102). Connectedness is strengthened as individuals contribute to a purpose larger than themselves and build positive relationships with colleagues and collaborators.

THE DARK SIDE OF WORK LIFE

The flipped side of the positive bearers of the meaning of work has been addressed by several scholars. One is the risk of alienation of labor, a concern raised by both Karl Marx and Weber. In modern capitalism, Weber observed that work ethics for the sake of religion were fading, as did the sense of purpose provided through work, specifically in factory settings. In the 1844 publication *Economic and Philosophic Manuscripts*, Marx criticized the alienation of workers inherent in capitalist mass production systems (Marx, 1978). The potential role of deep fulfillment and creative activity that work could hold, he claimed, capitalism fundamentally distorted. This phenomenon is in part due to the gain in productivity enabled by the division and specialization of labor, practices highlighted in the work of Adam Smith, the *Wealth of Nations* (Smith, 1776).

One form of alienation emphasized by Karl Marx (1978) was, in line with thoughts of the SDT-theory, alienation from others and the production process. The modern competitive work structure fosters rivalry, rather than prosperous social relations. Csikszentmihalyi (1990) links his reflections on alienation to his theory of flow. When people do not experience flow in their work, a misalignment occurs between individual abilities and job demands. This misalignment can lead to dissatisfaction and alienation.

In terms of the meaning of work in 2025, it is a fair assumption to claim that work is viewed as the source of all good. Work is not just an engine for economic development, but a source of individual meaning and dignity. Participation in work life not only aids economic independence and basic social interaction, but functions as a central political and social remedy to promote inclusion and equality. In contemporary societies, work is viewed both as a right and a duty. Those who *can* participate in working life are expected to do so, and western governments are constantly pressing for initiatives to enable as many as possible to contribute as much as possible, despite various challenges. These initiatives include substantial measures for qualification and rehabilitation. As such, work life participation becomes a collective project, in which everyone contributes to the greater good of society.

THE MEANING OF WORK IN CONSTRUCTION PROJECTS

The construction industry is economically important in any region of the world, employing some 7 percent of the world's total working-age population (Al Barbosa et al., 2017). So, what is it about this industry that appears appealing to such an extent that it attracts so many people? Construction work may provide a sphere in which to experience personal fulfillment and deep satisfaction (Morrison, 2023). The nature of construction work is unpredictable in the sense that workers need to constantly find their way around things, solve problems as they emerge, and use their creativity in performing their daily tasks. Many take huge pride in their contribution to the projects' accomplishment and enjoy a feeling of the ongoing participation in making a difference.

Another intriguing factor explaining industry attractiveness is the social, interpersonal work climate. There is an inherent possibility to socially connect and to build and sustain a sense of relatedness and connectedness (Skinnarland, 2013). The close work with colleagues fosters inclusivity and reinforces a sense of belonging, and a way to prosper within a professional community. Furthermore, the construction industry can be a place to grow professionally, given

the constant opportunities that arise from variations in work. Professional challenges present themselves at all levels in the construction project hierarchy. It is not only the uniqueness of projects that present workers and managers with constant changes and challenges, but also variations in the types of projects set in unique locations, including changes in travel patterns to and from work. This diverse and shifting work environment offers valuable opportunities to grow and to thrive. Lastly, many employees enjoy the physically active work environment, for many resulting in improved health, both physical and mental health (Morrison, 2023).

Borcherding and Oglesby, already in 1974, investigated the relationship between construction work and satisfaction. They concluded that satisfaction was inherent in the work itself and argued that to improve job satisfaction as well as productivity, there was an urgent need for “well-planned, smooth work flow rather than in job enrichment, as is advocated by organizational behaviorists for industrial or bureaucratic work situations” (Borcherding & Oglesby, 1974, p. 413).

WORKFORCE CHALLENGES FACED BY THE CONSTRUCTION INDUSTRY

Up to this point in the paper, we have pointed to the meaning of work and what it is that gives rise to meaning in the context of construction work. At the same time the construction industry is facing challenges, both on the industry level as well as on project and individual levels. Around the globe there have been consistent reports of shortage of workers (Coelho et al., 2022; Chin, 2023; Maqbool et al., 2024; Klein & Smith 2024). It is claimed this labor shortage has put contractors in a difficult position. Contractors must compete for the scarce availability of required skills in the labor market (Maqbool et al., 2024). Labor shortage as a term refers to a “shortage of blue-collar workers, skilled, semi-skilled and unskilled labor” (Chin, 2023). Such shortages of skills can impact project efficiency, quality, and profitability around the globe, and ultimately affect the populations which these projects will serve.

Concurrently, the number of young people to replace older workers retiring is declining (U.S. Bureau of Labor Statistics, 2021). A skills survey in the UK determined that one out of three available job vacancies were considered “hard to fill” (Winterbotham, 2017). Coupled with the growing lack of interest in trade professions is a trend among young people to pursue secondary and higher education. This development appears to occur at the cost of apprenticeships to train for trade skills sought by the construction industry (Maqbool et al., 2024).

Many point to the COVID-19 crisis as a main source of failing to uphold access to labor in recent years (Chin, 2023; Klein & Smith 2024). Further, the construction industry, despite many early adopters to advanced technology, has remained relatively traditional in their approach to working methods, which according to McKinsey & Company (2017) has resulted in a slower productivity growth rate compared to other industries. Ding et al. (2023) recognize that the trends towards adoption of technological advancement demand an upgrade of workers’ skills for the companies to take advantage of such advanced technologies. The lack of capabilities to prosper from the use of advanced technologies is found to impact on the performance of Australian construction projects (Ding et al. 2023). As may be the case, contractors who embrace technological advancements may be able to improve productivity while at the same time reducing their dependency on a substantial labor force (Gambatese & Hallowell, 2011).

IMPLICATIONS OF WORKFORCE CHALLENGES IN THE CONSTRUCTION INDUSTRY

There are some serious implications of labor shortage on the broader economy, the industry, project and individual levels. Labor shortage has a direct influence on project costs and time efficiency. As firms struggle to recruit qualified workers, project delays and increased labor costs can occur (Barbosa et al., 2017). The quality may be compromised, questioning the

durability and safety of built structures (Durdyev et al., 2021). Maqbool et al. (2024, p. 8), reporting from Australia, found that labor shortage impacts on quality management, and skill shortage has a severe impact on the entire construction supply chain performance (Ding, Jie, Sisombat & Bandlamudi, 2023).

On an individual level studies reveal that mental health issues are a pressing concern in the construction industry (Gruttadaro & Beyer, 2021; Tijani et al. 2023). The demanding nature of construction work can have a negative effect on employees' psychological well-being (Love, Edwards, & Irani, 2010). Stress levels arise from operating under compressed project deadlines, working long hours, and from the physical demands of the job. In the case that these conditions are not addressed, chronic mental health issues can be prolonged (Lingard et al., 2014). Many experiences job insecurity following from the project-based nature of the work and workers have to deal with uncertainties in terms of continued employment. Lingard and Francis (2004) found that being subjected to these uncertainties can create severe financial stress and anxiety. Although health, safety, and environmental (HSE) policies, procedures, and practices, to promote the well-being of workers and safe operations, have been a focus area among practitioners for some time, the high risk of injury and fatalities inherent to construction contributes to workers' mental burdens. Construction workers are exposed to potentially life-threatening situations on a regular basis, and near-misses and accidents may heighten the levels of anxiety and stress (Gillen et al., 2002). In this scenario, the LPS might be one of the potential solutions to address many of the challenges facing the construction industry, which leads us to the discussion of how the LPS might attend to issues related to the meaning of work, well-being, and productivity. To support this discussion, Figure 1 summarizes elements of what work in construction give us in terms of positive and negative outcomes addressed.

What does work (in construction) give us?			
Positive outcomes			
economic security	reinforcing belief in own abilities	personal and spiritual growth	
make sense of life	demonstrate moral responsibility and contribute to common good		
realize one's humanity	Sense of belonging	involvement and participation	
means to self-actualization	source of identity		
joy and purpose	fulfilling, prosperous and meaningful	intrinsic motivation	connectedness and interaction
deep immersion and satisfaction	creative activity and problem solving	social belonging and relatedness	
Negative outcomes			
stress and anxiety	physically demanding	mental health issues	feeling of meaningless
job (and financial) insecurity	long working hours	dissatisfaction and disengagement	
	risk of alienation	increased stress levels	

Figure 1: Summary of positive and negative aspects that work presents to workers.

DISCUSSION

Our point of departure in the following discussion is that knowledge about The Last Planner System and Lean thinking is already established (e.g., Ballard & Howell, 1994; Ballard, 2000; Koskela, 2000; Ballard, & Tommelein, 2021). However, we will draw on the main principles underpinning LPS and Lean thinking to discuss the opportunities for experiencing a meaningful work environment which can support recruitment and retention of individuals in construction.

MEANING OF WORK IN LIGHT OF LPS AND PRODUCTIVITY

The picture drawn earlier in this paper of a severely challenged industry calls for measures to address productivity and effectivity constraints. Scarcity of labor, for one, demands better control and planning of construction projects. Ballard (2000) introduced The Last Planner System in his doctoral thesis, as a critique of the traditional approach to planning. Traditional planning approaches were mainly characterized by centralized and early detailed plans developed by top management remote from and disconnected from the production execution phase. The Last Planner System is about worker involvement in planning and providing the basis for future production. Inherent in LPS are Lean principles that project interdisciplinary participants, by communicating with each other and engaging in planning production ahead, establish a network of commitments. The core of LPS is to coordinate human and material resources in the construction project by systematically analyzing, monitoring and ultimately removing constraints that might prevent planned tasks from being carried out.

Although LPS is mainly a production planning and control system, research suggests that LPS has positive effects on individuals participating in construction projects. As discussed above, the LPS can greatly influence employees' well-being, both in terms of physical and mental health aspects, and strengthen the perception of meaning of work in construction as pertaining to an optimistic and thriving character. As such, LPS is more than a production system and practice to improve project efficiency. LPS has a significant role in strengthening well-being and building a sense of belonging among employees (Skinnerland, 2013). The work environment created by LPS fosters collaborative practices and structured planning.

Fauchier and Alves (2013) identified three main sets of behaviors observed in projects that used LPS, which demonstrated how LPS can promote a collaborative, adaptive and efficient culture, thereby integrating lean thinking and ambitions into construction projects. One is the capability for LPS to facilitate social networks constructs, into which trust is built and communication enhanced. Second, LPS systematically encourages teams to constantly adapt and to be responsive to project demands, hence addressing evolving and multiple needs in a dynamic environment. Third, Fauchier and Alves (2013) demonstrate how LPS calls for construction projects to be viewed in terms of production system management, emphasizing flow, value generation and the alignment of project activities with lean principles. Fauchier and Alves thus argue that there is a need for a shift in focus from viewing LPS merely as a set of tools and schedules, to LPS as a methodology (system) for managing projects as social collaborations.

Liu et al. (2024) explored and identified five key social mechanisms produced by using LPS in construction projects which when combined resulted in improved efficiency in project execution and overall project performance, alongside happier and more satisfied project participants. The first social mechanism is an improved collaborative environment in which participants actively engage in processes such as planning and decision-making, which foster teamwork and help develop shared understanding of project goals. The second mechanism is richer communication. LPS meetings and planning sessions can facilitate open and transparent communication and help reduce any misunderstandings. Third, when team members become involved in the planning process, commitment levels increase to meet tasks and deadlines. Fourth, the collaborative environment facilitated by LPS supports development of trust among team members, as stakeholders depend and rely on each other's input. Last, Liu et al. (2024) identified LPS as promoting a culture of continuous development and improvement.

LPS, SOCIAL AND TECHNICAL ELEMENTS, WHICH MATTERS MOST?

Despite the reported benefits of the LPS, there is a need to warn against a somewhat naive perception that if only LPS is implemented in the construction project, people will be satisfied, happy and content. If LPS is simply viewed for its technical aspect, we argue that projects are

less likely to experience benefits, and the system could be blamed for project failure. One of the questions we are raising, is what is the relative importance of the social aspect in deploying the Last Planner System versus what is the importance of its technical aspect? And what does an increased focus on the social aspect do for the project participants' wellbeing? In presenting the various Venn diagrams in Figure 2, we aim to illustrate three ways in which the social and technical aspects could be viewed to define an LPS implementation. Each with a varying emphasis on promoting meaningful work. The first diagram, on the left, illustrates a balanced view of socio-technical aspects to support LPS implementation, which we advocate for. The middle diagram illustrates how most of the literature in construction management, especially outside of the IGLC, addresses how planning in general and LPS implementation as a planning tool is viewed (Alves et al. 2020). Finally, the diagram on the right represents those views that place more emphasis on the social aspect of the LPS.

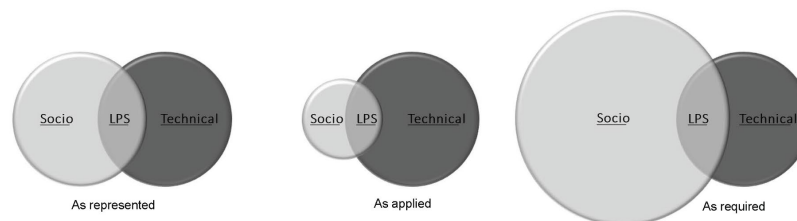


Figure 2: Variation of relative importance between the social and technical aspects of LPS

Skinnarland (2013) argues that an unbalanced attention to the social side of production, the people, relationships and culture, at the expense of structure and systems will not produce good results. Likewise, paying excessive attention to the structural and systematic side of production at the expense of the social production system will not produce good results. Only simultaneous attention to both structure (systems) and culture will provide the production results aimed at and simultaneously create a work environment in which employees thrive and prosper. As suggested by Csikszentmihalyi (1990) work is meaningful when it is linked to the execution of tasks.

In line with this reasoning, González et al. (2015) question if the LPS purported effectiveness is influenced by factors such as the organizational environment power-distance, team integration, and interpersonal trust levels, and the interplay between them. Project participants thrive in participatory settings in which they feel empowered to share their ideas, to raise concerns and act on their ability to own processes. In environments characterized by openness, collaborative principles in Lean thinking are observed, such as increased creativity, continuous improvement, and more effective problem solving. Team integration fosters improved communication and collaborative commitment. LPS rely on teams that are able and willing to understand, support and to integrate with each other. When silos between project teams are removed, waste can be more easily identified and eliminated. The third factor is trust. High levels of trust result in enhanced psychological safety, as there is more open dialogue, participants are not afraid to voice concerns or admit mistakes, they search for solutions without the fear of blame. Trust among project team members is foundational for Lean practices like shared accountability and transparency. When trust is high, individuals are more likely to engage in open dialogue, admit mistakes, and seek collective solutions free from fear of blame. Psychological safety enhances the effectiveness of LPS, due to the reliance on sincere commitments and reliable promises for a stable workflow. These findings support the argument posed in this paper that there is a need to make sure that a solid culture which fosters well-being and job satisfaction exists, which can be strengthened using LPS. Project leadership who fails to recognize the importance of leveraging the power of the social network when implementing LPS, and sees it as a mere technical system of task and flow control, is likely to fail.

As stated earlier, LPS is about controlling production through a network of commitments. An investigation by Skinnarland (2013; 2022) about what actors in construction projects emphasize as drivers for good collaboration found that when actors in construction projects are asked “what constitutes good collaboration to you?”, the following terms come up as descriptive of good working relationships: belonging and connectedness, involvement, communication, information flow, trust, motivation and well-being, understanding, respect for each other, and seeing each other’s perspectives and work predictability. So, to address the crucial element of LPS as collaboration, LPS needs to be implemented to cater for collaborative experiences along the lines of these terms.

As a result, there is a need, as argued also by Fauchier and Alves (2013), to view and to operate LPS not as a tool but as a social dynamic system. The argument is that the social side does not just come into play once LPS is implemented, the social side is an intrinsic part of the LPS. The effective deployment of LPS simultaneously offers benefits to production and enables the emergence of a positive culture that supports worker wellness. Workers can craft (design) their jobs to provide them with a more meaningful experience by creating, what Randel et al. (2024) labelled ‘bridges’ to connect elements that support positive elements of the work, while also establishing ‘barriers’ to protect themselves from the negative parts of their job. This notion takes us beyond viewing the LPS as a collaborative system by also encouraging project stakeholders, within existing standards and regulations, to support worker involvement in job crafting to support their mental health and well-being.

Linking back to Weber, Marx, Csikszentmihalyi and other previous scholars and thinkers mentioned in the beginning of this paper, work in construction does provide employees with the possibility to fulfil their creative potential and to prosper as a member of a project community. The LPS, when implemented in such a way so that the underlying Lean principles of true involvement and collaboration come into play, may be a driver for human needs for growth, development, and self-actualization. We argue that the meaning of work, as a fundamental human conscious and purposeful activity to transform environments and to prosper as a member of a community may arise when participants in construction projects rise above their own interests and dedicate themselves to a cause larger than themselves, namely the project outcome. When pursuing the collective activity of transferring the project towards its completion, participants, when perceiving collaborative, trusting and committing relationships may experience what Csikszentmihalyi (1990) coined, a state of flow, into which they are deeply immersed and satisfied. Construction projects using LPS to the full and true collaborative extent, have in them the structural and cultural agencies needed to cater for the profound psychological needs of autonomy, competence, and relatedness, needed to develop intrinsic motivation, personal well-being, and meaningful experiences of work, as posed by the Self-Determination Theory (Ryan & Deci, 2017).

Although research demonstrates that there is a relationship between use of LPS and a prosperous and meaningful work life, observations of using LPS as merely a tool, downplaying the importance of LPS as a social production system are prone to failure (Skinnarland, 2013). Thus, future research should seek more knowledge about:

1. How can LPS be more seamlessly aligned with attention to enhancing workers’ well-being and to foster creativity and commitment by true involvement?
2. How can we raise awareness of well-being and mental health issues in construction?
3. Which steps shall we take to address mental health challenges faced by employees?
4. How can the construction industry attract a more diverse workforce?
5. How can we accelerate worker training and development so that the risk arising from the skills gap experienced by the industry can be closed in a timely fashion?

These and other questions not only will address the meaning of work in construction per se, but strengthen the relationship between structure and culture, as well as addressing how to attract and keep employees in an industry facing the challenges described.

CONCLUSIONS

Although the construction industry is facing its challenges, such as labor shortage, which has been shown to take a toll on all levels, from society, to industry, project and individual levels, one aim of this paper has been to describe work in this industry in terms of the characteristics that attract people to seek work in this industry. Drawing on previous scholars who described what meaning of work ultimately entails, we have argued that the production nature of construction is a professional setting in which a meaningful work life can be experienced. This industry is a great place to thrive and to give rise to meaningful work. A further argument in our discussion is that LPS can promote the right mindset towards work in construction.

However, as discussed, thriving and experiencing meaningful work does not come by itself just because of the characteristics of the industry as a setting for unfolding creativeness and to prosper as members of communities. We draw on research that demonstrates how using a socio-technical system like The Last Planner System creates a collaborative work environment in which employees grow, develop and prosper. Still, there are some conditions that need to be accounted for in terms of implementing LPS in construction projects. When deploying the Last Planner System®, practitioners need to invest efforts in both the technical aspect and the social aspect of the system. LPS offers an opportunity for a positive, inclusive, collaborative and respectful culture to emerge from construction projects. Such cultural attributes promote well-being and a sense of community which could only be a positive catalyst to attract and retain talent in the industry. Without the social aspect of LPS, the system is operating far below its true potential and the practitioners run the risk of experiencing minimal performance improvement and running the risk of LPS being dismissed and seen as just one more fad.

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