Soft Skills as a Tool to Reduce Burnout in the Construction Industry

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Area of Focus

With 70% of construction personnel suffering from stress, anxiety or depression they have the third-highest stress levels of any occupation worldwide. (Leung, Chan & Cooper, 2015). The magnitude of this statistic is largely camouflaged by the assumed and portrayed stoic disposition of construction industry members (Leung et al., 2015). Consequently, this can diminish the apparent need for education and training on constructive soft skills that may help in preventing or reducing stress, which can lead to burnout if not mitigated. In addition to this, the large amount of soft skill training opportunities come up short of relating to the fast pace, high-stress nature of construction. These opportunities can also be very costly and require a considerable amount of time.

Construction personnel with high levels of emotional stress are likely to show symptoms such as depression, frustration, loss of temper, fatigue or anxiety which negatively affect their interaction with subordinates, colleagues and supervisors. This may also lead to producing poor quality work in general, which ultimately induces burnout and a reduced sense of belonging and intention to stay with the company (Lung et al., 2015).

The fact that emotional stress surfaces as physical stress and pain because of its severity should be an obvious indicator that awareness is necessary, as is education on how, on an individual level, this stress can be managed or reduced to avoid burnout.

Curtailing these stressors not only causes additional individual challenges, stress and exhaustion, but this also starts to affect projects, organizations and most importantly relationships and well-being at home (Leung et al., 2015). The purpose of this study is to determine if members of the construction industry believe that, on an individual level, certain soft skill trainings or education can effectively reduce burnout resulting from unhealthy stress

within the construction industry. This paper seeks to answer the following questions; how widely is stress prevalent within the construction industry? With the amount of stress present within the construction industry are members aware of or in agreement with the main factors identified as contributing to this stress that could be addressed with proactive training? Can increased knowledge of certain soft skills equip industry members to effectively avoid or reduce unhealthy levels of stress?

Background and Rationale

Construction is known to be a high-stress, fast-paced industry, but there is a lack of awareness of how stress can be beneficial, as well as how to reduce the chances of stress reaching a critical "burnout" level. Although relationships, critical thinking, problem solving and communication seem to be the foundation of the majority of identified stressors within construction, the recommendations to reduce stress seem to lean towards reactive stress management options (Leung et al., 2015). Preventative measures, including educating and training industry members on soft-skills, may be a more productive and substantial outcome to reducing burnout.

Common Stressors Within the Construction Industry

The main contributors to stress within the construction industry have been identified as: a lack of feedback, poor communication, inadequate staffing, too much work, conflicting demands, ambitious deadlines and pressure (CIOB, 2006). Because of the physically demanding nature of construction, the majority of heath care promotion within the industry leans heavily towards physical well-being, not psychological, even though personnel generally experienced more emotional than physical stress symptoms (Leung et al., 2015). Also, direct physical stressors

mainly impact field personnel while psychological stress affects not only field personnel, but a much wider range of industry's members, making it the focus of this research.

The Chartered Institute of Building (CIOB) conducted a study in 2006 to better understand the issue of occupational stress within the construction industry at a professional level and found that only 6% of those who suffered from stress took time off as a direct result. But 50.5% indicated that taking time off helps (or would help) cope with workplace stress (2006). When stress symptoms are ignored or diminished, they not only manifest in physical ways, but also start impacting interpersonal relationships, project performance and work-life balance (Leung et al., 2015). If 70% of the industry is suffering from stress but only 6% are taking time off to cope, it highlights the fact that proactive trainings and awareness targeted to address the main stressors may be more effective than reactive support mechanisms.

Good Stress and Bad Stress

The International Labor Organization published a study in 2016 stating that high stress levels can contribute to developing several other health problems including mental and behavioral disorders such as exhaustion, burnout, anxiety and depression. High stress can also contribute to physical impairments such as cardiovascular disease and musculoskeletal disorders. Consequently, coping behaviors such as alcohol and drug abuse, smoking, unhealthy diet and poor sleep are emerging due to high levels of stress.

When individuals are stressed, hormones are released from the adrenal glands to help cope with the appropriate stressors. Cortisol is a hormone released to help turn sugar and fat into energy to either run or to fight the stressor. This is commonly known as the "fight-or-flight" response. During this process, digestion, reproduction and growth systems are suppressed so that the energy is used more productively until the threat is mitigated or eliminated. The peril of this

is when stressors or threats are continuously present, the high levels of cortisol can become unhealthy and impair immune function or result in depression ultimately contributing to burnout (McGonigal, 2015).

It is important to note that not all stress is bad. Lingard's work, (as cited in Leung et al., 2015) explains that "overstress can result in burnout, too little stress (understress) can also affect the performance of construction personnel through the phenomenon termed 'rustout'" which relates to boredom or not enough work or stimuli and can cause symptoms of fatigue. Furthermore, stress is a completely natural human defense mechanism that has the ability to increase health rather than harm it.

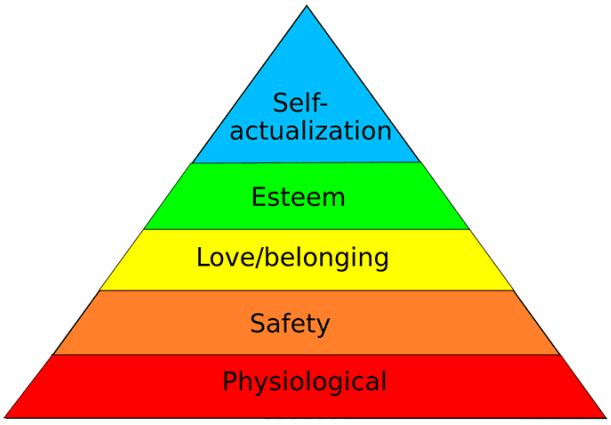
In many stressful circumstances, oxytocin is released from the pituitary gland to motivate individuals to build and strengthen social bonds and connect to social networks. It also increases courage, bravery and the brain's ability to better notice and understand what other people are thinking and feeling while dampening the fear response. Most importantly, it helps heart cells regenerate and repair from any micro-damage which ultimately strengthens the heart (McGonigal, 2015).

Depending on one's mindset and perception of stress, a large amount of unhealthy stress can be avoided. During stressful situations, along with cortisol, dehydroepiandrosterone (DHEA) is also released by the adrenal glands. DHEA helps the brain grow and learn from stressful situations and counters some of the effects of cortisol by speeding up wound repair and enhancing immune function. The ratio of these two hormones is what makes an individual more resilient or susceptible to stress, which can be enhanced simply by one's mindset and approach to stress (McGonigal, 2015).

Causes of Burnout in Construction

Burnout is defined as “a state of physical, emotional and mental exhaustion caused by long-term involvement in emotionally demanding situations” (Leung et al., 2015, p. 65). During a study investigating the relationship between stressors and stress in the construction industry, workplace stress, emotional stress and physical stress were measured. Out of nineteen stressors, eleven were significantly correlated to all three types of stress. Nine of these stressors attribute to soft skills, or lack thereof. These include Type A behavior, work-home conflict, poor interpersonal relationships, work overload, role ambiguity, role conflict, effort-reward imbalance, lack of feedback from superiors and lack of manpower support. The remaining two were physical stressors (Leung et al.). These stressors are apparent manifestations of interpersonal relationship challenges.

Some of these stressors contribute to poor relationships and a lack of belongingness, which are proving to be strong sources of depression, anxiety and stress. As shown below, using Maslow’s Hierarchy of Needs, the need for belongingness is the third tier, (out of five) in his triangle. This tier includes trust, acceptance and receiving and giving affection. This also includes affiliating and being part of a group. When a deficit need has been more or less satisfied, actions will then become habitually directed towards meeting the next set of needs or wants (McLeod, 2017).



As shown above, belongingness was thought to be a want and would only be satisfied after satisfying individual safety and health. But further research is indicating that this may be incorrect, and that safety and health may actually be in the same tier, if not after (or above) the belongingness tier. “Both psychological and physical health problems are more common among people who lack social attachment” (Baumeister, Leary, 1995, p. 24).

Anxiety and depression are both being associated with damaged, lost or threatened social bonds as well. Baumeister et al. (1995) emphasized that “social exclusion may well be the most common and important cause of anxiety” (p. 9). They continued to say that “both general depression and social depression (i.e., dysphoria about the nature of one’s social relationships) are inversely related to the degree to which one feels included and accepted by others” (p. 9).

The main stressors within construction are obvious deficits in relationships and communication. Therefore, these may be indicators of large contributors to the anxiety and depression surfacing within the industry.

Preventative Options to Reduce Burnout Within the Construction Industry

Given that the construction industry is inherently a higher stress career, it is more challenging to identify when stress levels shift from a healthy level to detrimental level. Therefore, awareness programs have been recommended to help with this. “The industry should be aiming to create more openness in acknowledging and addressing the problem of occupational stress. An industry-wide program of awareness raising, including stress awareness training needs to be implemented” (CIOB, 2006, p. 14). Additionally, support from organizations have been suggested: “In the short term, measures such as confidential support mechanisms should be implemented so that those suffering from stress can receive assistance without the concern that it will have a negative impact on their current or future career” (p. 14).

Although these are great recommendations, there are still challenges to both options. The CIOB (2006) study suggested that a small amount of people will seek out help because of a "perception that there would be a negative impact on their career if they admitted to suffering from stress" (p. 3). The other challenge is that construction is known for long working hours which can make time (and energy) for help or individual training very minimal.

Because the majority of the stressors are imbedded within deficits in interpersonal relationships and communication, a proactive approach is possible and may be more successful at reducing burnout. "It is also suggested that training opportunities on communication skills and team-building techniques be provided to construction personnel in order to help them cooperate and trust each other more" (Leung et al., 2015, p. 137). This includes soft skill trainings and educational opportunities promoted or mandated by construction organizations, which take place during the work day. This will improve awareness of stress and coach members on different skills that address and minimize the stressors directly in lieu of addressing the stress after the fact. Thus, this was the focus of this study.

Research Method

Sample and Participant Selection

Workplace stress has been proven to impact a large portion of the construction industry regardless of age, position, title or sector. Therefore, maximal variation sampling, which encompasses identifying a characteristic and then finding sites or individuals that display different dimensions of the characteristic, was utilized in selecting participants (Creswell, 2015). The main characteristic of this study was participation within the construction industry. Differing dimensions included age, years of experience in construction, position within the organization and sectors within the construction industry. Twelve individuals were interviewed, seven of

whom work for medium sized general contractors, three work for a large subcontractor and the remaining two were owner representatives. Positions held within the industry included estimators, project managers, project engineers, senior project managers, executive superintendents, a vice president, partners and general foreman. Most of the participants had construction experience ranging from 10-20 years (50%) with 25% between 3-10 years and 25% with over 20 years' experience. Three out of the twelve participants were female, and the remainder were male.

Data Collection

Creswell (2015) stated that open-ended questions are asked so that participants' best voice their experiences unconstrained by any perspectives of the researcher or past research findings. For this research, interviews were primarily conducted in-person to increase rapport and observe non-verbal cues that contributed to the responsiveness of the participants. A few instances required phone interviews because of time or location constraints. Questionnaires were composed mainly of open-ended questions with a few Likert scale and closed-ended questions. The questionnaire consisted of six different sections:

1. Background and demographic to identify their position, sector of the industry, years in construction and experience in other industries.
2. Training and education to identify if soft skill trainings are currently being utilized within the industry, are found to be beneficial or relevant and if it is believed that the industry, as a whole, could benefit from additional soft skill trainings.

3. Stress in construction to determine current and overall stress levels and contributing factors to support previous literature reviews and to identify if participants feel that stress is a problem that needs to be addressed.
4. Workplace relationships to identify if relationships between certain parties contribute to or reduce overall stress levels and if workplace stress has an impact to participants home and personal lives.
5. Current and potential mitigating solutions to identify if construction organizations provide effective reactive and/or preventative opportunities to mitigate stress and if soft skills have the potential to help individuals reduce idiosyncratic stress within the industry.
6. Open discussion to give participants the opportunity to voice or discuss any other opinions, comments, suggestions or ideas from regarding stress or education and training within the construction industry.

After the interviews were conducted, analysis of the collected data took place. Similarities in responses were reviewed against the literature review data to identify trends and complementary or contradictory findings. Common, broader themes were then identified to determine underlying stressors and potential opportunities for reducing stress within the industry.

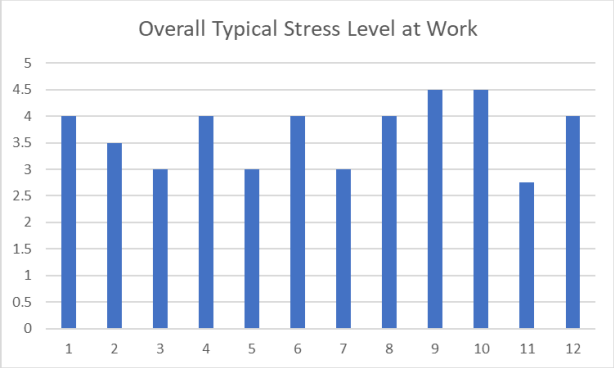
Results

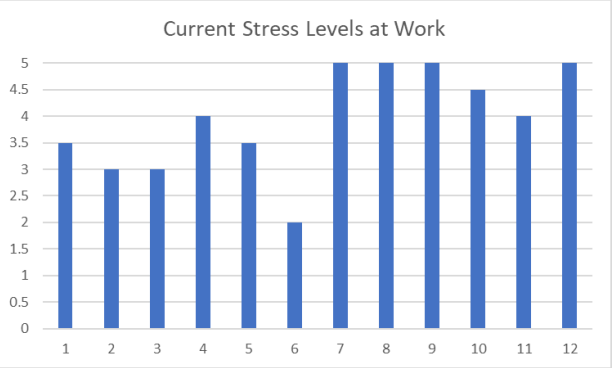
Stress Within the Industry

When presented with the statistic that over 70% of the construction industry is stressed, depressed or anxious, 83.3% of the participants either commented that it was not surprising, or were surprised that the number was that low. This speaks to the general awareness of the high levels of stress within the construction industry and that it is to be assumed. A general

understanding within the industry is one that if someone is unable to handle high stress environments, then construction is probably not a good fit for that individual. One participant summarized this by stating “I would have guessed it was higher. I would have guessed 100% or even 110%. I don’t know anyone who is not stressed. If they aren’t, they are not doing their job.”

This being said, participants were asked to rate their overall typical and current level of stress at work using a Likert Scale with one being ‘not stressed at all’ and five being ‘very stressed’. 58% of the participants rated their overall stress level at a 4 or higher with a current stress level at 3.96. This indicates that stress levels seem to remain consistently on the higher end of the 5 point scale in lieu of oscillating as it should.





Participants were asked to list factors contributing to the level of stress indicated for both current and overall stress levels. Deadlines and lack of time were the main factors for both current (67.67%) and overall stress (83.33%). The second highest contributors in both the current (41.67%) and overall stressors (66.67%) related to items categorized under relationships and/or teamwork challenges.

Deadlines, schedules and lack of time. Abbreviated and accelerated deadlines and the amount of work required within a short amount of time were common responses of factors contributing to stress levels. Some participants elaborated that problems and challenges arise unexpectedly and suddenly that then require rearranging of schedules or priorities to handle these

unforeseen demands. As one participant explained, “working in a high performing, reactive environment, the reactivity of our area is usually dealing with the unknown day-to-day.” Another participant explained that the reaction time of these demands is a large contributor to stress, “unknown factors that come into play. They always seem to come in at the wrong time and they need resolution within minutes vs. within days or weeks.” The potential impact of these quick decisions can easily magnify the stress levels of individuals making the decisions. As one of the owner representatives explained “in the construction industry, mistakes that happen usually have a real big impact immediately, and a lot of times they have an impact later on down the road.” Additionally, rearranging of schedules is not as easy as it seems and very frequently results in a substantial amount of work within the already tight timeframe of a construction project or construction members day. As participants expounded upon this topic, the deadlines and unknown factors started to surface as challenges with other group members and the relationship (or lack of) between the different members of construction projects. “(The) owner is uneducated about the construction process which creates a tight budget and tight time frame.” One field supervisor referenced subcontractors as a large source of unexpected or additional work “people knowing or not knowing how to do their job.” While a subcontractor participant identified general contractors contributing to additional time because of a “lack of willingness to be a team player by the GC”. This was further clarified, “the more stressful things are how hard we are being pushed and how tight the schedule is. Less stressful things - if and when the job is going well – are maintaining positive relationships with customers and coworkers.”

Relationships and teamwork. Lack of teamwork, lack of understanding of processes, managing and motivating other people, trust, relationships with coworkers and bosses and the perception of unqualified people were all factors that were communicated by participants as

contributors to overall and current stress levels. These factors were not limited to one specific group but seemed to be across the board. Multiple participants elaborated that clients', owners' and even other participating 'trade partners'' lack of understanding of processes ultimately contribute to unrealistic demands and deadlines mentioned above.

Frustration seems to be equally distributed amongst the different sectors of construction. When asked if certain parties outside of the participants organization ever caused stress, every participant answered "yes", but there was no single sector that prevailed over another. As one subcontractor participant explained "they (GCs) have a lack of understanding of the systems, and what it takes to put it in place. Often the GC does not understand what it takes to complete the work (i.e. sequence of installation)." The frustration seems to be returned by some of the participants within the general contracting sector;

> Subcontractors, because of my position within the industry is a lot of time getting those guys to meet schedules or certain budgets or timelines. You can only do so much to make somebody get something done. And with how the industry is, how busy it is, it's sometimes difficult. So they wind up increasing your stress by not being able to meet those deadlines because somebody else can't do their job or can't perform.

The questionnaire also inquired if certain parties within the participants' organizations contribute to overall stress levels. Of the ten participants who responded yes, five identified a boss as the main contributor and five identified subordinates or equals. Respondents communicated that bosses do not effectively communicate intentions or overall goals enough and often result in unrealistic expectations or deadlines. Participants who listed subordinates or

equals as a large contributor also identified communication as a main barrier but attributed a lack of responsibility or experience of the subordinates to overall stress levels.

Perception of stress. To explore participants current perception of stress, it was asked if stress is bad, or if stress could also be good. Every participant pondered the question and commented that stress can be bad in certain circumstances but clarified that it can also be good. "There are times when it is bad, when it creates a lot of problems and a lot of mistakes, because we are reacting to too many things at one time and then mistakes happen." It was also recognized that the level of one's stress depends on how it is handled or interpreted individually "stress comes from two things, it is either self-inflicted or relationships." But overall, it was recognized by the majority of the participants (83%) that at a certain level, stress is good in that it contributes to motivation within the industry. "Stress is a human motivator to get things done and be productive. To a certain degree it is to be expected and can be good but at a certain point it becomes too much and cannot be good." The remaining two participants ascribed stress to an increase in productivity rather than a direct correlation to motivation.

Soft Skills Training and Education Within the Industry

During the interviews, participants were given a list of example topics to aid in clarifying what categories are considered 'soft skills' (see appendix). It was explained before the interview that this list was an optional aid and was not exclusive of all soft skill topics.

Current availability and effectiveness of soft skill training opportunities. Participants were asked about participation in any general soft skill trainings within the past year and what the motivation was for attending the training. Eight of the twelve participants confirmed participation in optional soft skill trainings. Although two of the participants mentioned that even though the trainings were optional, there was pressure or strong encouragement to attend.

Additionally, seven of the twelve participants read books relating to soft skills within the past year. Both the soft skill trainings and books encompassed topics relating to communication, leadership, personal development and conflict resolution.

One of the specific questions asked during the interviews was “Do you think there is an adequate amount of soft skill training opportunities that are relevant, or immediately useable to our industry?” Five individuals answered no, one participant was able to confidently answer yes, and the remainder were either unsure or believed there might be opportunities available but had not participated in any. The participants who answered “no” elaborated that “construction is a very direct industry. So typical techniques are usually too soft for construction people.” It was clarified that “concepts may be applicable but deploying these techniques in the recommended manner would not relate well to construction.” Two of the participants who answered “no” fell within the 25% with more than 20 years’ experience within the industry. One responded that “it was something that was never really considered in the industry and it is now becoming something we use every day.” The other response was clarified that training topics do not have to be construction specific, but it is in the way that they are taught that determines if it is relatable or useable to industry members.

> They don’t have to be specifically towards construction because everyone is a human being. You got to teach them the basic things about those areas that work in any environment. The bottom line is that you have to understand the construction industry when it comes to the workers and everything. They are more or less a rugged background and are usually in a rigid environment and learn in a rigid environment, they learn by high performance and productivity.

The remaining participants that stated ‘maybe’ or believed that trainings were available mentioned industry organizations that may offer trainings or answered as it relates to the participants organization. One participant stated, “It is out there, but my organization has not hit that nail on the head yet.” Other participants also ascribed the responsibility of construction related trainings to organizations “We are getting there. Depends on how much your company wants to invest in you.”

Soft skills potential to help reduce stress within construction. When participants were asked if the industry, as a whole, could benefit from soft skill trainings, 92% said “yes” with one response being “maybe”. The question was asked again in a different context later in the questionnaire “Do you think that additional knowledge and/or training in soft skills have the potential to reduce individual construction workplace stress?” All 12 participants responded “yes”. As one participant explained,

> I think that is huge when you are talking about stress, and stress within the construction industry, it is what YOU do to make the situation better or get you out of the situation that is stressing you out. It is not going to go away by itself, so you have to figure out how to attack it and all of the soft skills (listed by the participant) are skills that you will at one point need to get out of stressful situations.

Following both questions, participants were asked to identify which soft skills they thought would have the most impact and why. The soft skill recommended overall for the industry was communication (91.67%) with leadership skills (50%) as the second most identified. “Leadership and communication are critical. In other fields I think it has been covered where it has not been in the construction industry as much.” When participants were asked which

soft skills had the most potential to reduce stress, three skills were mentioned the most often; communication, interpersonal relationships and critical thinking / problem solving.

After participants listed the soft skills thought to help either the industry as a whole or stress on an individual level, each were asked a simple question of why. Responses relating to communication talked about the variety of personalities that are involved on a construction project as well as the variety of ways in which communication is used;

> Communication is one of the main things that we drive on in the construction industry, especially being a general contractor. Given that we move a lot of information between places, from the engineers to the architects to the owners to the subcontractors, to our superintendents internally, even. So, communication is a really big deal in construction. We deal in all different forms. Verbal to e-mails to text messages and in-person meetings where body language stuff really comes in. A lot of issues could be resolved with better communication and a lot of issues arise from bad communication.

Responses related to problem solving and critical thinking trended towards how construction parties work together as a team and how it is approached;

> We tend to deal with change in a defensive mode and we start out that way instead of approaching it as a problem we can solve together. There may be more

than one way to solve a problem. Looking at the other party(s) for creative ways to deal with it.

Responses relating to interpersonal relationships highlighted the fact that industry members get so caught up in the processes and technical aspect that it is forgotten that a large part of construction is working with others;

> Interpersonal relationships. I do think that can be overlooked in construction for sure when people get stressed and focused on their projects they can lose sight of the fact that they are working with other people and be aggressive. And that doesn't exactly always help teams work together.

A key point identified during the interviews was that participants believe that construction organizations should be the ones providing access to these skills. Although 100% of the participants believe these are beneficial, as one participant stated, "not everyone will seek it out on their own". A different participant explained that "the first step is identifying for individuals to know what they don't know. The second step is to provide stress mitigation and performance enhancing communication techniques that are relatable to the unique nature of the construction industry." Another participant clarified that although it is beneficial it must be mandated in order for field personnel to take advantage of the opportunities. "We have enough pulls on our time, superintendents especially. But I think mandating is about the only way to make us do it. Otherwise we will focus on the job and what we are busy with".

Discussion

The purpose of this study was to determine if members of the construction industry believe that, on an individual level, certain soft skill trainings or education can effectively reduce burnout resulting from unhealthy stress within the construction industry. It was determined that

every one of the participants believe that soft skills have the potential not only to reduce stress within the industry but could benefit the construction industry as a whole. As for the question about how prevalent stress is within the construction industry, participants believe that there is more prevalence of stress than what has been identified in prior research studies. But there is also agreement that due to the general understanding that construction is a stressful industry, there is an expectation that members should handle a large portion of this stress individually, otherwise it could be seen as unable to handle the job or the industry. With the amount of stress present within the construction industry members are aware of and in agreement with the main factors identified as contributing to this stress that can be addressed with proactive training. Can increased knowledge of certain soft skills equip industry members to effectively avoid or reduce unhealthy levels of stress?

Main Stressors Within the Construction Industry

The main stressors identified within the construction industry seem to be well known by the participants and consistent between the different sectors, experience levels, genders and age groups that participate within the industry. The CIOB's list of common stressors compared against participants identified stressors can be categorized within common themes; leadership, critical thinking, interpersonal relationships, communication and time management. The wide-ranging responses from participants of both inside and outside of respective construction organizations suggests that no single party or sector of the industry is a main contributor to individual stress. Additionally, each party expressed frustration with the lack of overall understanding of each group member's processes, which contributes to unrealistic deadlines, communication and leadership challenges. Additionally, unforeseen and urgent challenges that are brought up by project team members seem to be a large contributor to stress as well. This not

only creates unpredictability in an individual's work day and can extend the hours required at work to complete daily tasks but can also extend the overall schedule of a project that then contributes to the "lack of time" and "deadline" stressors identified by participants. When participating project members are stressed, this resonates amongst the project team creating a domino effect of stress on a project. With the amount of stressed, anxious and depressed individuals identified within the industry, it would be safe to assume that this is a frequent occurrence.

Stress Perception within the Industry

Overall, participants believe that stress can be motivational and can increase productivity. It was recognized that too much or consistent stress can be unhealthy, at which point burnout becomes an inherent risk. Considering the majority of reactions to stress within the industry are negative versus positive, the threshold of when stress transitions from good to bad may be quite low. But current education or training opportunities on general stress awareness within the industry seems to be minimal, which may contribute to this lack of understanding or necessary mind shift to raise this threshold. Additionally, with the general perception that stress is inherent within the industry, it proves that it is much more difficult to admit to being stressed or seek out resources to mitigate stress when it has reached an unhealthy level. Therefore, preventative measures would likely have a much larger impact than reactive measures.

Soft Skills as a Tool to Reduce Burnout

100% of the participants believe that soft skills have the potential to reduce stress within the construction industry. And considering construction's main stressors, the top recommended soft skills that would reduce stress recommended by participants are not surprising, as they were identified as the same categories that the main stressors fell within: communication, leadership,

interpersonal relationships and critical thinking/problem solving. Each of these are inherently interrelated to one another. Communication is necessary in relationships, relationships are necessary for effective leadership and all of the above are necessary for effective problem solving and critical thinking as it relates to a construction project. Soft skills were not only seen to potentially help with stress within the industry but 92% of respondents believe that these would help the construction industry in general.

A large takeaway from these findings is that these soft skills will be better served if they are encouraged and provided by employers. Considering one of the main stressors already is lack of time, finding additional time to research and seek out these opportunities individually will be largely untapped if the support of organizations is not apparent. It is suggested that organizations research, seek-out and provide these opportunities during working hours as mandatory events so that it becomes clear that individuals' health is important to employers. When industry members become informed and educated on these techniques, it has the potential to reduce unhealthy stress levels that contribute to physical health problems. Additionally, it increases the awareness of leadership and communication techniques that can aide in reducing stress levels of the participating project team members including trade partners and clients.

Conclusion and Future Research

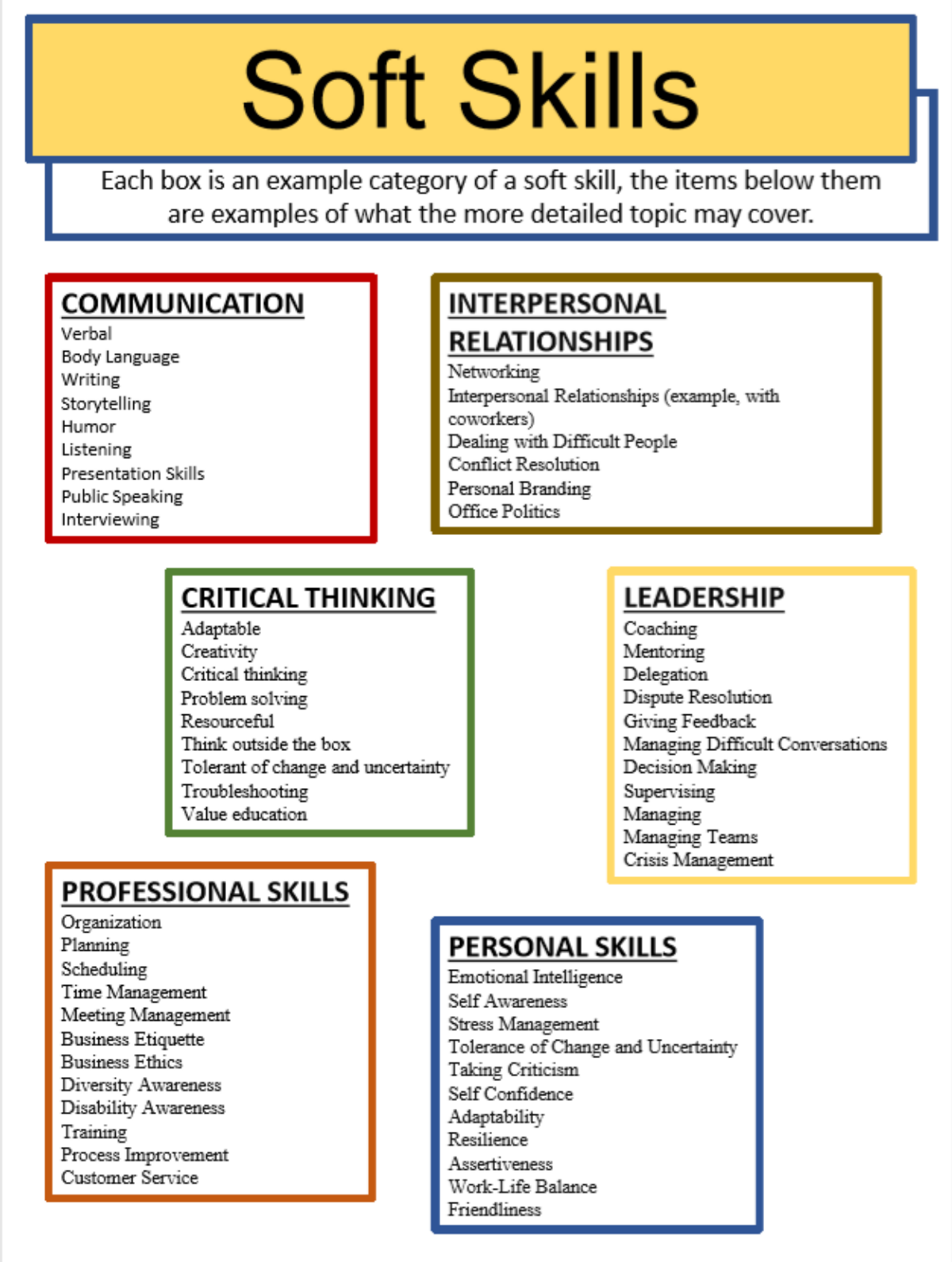
Construction is a high-stress, fast-paced industry that relies heavily on effective leadership, communication, interpersonal relationships and critical thinking. Technical skills have been the focus of training and education within the industry and are still a critical component of construction, but soft skills have long been overlooked and are equally significant and critical to the industry. This research has investigated stress levels and training opportunities from the perspective of twelve different industry members varying in age, experience, titles,

gender and industry sectors. It has revealed a resounding response that soft skills have the ability to help construction industry members reduce stress levels that contribute to burnout as well as benefit the industry as a whole. The top soft skills recommended were communication, leadership, interpersonal relationships and critical thinking/problem solving. In order for this to be most effective it is recommended that construction organizations provide these opportunities as mandatory trainings for employees. Although it is equally beneficial for individuals to seek out these opportunities individually, a lack of time may contribute to lesser participation therefore lessening the benefits. Additionally, relevancy of the material as well as awareness and understanding of the industry by the facilitator is an important factor for the effectiveness of these trainings. It is important to note that stress cannot and should not be eliminated altogether. Stress is healthy to a certain degree and contributes to the motivation and drive of members within the construction industry. The intent is the ability to identify when stress transitions from healthy to unhealthy as this is when it becomes detrimental to individuals and construction projects.

It is recommended that future research may be warranted to determine if organizations encouragement and reimbursement may be just as effective as providing and mandating the soft skill trainings. Such studies may help in expanding available opportunities as well as effectiveness of retaining and executing the learned information if the individual shows the initiative in lieu of the employer mandating it. A further study should also be conducted to explore when construction industry members perceive stress as shifting from good to bad. It is unclear with the results of the study, what percentage of the current stress levels identified were considered healthy versus unhealthy stress. This would reveal the general understanding of the

perception of stress to determine the type and amount of training that could further benefit the industry.

Appendix


Soft Skills
Each box is an example category of a soft skill, the items below them are examples of what the more detailed topic may cover.
COMMUNICATION
Verbal
Body Language
Writing
Storytelling
Humor
Listening
Presentation Skills
Public Speaking
Interviewing
INTERPERSONAL RELATIONSHIPS
Networking
Interpersonal Relationships (example, with coworkers)
Dealing with Difficult People
Conflict Resolution
Personal Branding
Office Politics
CRITICAL THINKING
Adaptable
Creativity
Critical thinking
Problem solving
Resourceful
Think outside the box
Tolerant of change and uncertainty
Troubleshooting
Value education
LEADERSHIP
Coaching
Mentoring
Delegation
Dispute Resolution
Giving Feedback
Managing Difficult Conversations
Decision Making
Supervising
Managing
Managing Teams
Crisis Management
PROFESSIONAL SKILLS
Organization
Planning
Scheduling
Time Management
Meeting Management
Business Etiquette
Business Ethics
Diversity Awareness
Disability Awareness
Training
Process Improvement
Customer Service
PERSONAL SKILLS
Emotional Intelligence
Self Awareness
Stress Management
Tolerance of Change and Uncertainty
Taking Criticism
Self Confidence
Adaptability
Resilience
Assertiveness
Work-Life Balance
Friendliness

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