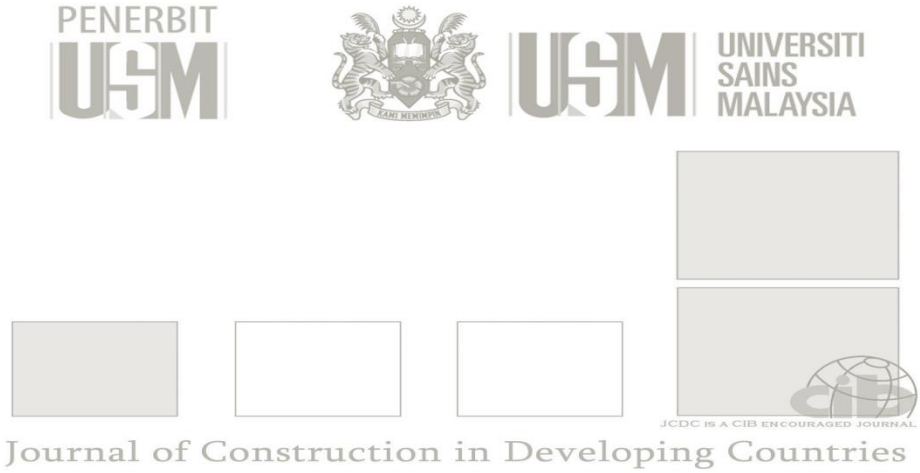


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| **Manuscript Title** | Significant Decent Work Objectives for Monitoring Construction Workers' Productivity Performance in Zimbabwe |
| **Authors** | Tirivavi Moyo, Gerrit Crafford and Fidelis Emuze |
| **Submitted Date** | 11-Nov-2020 (1st Submission) |
| **Accepted Date** | 15-Mar-2021 |

# Significant Decent Work Objectives for Monitoring Construction Workers' Productivity Performance in Zimbabwe

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## ABSTRACT

Decent work deficits in Zimbabwe have exacerbated low construction workers' productivity. Therefore, the functional decent work agenda matrix can potentially be utilised in place of the non-existent construction labour productivity performance monitoring tools. Hence, this study aims to determine significant decent work objectives for monitoring construction workers' productivity performance and also to examine demographic-related statistically significant differences. Given the exploratory nature of the study, a positivist paradigm was utilised for data collection and analysis owing to the aim of revealing relationships between construction workers' productivity performance and decent work objectives. Adequate earnings, productive work and environmental context were the most significant objectives while all other objectives were significant towards monitoring construction workers' productivity performance. Demographically targeted interventions include the need for adequate remuneration according to different generations and designations of workers, work-life balance for various designations and educational levels, improving the stability of employment, enhancing social security and improving training and awareness of environmental sustainability for workers of various designations. This study did not consider skilled construction workers' views as this was exploratory. Significant decent work objectives can be utilised to monitor construction workers' productivity performance, thereby improving both workers' welfare and productivity.

**Keywords:** Decent work, Labour, Productivity, Sustainability, Zimbabwe

## INTRODUCTION

Although construction industries contribute 13% to the world's gross domestic product, construction labour productivity growth has averaged 1% in the past two decades compared to 2.8% for the total world economy (Barbosa et al., 2017). In Zimbabwe, underlying productivity, profitability, performance and sustainability challenges have precariously affected the construction industry (Mhlanga, 2018). Project overruns attributable to manpower and organisational-related challenges are prevalent (Chigara and Moyo, 2014a;

Jarkas et al., 2014; Gurmu, 2021). In addition, lack of adequate health and safety requirements, low remuneration and poor relationships between management and workers have been detrimental (Chigara and Moyo, 2014a, 2014b; Chazireni and Chagonda, 2018; Chaturvedi et al., 2018). Despite these challenges, competent construction workers' productivity performance measurement and monitoring are inadequate (Moyo et al., 2014; Mhlanga, 2018; Nasirzadeh et al., 2020). Thus alternative remedies situated in the existing Decent Work Agenda programme are pertinent as decent working conditions contribute significantly to construction workers' productivity at task level (Moyo et al., 2019a; Ugulu et al., 2020). However, empirical studies at a holistic industry level are non-existent.

Demographic considerations are fundamental as they support the existence of differences concerning the impact of demographic variables (Chileshe and Haupt, 2010; ILO, 2018a). Accordingly, the collection of information from site/project managers, educators and regulators will enable varied insights on decent work objectives as well as relevant interventions to be revealed. While most construction worker-related studies include perspectives from site/project managers (Gurmu, 2021; Ugulu et al., 2020), the decent work element variable also requires the insights of those who enforce such objectives on construction sites (Uzhenyu and Marisa, 2017; Charizeni and Chagonda, 2018) as well as those responsible for training construction workers. However, skilled and semi-skilled construction workers were not considered in this exploratory study.

Therefore, this research aims to determine significant decent work substantive objectives for monitoring construction workers' productivity performance that also consider the demographic variables of construction stakeholders. This human-centred approach is essential towards achieving the sustainability development objective for economic growth (Frey and MacNaughton, 2016). Bouglet et al. (2012) contend that the adoption of such decent work practices will most likely motivate the workers and increase their commitment. Its attainability is based on addressing the key issues of the changing organisation of production, work and employment relationships (ILO, 2018b).

This article initially considers a review of construction workers' productivity performance and decent work, and the role of demographic variables. The research method that satisfies the objectives is explained, and the results of the survey analysed and interpreted through descriptive and inferential statistical methods.

## CONSTRUCTION WORKERS' PRODUCTIVITY PERFORMANCE AND DECENT WORK

The performance of the construction industry depends on the performance of labour productivity (Nasirzadeh et al., 2020). The study of construction labour productivity models has been continuous and improvements are still being sought (Chaturvedi et al., 2018). Several researchers have extended different productivity models (Jang et al., 2011; Nasirzadeh and Nojedehi, 2013; Shashank et al., 2014). However, a holistic approach to decent work objectives and their effect on construction labour productivity performance is non-existent. While the promotion of competitiveness in the construction sector is a way to achieve desirable changes, this should not be accompanied by social imbalance or environmental challenges (Despotovic et al., 2015). Hence, globalisation has necessitated the demand for economic, social and environmentally sustainable approaches for productivity improvement (Burgess and Heap, 2012) potentially through the Decent Work Agenda.

The Decent Work Agenda was primarily promulgated to address welfare-related aspects within working environments (ILO, 2018a). However, the ILO (2019) reveals that decent work shortcomings lead to workers' productivity losses. Several sources, including Ghai et al. (2006) and Moyo et al. (2019a), reveal that increasing productivity is at the centre of the Decent Work Agenda. Ferraro et al. (2016) report that the continuous evolution of the decent work context is important as the increase in the integrability of disadvantaged workers is on-going and must be considered within situational contexts.

Ferraro et al. (2016) refer to eleven (11) substantive objectives predominantly representing the structural dimensions (social and economic) of the decent work measurement framework. The environmental context was also considered in this study as it deals explicitly with a vital sustainability dimension that potentially affects workers' productivity (Moyo et al., 2019a, 2019b, 2021). Thus, this study interrogates the significance of decent work objectives towards construction workers' productivity performance monitoring as supported by various authors, shown in Table 1, as they were considered as significant factors.

Therefore, the framework of this study considers these twelve (12) substantive objectives as the dependent variables contextualised within the independent demographic variables of age, gender, designation, educational levels and experience. Independent variables stand alone and they influence the substantive decent work objective variables under consideration. The role of the demographic variables is discussed in the next section.

Table 1: Decent work objectives affecting construction workers' productivity

| **Decent work objective** | **Decent work objectives-related issues affecting construction workers** | **Sources** |
|---|---|---|
| Employment opportunities | • Craft turnover issues<br>• Lack of labour experience<br>• Shortage of skilled labour force | Mahamid (2013), Chigara and Moyo (2014a), Jarkas *et al.* (2014), Nyoni and Bonga (2016) |
| Adequate earnings and productive work | • Low remuneration<br>• Lack of skill assessment and evaluation<br>• Inadequate skill of workers | Chigara and Moyo (2014a), Nyoni and Bonga (2016), Chaturvedi et al. (2018), Gurmu (2021), Ugulu et al. (2020) |
| Decent working time | • Working for long periods without holiday<br>• Inadequate time for breaks and lunches<br>• Misuse of time schedule<br>• Heavy workloads and long working hours | Mahamid (2013), Chigara and Moyo (2014a), Moyo et al. (2019b), Ugulu et al. (2020) |
| Combining work, family and personal life | • Maintaining proper motivation of workers through balanced work schedules<br>• Lack of social activitiess<br>• Workers' personal problem | Chaturvedi *et al.* (2018), Moyo et al. (2019c), Gurmu (2021), *Ugulu et al.* (2020) |
| Work that should be abolished | • Lack of compliance with statutory regulations<br>• Eliminating discrimination, victimisation and harassment | Chigara and Moyo (2014a), Moyo et al. (2019c) |
| Stability and security of work | • Lack of job security<br>• Lack of adequate worker retention schemes | Chigara and Moyo (2014a), Ugulu et al. (2020) |
| Equal opportunity and treatment in employment | • Lack of opportunity for growth<br>• Inadequate site amenities that support women in construction<br>• Lack of compliance with statutory regulations | Chigara and Moyo (2014a), Jarkas et al. (2014), Moyo et al. (2019b, 2021) |
| Safe work environment | • Lack of proper safety management on sites<br>• Poor health condition of workers | Chigara and Moyo (2014b), Nyoni and Bonga (2016), Chaturvedi et al. (2018), Moyo et al. (2019b) Ugulu et al. (2020) |
| Social security | • Lack of adequate social security for workers<br>• Lack of adequate ergonomics | Moyo et al. (2019a), Moyo et al. (2019b) |
| Social dialogue, workers' and employers' representation | • Labour disloyalty<br>• Inadequate labour management<br>• Poor relations between management and workers | Mahamid (2013), Chigara and Moyo (2014a), Jarkas et al. (2014), Moyo et al. (2021), Ugulu et al. (2020) |
| Economic and social context for decent work | • Lack of financial motivation system<br>• Lack of participative approach towards project planning and scheduling | Chigara and Moyo (2014a), Mahamid (2013), Chaturvedi et al. (2018), Moyo et al. (2019b) |
| Environmental context | • Effect of inclement weather and weather changes<br>• Poor health condition of workers | Mahamid (2013), Chigara and Moyo (2014a), Moyo et al. (2019b), Ugulu et al. (2020) |

## Role of demographic variables

Brennan and Cotgrave (2014) support the consideration of varied respondent groups in this endeavour as it provides variability and the opportunity to explore diverse perspectives. The ILO (2018a) supports the disaggregation of labour statistics as crucial to the identification of critical issues and tendencies concerning specific demographic groups as well as enlightening the devising of targeted policies. These characteristics are important in interpreting generational issues of workers within the construction industry in Zimbabwe.

According to Mazlan et al. (2019), the possibility of the competency level of safety training is dependent on aspects of age, gender, experience and designation. Ultimately, the achievement of decent work is entrenched in equipping professionals and skilled individuals in its literacy (Murray and Cotgrave, 2007). The sought-after safety culture on construction sites is dependent on the production of skilled and self-disciplined personnel (De Silva and Wimalaratne, 2012). Reduction of losses is predicated on training programmes that leverage construction workers' skills and safety awareness (Chaturvedi et al., 2018).

Gender imbalance within the construction industry is also a cause for concern (Magwaro-Ndiweni, 2016; Afolabi et al., 2019), with over 90 % male domination in the Zimbabwean construction industry (Infrastructure Development Bank of Zimbabwe, 2019). Ghai et al. (2006) contend that poor work is greatest amongst the less educated. Related to educational levels is the workers' experience. Less experienced workers have contributed to an increase in employee safety concerns within the Zimbabwean construction industry (Mhlanga, 2018).

## RESEARCH METHOD

Although an interpretative philosophy can be used for the reported study, the authors adopted positivism to reveal correlational relationships between decent working objectives and construction workers' productivity with the consideration of demographic variables of respondents. Positivism appropriately argues that the explanation of human behaviour is in terms of cause and effect (Saunders et al., 2016). A questionnaire survey research strategy as supported by Gurmu (2021) was utilised and entailed the acquisition of quantitative information from site/project managers in construction companies, vocational training lecturers, the inspectorate of the National Social Security Authority, the Environmental Management Agency, the National Employment Council and National Manpower Advisory Council members.

## Sampling

For site/project managers, all eighty-three (83) construction companies' based in Harare and Bulawayo and listed in the Construction Industry Federation of Zimbabwe (CIFOZ) 2020 list of companies were selected to participate in the study. The selected geographical areas are the capital cities which are home to more than 90% of construction companies in Zimbabwe, according to the CIFOZ list. All eight (8) categories (A-H) were approached for participation in the study. The CIFOZ categories are reflective of certain organisational, technical and financial traits where category A companies are the most organisationally and technically competent, and financially stable. The survey managed to collate data from six (6) of the eight (8) contractor categories represented within the study area with 55.6% of the contractors being in category A. This is the highest category and such a high representation aids to the validity of the study. All the other respondents were selected from a total population of forty-one (41) through cluster sampling which targeted all the respondent groups from the same geographical areas of Harare and Bulawayo (Saunders et al., 2016). The respondent groups are predominantly located in these areas (Mhlanga, 2018) and are representative of the study population.

## Instrument design

The questionnaire comprised two sections; the first section requested demographic information while the second section required the respondents to rate the decent work substantive objectives on their significance towards monitoring construction workers' productivity performance where 1 - not significant, 2 - of little significance, 3 - somewhat significant, 4 - significant, 5 - very significant and 0 (U) – unsure .

## Data analysis

The Statistical Package for Social Science (SPSS) version 24 was used in the determination of significant indicators within demographic variables considerations (Field, 2014). A Cronbach alpha reliability test was conducted, which Taherdoost (2016) describes as the extent to which the questionnaire provides stable and consistent results, and it showed good reliability of 0.831. The test for the normality of indicators was also conducted and a non-significant result (sig. value of more than 0.05) of 0.052 and 0.062 from both the Kolmogorov-Smirnova test and the Shapiro-Wilk test indicated normality (Ghasemi and Zahediasl, 2012). The relative importance index (RII) was utilised to evaluate significance (Kazaz and Ulubeyli, 2007), with mean responses being divided by the highest possible rating and numerically defined in significance intervals (Bingol and Polat, 2020) as follows: 'not

significant' < 0.2 ; 0.2 < 'of little significance' ≤ 0.4; 0.4 < 'somewhat significant' ≤ 0.6; 0.6 < 'significant' ≤ 0.8; and 0.8 < 'very significant' ≤ 1. From this evaluation scale, significance was regarded from RII of < 0.6.

The Pearson bivariate correlation method was used to measure the association between the rankings of statistical indicators and the demographical variables of respondents (Shayib, 2013). As suggested by Field (2014), a statistical power analysis of 80% was utilised. However, a variable population value of the correlation was anticipated due to the existent uneven populations, specially for gender . Thus, a population correlation coefficient of at least 0.1 was utilised for a sample size of at most 75 (Jaccard and Becker, 2009). Further to that, the size of the association was examined on the following scale: +/- 0.1 represents a small association, +/- 0.3 represents a medium association and +/- 0.5 is a large association (Field, 2014). Statistical significance of the correlation was set at 5%, indicating that a p-value of < 0.05 shows a significant correlation (Shayib, 2013).

## RESULTS AND DISCUSSION

This section presents the response rate and demographics of the respondents. It also reports on the significance and correlational analysis of decent work substantive objectives.

### Response rate

The survey achieved a response rate of 65% for site/project managers and 78% for regulators and educators, as shown in Table 2. The overall response rate of 69.4% is comparable to other productivity-related studies that include those of Ghoddousi et al. (2015) and Ohueri et al. (2018) with a response rate of 40% and 56% respectively.

Table 2: Response rate

| Respondent Group | Population | Responses | Response Rate |
|---|---|---|---|
| Site Managers/Project Managers | 83 | 54 | 65% |
| Regulators and Educators | 41 | 32 | 78% |
| Total | 124 | 86 | 69.4% |

### Demographics of respondents

The variability in the demographics of the respondents as shown in Table 3 was important to allow for the mining of targeted resolutions and ensuring the effectiveness of corrective action that would have been taken. As stated by the ILO (2018a), geographical and demographic connotations are key to

identifying critical issues and enlightening the devising of targeted policies.

The age of the respondents is skewed towards Generation X (47.7%) and Y (48.7%) groups. The notion that the construction industry is male-dominated is expressed by the result of 86.2% (Magwaro-Ndiweni, 2016). With 13.8% (12) of the respondents being female, the expected sample size for statistical analysis was not met (Jaccard and Becker, 2009). The expected ratio of 90:10 (male to female), according to the Infrastructure Development Bank of Zimbabwe (2019), meant a substantially larger population of females was required. However, this is not achievable with the existing respondent group populations. Therefore, the analysis for the gender variable, as shown in Table 5, is a reflection of a male-dominated construction industry. The designations were all represented in terms of the populations, and the majority of the respondents (68.6%) possess degrees. These two demographic variables aid the validity of the study. The experienced groups are all represented, with the six to ten-year experienced group being the best represented with 41.6%. While Mhlanga (2018) contends that less experienced workers have contributed to increasing employee safety concerns in the Zimbabwean construction industry, Murray and Cotgrave (2007) maintain that the younger experienced workers have a better potential for achieving sustainability literacy.

Table 3: Demographic variables

| Demographic variable | Site / Project Managers | Educators and regulators | Total |
|---|---|---|---|
| Generation (Age) | | | |
| i.Baby Boomer | 1.2% | 1.2% | 2.4% |
| ii.Generation X | 15.1% | 32.6% | 47.7% |
| iii.Generation Y | 31.2% | 17.5% | 48.7% |
| iv.Generation Z | 1.2% | 0% | 1.2% |
| Gender | | | |
| i.Male | 54.7% | 31.5% | 86.2% |
| ii.Female | 8.1% | 5.7% | 13.8% |
| Designation | 62.8% | 37.2% | 100% |
| Educational Level | | | |
| i.National Certificate | 0% | 3.5% | 3.5% |
| ii.National Diploma | 17.4% | 10.5% | 27.9% |
| iii.Degree | 45.3% | 23.3% | 68.6% |
| Experience | | | |
| i.1-5 years | 16.3% | 8.3% | 24.6% |
| ii.6-10 years | 27.9% | 13.8% | 41.7% |
| iii.11-15 years | 11.6% | 11.6% | 23.2% |

| | | | |
|---|---|---|---|
| iv.More than 15 years | 7% | 3.5% | 10.5% |

**Significant decent work objectives towards monitoring construction workers' productivity performance**

Respondents rated substantive objectives with the results, as shown in Table 4.

Table 4: Relative importance of decent work objectives

| Rank | Decent work objective | Mean score | RII |
|---|---|---|---|
| 1 | Adequate earnings and productive work | 4.221 | 0.844 |
| 2 | Environmental context | 4.163 | 0.843 |
| 3 | Safe work environment | 3.989 | 0.798 |
| 4 | Employment opportunities | 3.961 | 0.793 |
| 5 | Economic and social context for decent work | 3.892 | 0.778 |
| 6 | Combining work, family and personal life | 3.651 | 0.730 |
| 7 | Social dialogue, workers' and employers' representation | 3.643 | 0.729 |
| 8 | Decent working time | 3.589 | 0.718 |
| 9 | Stability and security of work | 3.361 | 0.672 |
| 10 | Social security | 3.353 | 0.671 |
| 11 | Work that should be abolished | 3.314 | 0.663 |
| 12 | Equal opportunity and treatment in employment | 3.274 | 0.655 |

The results show that "Adequate earnings and productive work" and the "Environmental context" were very significant decent work substantive objectives, with RII ≥ 0.8, towards monitoring construction labour productivity performance. The economic-related element of "Adequate earnings and productive work" is consistent with significant manpower-related challenges that affect the Zimbabwean construction industry (Chigara and Moyo, 2014a; Mhlanga, 2018). Respondents, especially site/project managers, agree with insights from construction workers in previous studies (Nyoni and Bonga, 2016) on the importance of adequate earnings for construction labour productivity performance. The environmental context is a noteworthy finding, considering these are key issues that should be addressed in work environments for facilitating productivity gains (Moyo et al., 2019b). Addressing these two key objectives would therefore drastically enhance construction labour productivity performance in Zimbabwe. All other decent work substantive objectives were significant with 0.6 < RII ≤ 0.8, confirming the importance of the Decent Work Agenda, not only towards achieving good welfare for workers, but also improving construction labour productivity

performance (ILO, 2019). Also, economic, social and environmental sustainability requirements can be easily attained (Burgess and Heap, 2012) by utilising these functional decent work substantive objectives for monitoring construction labour productivity performance for developing countries such as Zimbabwe.

## Relationships between decent work substantive objectives and demographic variables

The Pearson bivariate correlation method was then utilised to reveal significant decent work substantive objectives on monitoring construction workers' productivity performance with the consideration of demographic variables. The results in Table 5 show relationships between decent work substantive objectives and demographic variables. As already mentioned, the gender demograhic variable's findings were skewed towards a male-controlled construction industry. Hence, the results dominantly reflect the insights of males.

Findings by Ghai et al. (2006), Brennan and Cotgrave (2014), the ILO (2018a) and Mazlan et al. (2019) on demographic-related significant differences are established by the results for the variables of generation, designation and educational levels. Furthermore, the variable of designation contributed the most to the differences. Insights from site/project managers, educators and regulators are expected to differ owing to expectations of the designations as further explained within the specific decent work substantive objectives. All the significant demographic variables showed a medium association with the substantive objectives. The two-tailed test of significance level was used to assess and investigate any causality, while only variables that had significant ($p<0.05$) variations between the substantive objectives and the demographic variables were selected for further analysis.

### *Adequate earnings and productive work*

The demographic variables of generation (-0.266) and designation (+0.314) showed a statistically significant difference with the decent work substantive element of adequate earnings and productive work. In terms of generation, according to the coding shown in Table 3 and the negative correlation, the younger generation had a higher ranking for this substantive element. This shows that they are the most affected by the current levels of adequate earnings and productive work within the industry. For designation, also according to the coding in Table 3 and the positive correlation, educators and regulators had a higher ranking for this substantive element as opposed to site/project managers. It is critical to note that those who enforce substantive objectives on sites and train workers perceive that construction

workers can improve their productivity if they are adequately remunerated. However, site/project managers do not share the same level of insight, as the apparent low skills level may be a factor. As workers contribute positively to the companies they work for, they should be rewarded adequately, and the earnings should be in relation to the cost of living within their localities. Aligned to this, continuous social dialogue within the Tripartite Negotiation Forum to establish fair remuneration is paramount.

Table 5: Correlation analysis of decent work objectives

| **Decent work objective** | | **Gender** | **Generation (Age)** | **Designation** | **Education level** | **Experience** |
|---|---|---|---|---|---|---|
| Employment opportunities | Corr. | 0.025 | -0.108 | -0.108 | 0.063 | 0.123 |
| | Sig. | 0.818 | 0.321 | 0.321 | 0.563 | 0.258 |
| Adequate earnings and productive work | Corr. | -0.041 | -0.266 | 0.314 | -0.94 | -0.40 |
| | Sig. | 0.710 | 0.013 | 0.003 | 0.388 | 0.716 |
| Decent working time | Corr. | 0.024 | -0.37 | -0.209 | 0.77 | 0.035 |
| | Sig. | 0.826 | 0.733 | 0.058 | 0.481 | 0.747 |
| Combining work, family and personal life | Corr. | 0.085 | 0.004 | -0.273 | 0.342 | 0.57 |
| | Sig. | 0.437 | 0.972 | 0.011 | 0.001 | 0.602 |
| Work that should be abolished | Corr. | -0.039 | -0.176 | -0.095 | 0.173 | 0.090 |
| | Sig. | 0.724 | 0.105 | 0.383 | 0.112 | 0.411 |
| Stability and security of work | Corr. | -0.000 | 0.058 | -0.287 | 0.117 | 0.067 |
| | Sig. | 0.940 | 0.595 | 0.007 | 0.285 | 0.538 |
| Equal opportunity and treatment in employment | Corr. | -0.20 | 0.027 | 0.062 | -0.005 | 0.058 |
| | Sig. | 0.854 | 0.805 | 0.573 | 0.964 | 0.595 |
| Safe work environment | Corr. | 0.191 | -0.019 | -0.068 | 0.181 | 0.021 |
| | Sig. | 0.079 | 0.865 | 0.536 | 0.096 | 0.846 |
| Social security | Corr. | -0.007 | -0.039 | -0.216 | 0.470 | 0.055 |
| | Sig. | 0.951 | 0.721 | 0.046 | 0.665 | 0.612 |
| Social dialogue, workers' and employers' representation | Corr. | -0.051 | 0.038 | -0.109 | 0.046 | 0.021 |
| | Sig. | 0.644 | 0.724 | 0.316 | 0.677 | 0.846 |
| Economic and social context for decent work | Corr. | 0.119 | 0.022 | -0.201 | 0.002 | 0.043 |
| | Sig. | 0.277 | 0.843 | 0.064 | 0.986 | 0.691 |
| Environmental context | Corr. | 0.073 | 0.059 | 0.235 | 0.111 | -0.021 |
| | Sig. | 0.503 | 0.592 | 0.029 | 0.309 | 0.845 |

*Corr.-correlation: Sig. – significance*

***Combining work, family and personal life***

The demographic variables of designation (-0.273) and educational level (+0.342) showed a statistically significant difference with the decent work substantive element of combining work, family and personal life. For designation, according to the coding in Table 3 and the negative correlation, site/project managers had a higher ranking for this substantive element as opposed to educators and regulators. For the educational level, also according to the coding in Table 3 and the positive correlation, those with degrees had a higher ranking for this substantive element as opposed to those with national certificates. Work-life balance policies need to be enacted within the construction industry in line with advances in other countries. The labour contracts within the Zimbabwean construction industry need to support this decent work position.

***Stability and security of work***

The demographic variable of designation (-0.287) showed a statistically significant difference with the decent work substantive element of stability and security of work. For designation, according to the coding in Table 3 and the negative correlation, site/project managers had a higher ranking for this substantive element as opposed to educators and regulators. Respondents perceived that construction workers are disadvantaged through lack of stability and security of work. This is prevalent in developing countries where prolonged economic recessions are commonplace. The nature of the construction industry makes it difficult to ensure the stability and security of work. However, encouraging workers to multi-skill and offer outplacement services will help the workers to achieve some form of stability.

***Social security***

The demographic variable of designation (-0.216) showed a statistically significant difference with the decent work substantive element of social security. For designation, according to the coding in Table 3 and the negative correlation, site/project managers had a higher ranking for this substantive element as opposed to educators and regulators. Respondents perceived that construction workers are disadvantaged through inadequate social security. In Zimbabwe, the construction industry has a poorly subscribed pension scheme, mostly owing to the nature of intermittent employment structures (Uzhenyu and Marisa, 2017). Construction companies have to be encouraged to offer social responsibility strategies to construction workers that enable the social security of workers to be enhanced.

### *Environmental context*

The demographic variable of designation (+0.235) showed a statistically significant difference with the decent work substantive element of social security. For designation, according to the coding in Table 3 and the positive correlation, educators and regulators had a higher ranking for this substantive element as opposed to site/project managers. Training of both the managers and skilled and semi-skilled workers needs to incorporate environmental context learning objectives.

## CONCLUSIONS

Achieving adequate construction workers' productivity performance monitoring through attaining decent work is pertinent to the sustainable development of a country. In Zimbabwe, decent work deficits and diminishing construction workers' productivity are evident and interlinked. Hence the study sought to determine significant decent work substantive objectives to establish an adequate construction workers' productivity performance monitoring framework to enable the resolution of existent and future challenges. The National Employment Council for the Construction Industry and the Tripartite Negotiating Forum need to advocate for policy adjustments that address, most specifically, adequate earnings and productive work and environmental issues associated with reducing construction workers' productivity. All other decent work substantive objectives are also pertinent to monitoring construction workers' productivity performance adequately. Statistically significant differences were revealed for the demographic variables of age (generation), designation and educational levels for five of the decent work substantive objectives. Issues of adequate earnings and productive work, work-life balance, stability and security of work, social security and environmental context are important and require targeted interventions. Generally, there needs to be adequate awareness and regulation on decent work goals for all stakeholders with differentiated considerations being given to the various generations, designations and educational levels.

Construction workers' productivity performance can be monitored through decent work substantive objectives. Any positive achievements within the objectives will inevitably contribute to the enhanced welfare of workers and construction workers' productivity improvement. The male-dominated construction industry in Zimbabwe suppresses the views of the few females that are already active. This state of affairs excarbates the plight of females and an equality drive is required. Females should be preferentially treated so as to have a significant voice in the construction industry. Although the study was specific to the Zimbabwean construction industry, this

approach can be replicated in any developing country. The absence of insights from construction workers was a limitation of the study; however, most of their views were presented in previous studies on factors that affect productivity at task level in Zimbabwe. For future studies, ascertaining the weighted contribution of all construction stakeholders on all decent work objectives would allow appropriate measured action to be taken towards resolving any performance-related issues.

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Figures

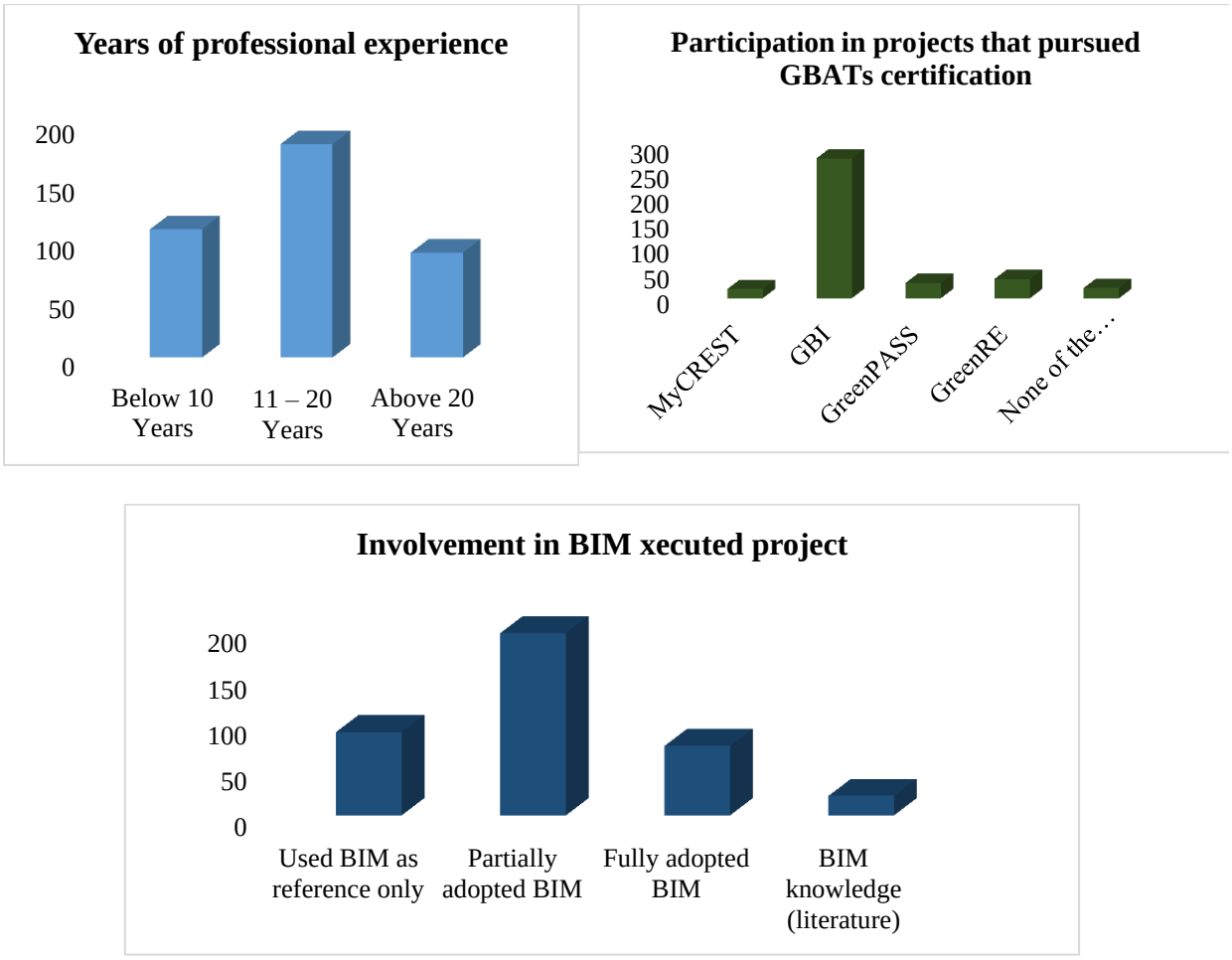


**Figure 1:** Background Information of Respondents