

Job Quality in South Africa's Insurance Sector

An exploration of job quality in a sample of insurance firms

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1. Introduction

South Africa, like many other countries, is experiencing skills shortages across a range of occupations and industries. These shortages have arisen due to a number of reasons: the historical neglect of the broader education system and constraints on skills acquisition at the individual level under apartheid, continued challenges within the education and training system post-apartheid, the rising skills-intensity of production across a broad range of economic activities over time, and spatial mismatches between the demand for skills and the supply of skills (i.e., where firms and jobs are located compared to where workers live).

At the same time, employers continue to place a premium on experience. Indeed, analysis of recent Workplace Skills Plan (WSP) submissions in the insurance sector have revealed that lack of experience is a key factor in hard-to-fill vacancies (HTFV) within the sector and that, while it does combine with other challenges related to remuneration, qualifications and equity, experience alone accounts for more than one-third of all reports of HTFVs in the sector in 2021 (Oosthuizen et al., 2022). Within this context, employers—and, more broadly, economic sectors—are forced to compete for appropriately skilled, qualified and experienced workers. This competition occurs at the point of recruitment, but employers must also continually work to retain these workers.

From the perspective of the employer, improving staff retention is beneficial due to the costs associated with staff turnover. This is because employers incur both direct costs when an employee leaves, as well as additional costs when recruiting and training new employees. Some of these are financial costs, but there are numerous intangible costs associated with staff turnover related to institutional knowledge, for example, that are more difficult to directly quantify but which may hamper efficiency.

Some of the factors that affect staff retention are lack of growth and progression, being overworked, lack of feedback and recognition, and limited decision-making responsibility (Martinelli, 2017). One significant predictor of staff retention is job satisfaction which is defined as “a direct measure of utility an employed worker derives from his/her current job” (Clark and Oswald, 2016). At the same time, job satisfaction has been found to influence worker productivity, one of the crucial factors influencing the success of an organisation (Bockerman and Ilmakunnas, 2010). Job satisfaction itself is influenced by various factors, but the central issue is the quality of jobs. A good quality job consists of multiple dimensions that a worker values. How important these dimensions are to an individual worker varies, and relative importance may also vary over the span of an individual’s career.

This research focuses on job quality in the insurance sector and aims to contribute to the evidence base related to the sector, but also related to more comprehensive measures of job quality than are made possible by official South African Quarterly Labour Force Survey (QLFS) data.

The research aims to answer four key questions with respect to job quality in the insurance sector. First, how does the quality of jobs vary within the insurance sector across worker characteristics? Second, how does the quality of jobs vary within the insurance sector across employer characteristics? Third, how is job quality related (or not related) to workers' subjective experience of their jobs? Finally, what are the key areas of success or failure in the provision of quality jobs in the insurance sector?

The remainder of this report is structured as follows. Section 2 discusses some of the conceptual and practical issues around the measurement of job quality, and provides an overview of some of the international and South African evidence on the issue. Section 3 outlines the methodological approach to the measurement of job quality undertaken in this research, highlights the structure of the index and outlines the sample of firms and employees that participated in the survey. Section 4 presents the research findings, while section 5 concludes.

2. Measuring Job Quality

2.1. Key Conceptual Issues

Analyses of the labour market typically focus on the quantity of work: the number of jobs, the level of employment, and the unemployment rate, for example. While these are important indicators, work fulfils various roles in many individuals' lives. The average full-time employee spends approximately 40 hours in their job per week, meaning that a large portion of employees' time is spent at work. From the perspective of the individual worker, evidence suggests that apart from work providing for basic necessities and survival, it also has the means to support individuals' social and personal lives and is therefore important for self-realisation and social integration (Muñoz de Bustillo et al., 2009). At the same time, as the economy becomes increasingly knowledge-based and skills intensive, employers' ability to attract and retain high quality, knowledgeable employees is considered to be a competitive advantage (Eurofound, 2021; De Sousa Sabbagha et al., 2018).

Talent and employee retention can thus be considered vital to maintain organisational competitiveness within the labour market. There are two factors that influence employee retention: employee motivation and job satisfaction (De Sousa Sabbagha et al., 2018). For example, employees who are satisfied with their working hours, wages, work environment and have opportunities to upskill, feel challenged by their work, and feel heard and valued by their employers are likely to report greater levels of motivation and job satisfaction, and are less likely to change employers.

2.1.1. The Role of Work and Working Conditions

Work has historically been seen as a means for individuals to fulfil their basic needs. However, it is clear that satisfaction in the work domain has a spillover effect in non-work domains (such as the family domain), which in turn affect individuals' work experiences (Van Laar et al., 2007). Work, therefore, has a multifaceted role in individuals' lives, as it no longer serves the sole

purpose of fulfilling basic needs. Work and working conditions also play an important role in how individuals' experience and perform their jobs. Working conditions refer to the working environment and nature of employment, and include work authority, work activities, work autonomy, training, skill usage, working time, time pressures, health, safety and well-being. Satisfactory working conditions are associated with beneficial outcomes for employees, employers, and society. These include enhanced individual health, well-being, and increased motivation, engagement, and performance (Eurofound, 2021).

The role of work, the way in which work is experienced and performed, as well as the expectations of employees and employers are evolving as a result of globalisation, technological advances, demographic developments and the Covid-19 pandemic. Technological advances, such as automation, are affecting the number of jobs available, the quality of jobs and the ability to acquire meaning through work. Similarly, digital platforms, such as e-commerce, e-services and online freelance work, have provided additional income generating opportunities that provide flexibility in terms of work processes (ILO, 2021). While these digital platforms may have provided innovative ways of work, they have also raised issues around lower incomes, working poverty and reduced access to social protection.

The effects of Covid-19 and its role in employees' work experiences cannot be ignored. The shift to remote work and increased acceptance of virtual business interactions hold both positive and negative consequences for employees. On the positive side these include the ability to spend more time with family, less commuting, increased adaptability, innovation, and collaboration, but there have also been financial consequences, and shifts in job security, employee well-being, and career attitudes (Howe et al., 2020). The extent to which these impact employees' experiences is dependent on individual circumstances, such as an individual's occupation and family composition (Fana et al., 2020).

2.1.2. Decent Work

Work has the potential to create structure in individuals' lives, by providing a means of survival, self-determination and connection to others (Blustein, 2013; Duffy et al., 2016). According to the International Labour Organization (ILO, 2013), decent work is work that is "productive and delivers a fair income, [provides] security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organise and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men". This includes employment opportunities to earn an adequate income, fair working time that allows for sufficient free time, work conditions that are safe and healthy, skills development opportunities, rights, dignified work, and opportunities to engage in social dialogue (Duffy et al., 2016; Yu, 2020). Decent work can therefore be considered as a key driver toward sustainable development, as it promotes inclusive economic growth, reduces inequality and increases resilience.

There are three needs that are satisfied through decent work, namely those related to survival, social connection, and self-determination, which ultimately enhance work fulfilment and well-being (Duffy et al., 2016). Survival needs are work characteristics that permit individual survival

as well as access to resources, for example, job security and adequate income. Social connection needs provide a sense of connection to other individuals, through supportive environments and policies that enable individuals to maintain relationships inside (and outside) the workplace. Self-determination needs are workplace opportunities that encourage autonomy, relatedness and competence. Duffy et al. (2016) suggests that once these three needs are fulfilled, it enhances individuals' psychological health, fulfilment, and well-being. Meaningful work predicts various positive outcomes, such as work engagement, job commitment, job satisfaction, meaning in one's life and overall well-being (Allan et al., 2020).

2.1.3. Job Quality

There are additional aspects that also impact work and one's experience of it; these are distinct work features that impact employees' well-being, summarized in the term *job quality* (Arranz et al., 2018; Yu, 2020). Job quality is the extent to which work-related factors foster beneficial outcomes for employees, more specifically psychological and physical well-being, and positive workplace attitudes (Holman, 2013; Yu, 2020). These work-related factors include job security, interpersonal work relationships and job autonomy, each of which have also shown to have an impact on workplace attitudes relating to job motivation, job satisfaction, job commitment, productivity, turnover rates as well as psychological well-being (Findlay et al., 2013; Holman, 2013; Wicht et al., 2019; Yu, 2020).

Job quality is a multidimensional concept that impacts individuals, organisations and overall well-being. While the subject of much research, there exists no standard definition of job quality, nor of its constituent components or indicators (Findlay et al., 2013; Grimshaw and Lehndorf, 2010; Muñoz de Bustillo et al., 2009). This lack of a single internationally accepted definition and comparable or consistent methods is a challenge (Santero-Sanchez et al., 2015). Conceptually, the meaning of the term 'job quality' varies across disciplines: for instance, sociologists focus on skill and autonomy, economists typically focus on pay, and psychologists focus on job satisfaction (Findlay et al., 2013). Indeed, in their analysis of decent work deficits, Bescond et al. (2003) indicated that the differences in terminology of job quality is one of the challenges in making cross-country comparisons.

Different theories have different conceptualisations of job quality. The strategic human resource management theory, for examples, contrasts a low-quality 'low commitment' job (i.e., low pay, low job security and low working time flexibility) with a high-quality 'high commitment' job (i.e., high pay, high job security and high working time flexibility) (Holman, 2013). The job demands control theory differentiates between various combinations of job demands and task discretion—the extent to which employees are able to exercise initiative and personal judgement in relation to their job tasks—that impact employee well-being, and which are indicative of four types of job quality: active jobs (i.e. high discretion and high demands), high-strain jobs (i.e. low discretion and high demands), passive jobs (i.e. low discretion and low demands), and low-strain jobs (i.e. high discretion and low demands) (Holman, 2013). In this case, active jobs are considered high quality jobs, as employees are able to use discretion in coping with demands, which likely results in high levels of employee well-being. In contrast, employees that have minimal control over job demands may

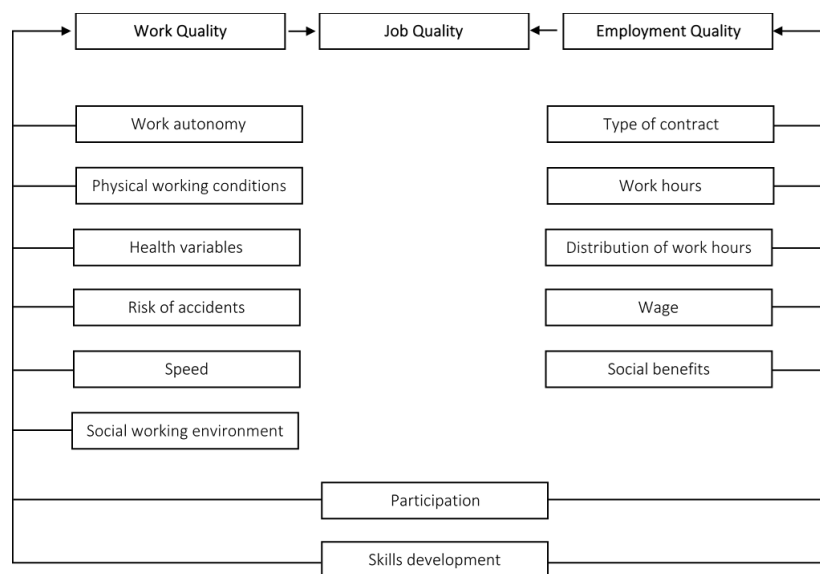
experience reduced ability to cope with them, with likely negative impacts on well-being due to high levels of strain.

It is important to understand the various dimensions of job quality if the quantitative and qualitative dimensions of work are to be measured. Muñoz de Bustillo et al. (2009) argue that one view in measuring job quality and determining job quality indicators is to select dimensions using theoretical perspectives regarding job characteristics and work-related factors on well-being. This perspective makes it possible to consider the numerous dimensions of job quality. On the other hand, the economic perspective focuses on wages as the main dimension, whereas the sociological perspective considers intrinsic qualities of work and the associated physical and psychological risks of work; these intrinsic qualities include skills, autonomy, working time, and work complexity (Muñoz de Bustillo et al., 2009).

Despite the lack of a single definition of job quality, there does appear to be some consensus on the key dimensions of job quality. Findlay et al. (2013) explain that good quality jobs are the jobs that allow individuals to develop and utilise their skills, that are challenging to the minds and the capabilities of individuals, and that offer opportunities of both control and task discretion in terms of work organisation and tasks. In addition, a crucial element to job quality is the degree to which an individual has their voice heard and represented in the workplace and has ample opportunities to participate in pertinent decision-making.

Muñoz de Bustillo et al. (2009) divides the concept of job quality into two areas, namely work quality and employment quality (this approach is also followed by Yu (2020)). Work quality involves attributes of work and working conditions that affect individual well-being, such as work intensity, work autonomy and work environment. On the other hand, employment quality considers aspects of the employment relationship that affect employee well-being, such as contract type, employment security, decent work, working hours, work-life balance, workplace retention, and social dialogue. Further, employment quality is affected by extrinsic rewards (such as remuneration and job security) as well as intrinsic rewards (such as skills utilisation, work relationships, and interest of work). The distinction between work and employment quality is that work quality relates to the material characteristics of the work performed and the work environment, whereas employment quality relates to the contractual relationship between the employer and employee (Muñoz de Bustillo et al., 2009). This is summarised in Figure 1. Grimshaw and Lehndorf (2010) define a third area, empowerment quality, which constitutes the quality of skills (such as skills development) and opportunities that allow individuals to express their voice (such as participation).

Figure 1. Job quality, employment quality and work quality



Source: Reproduced from Yu (2020, p. 278)

2.1.4. Job Satisfaction

Job satisfaction is often used as an indicator of job quality (Muñoz de Bustillo et al., 2009). However, as opposed to describing the characteristics of the job (i.e., the input), job satisfaction is a measure of employee well-being (i.e., the output). However, job satisfaction is, at best, an indirect indicator of job quality. While individuals' perceptions, emotions, attributes and perspectives play an important role in determining what constitutes as a good job and validating the indicators of job quality and job satisfaction (and well-being), job satisfaction is not broadly considered to be a suitable indicator of job quality (Arranz et al., 2018; Eurofound, 2012; Muñoz de Bustillo et al., 2009). This is because there are other variables and factors that could affect the level of job satisfaction and well-being, for example dissonance, relative thinking, adaptable expectations, individual expectation, and personalities (Muñoz de Bustillo et al., 2009). These additional factors would, in turn, influence levels reported in surveys. Rather, when selecting indicators of job quality, the focus should be on employee-centric indicators theoretically and empirically grounded in job quality.

Consideration should also be given toward institutional and cultural contexts as well as individual's life stage (Findlay et al., 2013; Muñoz de Bustillo et al., 2009). Individuals tend to place different preferences, importance and values regarding job and life factors (and/or domains), which should be considered when analysing job quality. For instance, some individuals may place greater emphasis on aligning their work around their lifestyles, others may prefer aligning their lifestyles around work, and others may prefer utilising a combination of the two. Establishing this would be dependent on the individual and the context in which they find themselves in. Furthermore, it is important that choices and constraints outside of typical workplace duties should also be considered. This is because individuals' realities and experiences are subjective, where the same job could be perceived and experienced

differently—depending on the individual, the importance as well as value they place on specific workplace-related factors.

2.2. *Measuring Job Quality*

Measuring job quality is important for three main reasons, according to Muñoz de Bustillo et al. (2009): Firstly, working life is a key element of quality of life, with working hours constituting a significant proportion of the average working age adult’s day. Secondly, in order to evaluate the performance of the economy, it is important to expand the focus from the quantity of jobs to the quality of jobs. As the labour market evolves in the face of, for example, technological change, globalisation, and one-off events such as the global financial crisis of 2008 and, more recently, the Covid-19 pandemic, it is important to monitor the qualitative impact on jobs. Such more nuanced assessments of employment may inform more effective policymaking that responds to key challenges.

In preparing to measure job quality, a range of aspects must be considered (European Parliament, 2009; Muñoz de Bustillo et al., 2011a; CIPD, 2018; Yu, 2020; Monnakgotla & Oosthuizen, 2021). These include:

1. The choice of a composite measure or a system of indicators;
2. The choice of dimensions and indicators to use;
3. The use of objective or subjective indicators (or both);
4. The level of observation, with job quality potentially measured at the macro-level or at the micro-level (i.e., at the aggregate level or the individual level); and
5. The choice of weighting and aggregation methods.

2.2.1.1. *Composite Measure or System of Indicators*

The measurement of job quality can follow two broad approaches. First, it may be measured by means of a composite measure, where “individual indicators are combined into a single measure based on an underlying model of the multidimensional concept that is being measured” (UNECE, 2019). Second, it may be measured through a system of indicators, “a coherent and interrelated set of measures of the different attributes of jobs that have an impact on the well-being of workers” (OECD, 2017). Both of these approaches try to construct a holistic picture of job quality by pulling together disparate pieces of data that each measure a specific aspect of job quality. Examples of job quality measured through a system of indicators include the OECD’s indicators of the quality of jobs (Cazes et al., 2015), the Laeken Indicators (European Commission, 2008), and the ILO’s decent work indicators ILO (2013).

These two approaches have three important commonalities: the object of analysis, the modelling of the dimensions that are to be measured, and the identification of the variables which are suitable in evaluating such dimensions (Muñoz de Bustillo et al., 2011). However,

the composite measure approach goes a step further than the the system of indicators by aggregating the selected dimensions' measures into a single measure.

Both approaches have advantages and disadvantages. Composite measures can summarise complex and multi-dimensional realities and are able to support decision-making. They are also easier to interpret than a system of indicators. In addition, composite measures can assess the progress, or lack thereof, of countries or industries over time; this is much more difficult using a system of indicators. If a composite measure is poorly constructed and not statistically sound, however, it may lead to misleading policy choices. A lack of transparency in the construction process of composite measures may disguise failings in some dimensions which will increase the difficulty of identifying the correct type of remedial action (Nardo et al., 2005); in contrast, these are much easier to spot in a system of indicators. In practice, the two approaches may usefully be deployed in parallel (Muñoz de Bustillo et al. 2011), by reporting the composite measure necessary for policy reasons and for its simplicity alongside the system of indicators on which it is based.

2.2.1.2. Dimensions and Indicators of Job Quality

It is at the conceptualisation stage of research where researchers and analysts need to decide which dimensions and indicators to use. A dimension refers to an aspect of a concept that is specifiable (Cascales Mira, 2021) and an indicator is a statistic or variable that is able to quantify a dimension in some way.

As already noted, job quality is a multidimensional concept and there is no consensus set of dimensions and indicators to use when constructing an index. However, Findlay et al. (2013) explain that, although researchers do not operate from a shared definition of job quality, there is a consensus on the key dimensions of job quality. They state that a good quality job should allow workers to develop, use their skills and the job demands should be challenging to some degree. In terms of work organisation, good quality jobs offer opportunities for task discretion and a sense of control. They further state that another crucial element of job quality is the extent to which employees can have their voice heard, represented, as well as being able to participate in relevant decision-making.

Yu (2020) presents examples of dimensions used in work quality and employment quality studies. He shows that dimensions typically used in work quality studies include work intensity, work autonomy and the quality of the working environment, while those typically used in employment quality studies include employment security, decent wages, skills development, work hours and work/life balance, training opportunities, workplace relations, social dialogue as well as social protection.

Eurofound (2012) suggests that deciding on the number of dimensions to use requires balancing opposing arguments: fewer dimensions mean that analysing the distribution of job quality amongst various groups becomes more identifiable and presentable, although fewer dimensions result in a loss of detail and challenges of interpretability as these fewer dimensions result in more highly aggregated indices.

According to Cazes et al. (2015), indicators used in the creation of a job quality index should fulfil standard statistical requirements and should:

- Have face validity: This refers to the capacity to measure what is intended. There should be substantive interpretations of the dimensions and indicators of well-being that matter to workers' lives, according to the literature and evidence.
- Focus on summary outcomes: Should be easily understood. The indicators should not display any ambiguity in interpretation and should show all changes, positive or negative, over time.
- Be amenable to change and sensitive to policy changes: This is important for the improvement of job quality policies and, ultimately, of people's lives.
- Be commonly used and accepted as job quality indicators within the academic and statistical communities: This is the case for indicators that rely on statistical instruments or that are based on surveys conducted by other entities.
- Ensure comparability across countries: Comparability is ensured when indicators follow internationally accepted standards and surveys or other instruments where data is collected and based on harmonised questionnaires and similar design implementation.
- Be collected through a recurrent instrument: This is crucial for the measurement of job quality over time.

2.2.1.3. Objective and Subjective Indicators

Two perspectives—subjective and objective—can be used to define and measure job quality. The subjective perspective is focused on the utility that an employee derives from their job (Eurofound, 2012; Holman, 2013; Yu, 2020). This utility is dependent on various job features, such as wage, type of work, working time, and is subjective in nature; employees have a preference and perceived fulfilment that influence their feelings, perceptions, attitudes and/or values. The extent to which the utility of a job is directly measurable is debatable, as some argue that it is revealed through actions and behaviours when performing work (Eurofound, 2012).

In contrast, the objective perspective considers job attributes that meet employees' needs and the extent to which the job meets these needs. The objective perspective assumes that the features of a job are the predominant cause of employees' experiences (Eurofound, 2012; Holman, 2013). Importantly, an objective perspective does not assume that job quality captures the degree to which employees' needs are satisfied. Arranz et al. (2018) highlight two approaches when utilising the objective perspective: (1) obtain measures that considers the extent to which the job satisfies the needs of an employee (accounting for individual circumstance), and (2) obtain measures of job quality independent of individuals' circumstances (focus on the characteristics of the job).

A combination of both subjective and objective indicators tend to be used, often due to unavailability of a full set of data (Brisbois, 2003; Crespo et al., 2017; Muhlau, 2011; Webster, 2015). However, if the primary aim is to report on the job quality aspects as opposed to the perception of these aspects, then the objective perspective should be utilised (CIPD, 2018; Yu, 2020).

2.2.1.4. Level of Observation

Job quality indices can either be constructed at a macro- or a micro-level. Macro-level indicators refer to those indicators that adopt macroeconomic measures for the set of dimensions that characterise job quality. These include indicators such as incidence of involuntary part-time employment, incidence of temporary employment, annual hours worked per person, incidence of long working hours, work affects health and overall satisfaction with working conditions (Brisbois, 2003) which are developed at a national and/or international level (CIPD, 2018).

Micro-level indicators, on the other hand, refer to indicators that are based on the definitions and explanations of job quality that are focused on the worker and include job characteristics (objective dimensions) as well as subjective dimensions that are related to the job-worker relationship (Crespo et al., 2013). Examples of micro-level indicators studies include those by: Yu (2020), which uses indicators such as wages, employment security, income security, social benefits, skills, work hours, participation and dialogue; Muhlau (2011), which makes use of indicators such as training, job security, promotion opportunities, autonomy, participation, work pressure, co-worker support, health/safety, anti-social hours and job complexity; and Wicht et al. (2019), which uses earnings, job security, job autonomy and abilities-demand match as micro indicators.

Despite this difference between macro- and micro-level measures, it should be noted that macro-level indicators are often constructed on the basis of micro-level data. Thus, for example, an indicator such as the incidence of temporary employment will typically be constructed from micro-level labour force survey data, but is summarised at the national level and included within the index. Indices calculated from macro-level indicators can, however, not be disaggregated unless the underlying data is disaggregated. In other words, separate indices by gender, for example, cannot be constructed from such an index, unless the macro-level indicators are available separately by gender. In contrast, indices constructed from micro-level data can be constructed for any group for which there is appropriate data.

2.2.1.5. Weighting and Aggregation

Aggregating various indicators across a number of dimensions into a single composite measure of job quality requires a set of decisions around the structure of the measure. These decisions reflect the explicit (or sometimes implicit) choices made about the relative importance of the indicators and dimensions since, as Clarke (2015) notes, different aspects of job quality are not equally important.

According to Muñoz de Bustillo et al. (2011a), aggregating different pieces of information within a composite index calls for a two-step process. First, the different elements (indicators, dimensions or variables) must be standardised so that their scales are equal and that they can be added together. For example, all variables may be transformed so that they range between zero and one. Second, these standardised elements must receive a weight, which is a multiplication factor proportionate to the importance assigned to each of the elements). These weights can be assigned through either a theoretical or policy-driven approach, or through a data-driven approach (Muñoz de Bustillo et al., 2011a).

The theory-driven approach uses economic theory and empirical evidence to assign weights to the chosen dimensions and indicators to reflect their relative importance. In contrast, data-driven approaches analyse the structure of the correlations between the various variables measuring the dimensions and allow the statistical procedure to assign the weights in proportion to how the variables correlate with one another. This method is of the assumption that all the variables that are included in the analysis are of the same unobservable (latent) phenomenon. The structure of the correlations between them can be used to deduce the unobservable variable from the from the observed variables. Given their complexity, however, these data-driven approaches are not particularly easy to convey to non-experts.

One example of a data-driven approach to determining weights is Principal Component Analysis (PCA). This is a technique that is mostly used when there is no consensus on the relative importance of the initial variables included within a composite index (Santero-Sanchez, et al., 2015). It allows for some degree of correlation among individual indicators since it can prevent counting the same behaviour more than once. The common use of this technique is to reduce the number of the initial variables which are needed to demonstrate the largest possible percentage of sample variability with the least number of variables, named principal components (Santero-Sanchez et al., 2015).

Indices may be constructed as weighted arithmetic means of the underlying indicators weighted by their respective weights. However, this means that a high score in one dimension may compensate for a low score in another, potentially obscuring low job quality in particular areas. This may be exacerbated by the chosen set of weights. One option to address this is to use a weighted geometric mean as it yields a more balanced outcome.

Table 1. Examples of approaches to job quality in terms of dimensions, indicators, level of observation, and weighting approach

Author(s)	Dimensions (Indicators)	Level of Observation	Weighting Approach
Brisbois (2003)	Health and well-being (2); Skills Development (3); Career and Employment Security (2); Reconciliation of Working and Non-Working Life (3) and Satisfaction Within Working Conditions (1).	Macro and Micro	No overall JQI measure. Focuses on individual indicators
Muhlau (2011)	Training (3); Job security (1); Promotion opportunities (1); Autonomy (3); Participation (1); Work pressure (1); Co-worker support (1); Health/safety (1); Antisocial hours (3) and Job complexity (1)	Micro	No overall JQI measure. Focuses on individual indicators
Huneus et al. (2012)	Income (1); Contracts and social protection (1); Tenure (1); Training (1)	Micro	Weighted average
Bocuzzo and Gianecchini (2014)	Economic (3); Professional (6) and Work/Life Balance (2)	Micro	Stated preference approach
Charlesworth et al. (2014)	Working-time autonomy (4); Job security (2); Job control (2); Workload (1); Skills development (1) and Access to work-life provisions (5)	Micro	Weighted average
Jones et al. (2014)	Training (2); Creativity (1); Promotion (1); Control Over Work (3); Information; Communication (2); Manager (3); Senior Manager/Culture (2); Meaningful; useful (1); Work hours (3); Pressure Intensity (3); Emotional demands (2); Physical demands (4); Job security (1) and Income (3).	Micro	Equal weighting
Cazes et al. (2015)	Earnings (2); Labour Market Security (4) and Quality of Working Environment (4)	Micro	Weighted average
Huneus et al. (2015)	Earnings (1); Formality (2); Job tenure (1)	Micro	Equal weighting
Santero-Sanchez et al. (2015)	Job security (2); Employment income and other emoluments (1); Working hours and work-life balance (5); Skills and training (6); On-the-job safety and gender equality (4)	Micro	Principal component analysis
Roncolato and Willoughby (2017)	Standard job quality measures (i.e. earnings, hours, conditions of work and physical health) and individual-level job quality measures (i.e. social relations, power and social relations, context, social relations and context and a holistic view of social relations, power and context)	Micro	N/A (Qualitative Study)
Arranz et al. (2018)	Working conditions (4); skills and training (3); work-life balance (2)	Micro	Equal weighting
Wicht et al. (2019)	Earnings (1); Job security (1); Job autonomy (4) and Abilities-demand match (1)	Micro	Item response theory
Yu (2020)	Wage (1); employment security (4); income security (3); social benefits (3); skills (1); work hours and flexibility (4); participation and dialogue (2)	Micro	Indicators equally weighted in overall job quality measure (no dimension scores)
Cascales Mira (2021)	Autonomy (3); Interaction (4); Intensity (2); Meaningful (2)	Micro	Equal weighting
Monnagotla & Oosthuizen (2021)	Wage (1); Benefits and employment security (8); Working time and work/life balance (4); Representation and voice (2)	Micro	Equal weighting

Source: Compiled by authors.

Schokkaert et al. (2009) argue for assigning equal weights to dimensions and indicators. Equal weights are preferred due to their simplicity, interpretability and the fact that they avoid

subjective assessments or forcing statistical weights on the relevant importance on dimensions or indicators that are vastly different at their core (Charlesworth et al., 2014). However, equal weights imply equal importance, even if this choice is not made explicitly. Some studies make use of a mixed weighting approach. Leschke and Watt (2013), for example, do not calculate an overall job quality index but present the findings for the sub-indices separately. Equal weights are applied to some sub-index indicators, while others are weighted where they deem there to be sufficient justification.

However, regardless of which weighting method is used, weights are essentially value judgements and should be used to assemble the primary objectives of the construction of a composite job quality index (CIPD, 2018). Critically, regardless of which weighting or aggregation method is used, transparency around the choices made and their justifications is essential.

2.3. *Job Quality Internationally*

As should be clear from the examples presented in Table 1, there is considerable heterogeneity in the composition and structure of measures of job quality across studies and across contexts. In this section, we provide an overview of some of the kinds of findings related to job quality globally.

Boccuzzo and Gianecchini (2014) measure job quality for young graduates using only objective indicators. Their index consists of three dimensions—economic, professional and work-life balance—weighted according to their view of their relative importance, and shows that women were less likely than men to have better quality job post-graduation. This was specifically related to women holding lower quality jobs in terms of the professional and economic dimensions. Master’s degree graduates experience better quality jobs than those with only a bachelor’s degree. Larger organisations were found to offer better jobs in terms of the professional and economic dimensions, while smaller organisations tended to offer better positions in terms of the work/life balance.

Arranz et. al. (2018) used only objective indicators to develop an employment quality index for Spain and Italy, using three dimensions (working conditions, skills and training, and work-life balance) and nine indicators. Overall, the study found a similar trends in job quality over time in the two countries, although job quality was slightly higher in Italy. Nevertheless, Spain fared significantly better than Italy on the work-life balance dimension, although this gap narrowed over time.

In measuring composite job quality index, different studies incorporate dimension sets and indicators of job quality most often considered in the literature. A review of these studies reinforces the earlier statement about the multi-dimensional characteristics of job quality analysis, even within the objective approach. For instance, Chen and Mehdi (2019) examine multidimensional aspects of job quality in Canada, six broad dimensions of job quality were assessed: working-time quality; income and benefits; work intensity; career prospects; skills and discretion; and social environment. They found that some of the largest labour market

segments, such as hospitality and personal services, are associated with many negative job features.

Cazes et. al. (2015) develops an OECD job quality framework using three dimensions to measure job quality, namely earnings quality, labour market security, and quality of working environment. Youth and low-skilled workers were found to fare worse in terms of job quality compared to their older and more skilled counterparts respectively. Women were found to be more likely to earn low pay, but were also found to be more likely to work in better quality work environments and have lower insecurity due to unemployment. Finally, a significant gap in job quality exists between formal and informal workers, with informal workers experiencing lower earnings quality, a higher risk of extremely low-paying jobs, and a higher probability of working very long hours.

Jones et. al. (2014) measure job quality for UK bus drivers using the DGB-Good Work Index (DGB-Index) developed for the German Trade Union Confederation. The index is made up of three dimensions, namely resources, burdens, and income/security dimensions, and 15 indicators. The study found that UK bus drivers' job quality is lower than that of non-driver workers in the same organisation, with their DGB index suggesting that their work be classified as medium quality work in the UK.

Cascales Mira (2021) measures the European Intrinsic Job Quality Index composed of four dimensions and eleven indicators. The index covers four dimensions of job quality, namely autonomy, interaction, intensity and meaningful dimensions, although it did not include an indicator linked to remuneration levels. The study found that institutional disparities caused variances in employment quality between countries.

Santero-Sanchez et. al. (2015) describes and construct a composite index of job quality for the tourism industry in Spain from a gender perspective in 2011. They derive a composite job quality index from the values found for the principal components. They found that women hold lower quality jobs than men and that the gender gap widens with age. Results also show a double adversity for women: a lower job quality in management positions they have not traditionally held, and a wider quality gap in clearly feminised, lower skilled positions.

The vast majority of studies that use macro level indicators for measuring or analysing job quality focus on cross-national differences and trends in job quality (Stier, 2015; Leschke and Watt, 2014; Sehnbruch et. al., 2020). Stier (2015) combines macro- and micro-level research to explain relationships at the individual level embedded in specific institutional contexts. The aim of this paper is to investigate the effect of macro-level characteristics on education-based skill inequality in job quality. Stier (2015) indicates that macro-level characteristics of countries have complex and varying impacts on job quality and on inequalities among different groups of workers, and finds that workers with an intermediate level of skills are indifferent to the lower-skilled on all measures and, therefore, that the pattern of skill differences is not entirely linear.

This brief review of evidence highlights a couple of key points that would be relevant in the context of this study. First, different sectors within the economy are characterised by differing

levels of job quality. As such, it is clear that job quality within the insurance sector may differ systematically from job quality in other sectors and in the national economy more broadly. Second, different types of workers may tend to experience lower or higher job quality than other workers. The evidence presented here, for example, typically finds that women and young people tend to hold lower quality jobs. Sehnbruch et. al. (2020), for example, highlight the plight of vulnerable workers, which include both the youngest and oldest workers, women, and less educated workers. Job quality may also be correlated with occupation, for example. Third, firm-level characteristics may also play an important role in determining job quality. For example, overall job quality may be lower in smaller firms relative to larger firms. Nevertheless, smaller firms may be able to offer higher quality jobs than larger firms in particular dimensions, even though overall job quality may be lower.

2.4. *Job Quality in Africa and South Africa*

Most studies relating to job quality in African countries appear to focus on either South Africa or Egypt. Assaad et al. (2009), for example, construct a job quality index using data on access to social insurance, regularity of employment, work hours, and nature of workplace and find that, overall, job quality in Egypt seemed to have decreased between 1998 and 2006. However, wage and salaried workers in the private sector—most notably those employed by microenterprises—saw an improvement in job quality over the period. Similarly, Barsoum (2010) assesses the job quality of poor young female workers in the private sector in Egypt and finds that private sector jobs are not attractive to women and that these jobs are rarely based on signed employment contracts, offer low pay, and have long hours.

Said (2012) examines the impact of accelerating privatisation and trade liberalisation initiatives on wage and job quality outcomes of the working poor in the Egyptian manufacturing sector between 1998 and 2006. The study finds that lower tariffs and increased export promotion had a small positive impact on the incomes of the poor, although this has come at the expense of higher incidence of low quality jobs.

In South Africa, studies of job quality have tended to be qualitative, not nationally representative, or do not construct a composite index (Reddy, 2014; DPRU, 2018; Mncwango, 2016; Webster et al., 2015). This appears to be changing, though, as more recent studies (Yu, 2020; Mackett, 2020; and Monnakgotla and Oosthuizen, 2021) have constructed composite indices using nationally representative quantitative data.

Reddy (2014) evaluates various individual indicators of job quality but does not present an overarching measure. The study considers individual job quality indicators and how these changed between 2001 and 2011. The results show that the period generally saw increased access to employment benefits: while the share of workers contributing to pensions decreased from 51.6 percent in 2001 to 48.5 percent in 2011, the share of workers with written contracts increased from 54.9 percent to 79.7 percent, while access rates to paid leave, medical aid and UIF also increased.

Similarly, DPRU (2018) also looks at individual indicators of job quality but do not construct a composite job quality index. The report provides employees characteristics and the individuals subjective perception of their job i.e., job satisfaction. In 2017Q3, almost two-thirds of the employed held a permanent contract, and the vast majority had written contracts (79.6 percent). In the same period, more than half of employees reported they have access to paid leave, sick leave or maternity/paternity leave, or that their employer contributed towards UIF on their behalf. Nearly half of employees reported employer pension contributions (47.5 percent), but only 29.9 percent reported medical aid contributions. Just over one-quarter (28.4 percent) of employees belonged to a labour union. Nearly three-quarters (72.9 percent) of the employed reported being satisfied in their main job, although there is substantial variation across sub-groups, with the informally employed, non-union members, and those working in private households, with verbal contracts, in non-urban areas, and with fewer working hours more likely to report that they were not satisfied with their main job.

The general public's perceptions and views of the job market are explored in Mncwango (2016). The paper assessed eight aspects relating to work values on a five-point scale, ranging from extremely important to not important. The paper indicated that job security was rated as 'very important' more often than any other characteristics. Although the public sees a need for occupational growth, intrinsically satisfying jobs and good income, security of tenure is what makes a job 'good' compared with other job conditions and financial benefits.

Cohen and Moodley (2012) attempt to measure decent work objectives in South Africa, using five statistical indicators to measure such progress namely: (i) employment opportunities; (ii) adequate earnings and productive work; (iii) stability and security of work; (iv) social protection; and (v) social dialogue and workplace relations. They conclude that high levels of unemployment and a weakened economy in South Africa have given rise to a growing informal sector and an increase in unacceptable working conditions and exploitation.

Webster et al. (2015) use nine indicators to construct an index of decent work in the farming, hospitality and security industries in Gauteng. They found that security workers scored the lowest on decent hours of work; combining work, family and personal life; and equal opportunity and treatment compared to their counterparts. In contrast, those in farming scored lowest on stability and security at work; social dialogue; social security; and adequate earnings. By contrast, hospitality workers were better off than their counterparts in the other two industries in terms of safety, and did not have the lowest score on any of the indicators evaluated.

Roncolato and Willoughby (2017) examine job quality of small business owners in low-income communities using qualitative method, using data from semi-structured, time-intensive interviews. The paper adopts Marxist and feminist theoretical frameworks to assess job quality around Cape Town (in Langa, Khayelitsha, and Strand). The results reveal a complicated story of self-employment being a means of expressing creativity, forming identity and community, while simultaneously being characterised by insecurity and harsh constraints environment.

Mackett (2020) constructs a decent work index, using an iteration of the Labour Force Survey. Using sub-major (2-digit) occupation groups as units of analysis, the study finds that there is an expected pattern around how occupations measure in relation to their degree of 'decency', meaning that higher paid professionals tend to have more decent occupations compared to low-skilled workers in elementary occupations. However, the higher up the occupational level, the lower they score in terms of certain indicators, such as balancing work, family, and personal life and decent working time. Furthermore, the study finds that occupation groups often score differently when the indicators which make up the decent work index are viewed individually rather than as a composite index.

Yu (2020) develops a composite, multidimensional employment quality index by taking 18 indicators from seven dimension into consideration, with each of the 18 indicators weighted equally within the index. The seven dimensions into consideration are: wage level; employment security; income security; social benefits; skills; work hours and flexibility; and participation and dialogue. The study finds highly educated, White, male workers aged at least 35 years, who lived in urban areas of the Western Cape and Gauteng, and were involved in high skilled occupations in the formal, public sector enjoyed significantly better employment quality.

Monnakgotla and Oosthuizen (2021) propose a simple job quality index, using the Quarterly Labour Force Survey (QLFS) data, which includes four dimensions of job quality, namely wages, benefits and employment security, working time and work-life balance, and representation and voice. The paper finds a decline in job quality over the 2011-2017 period, with substantially lower job quality experienced by women, by Africans and Coloureds, by youth, and by those with the least education. Similarly, those in more highly skilled occupations are found to have higher job quality than those in lower skilled occupations, as are those in urban areas relative to those in non-urban areas.

The authors also present a number of other versions of the index, which allow for other types of comparisons.¹ Their JQI, excluding the wage dimension as wage data for 2022 is not yet available, is updated here using the recently released QLFS for the second quarter of 2022 and following the original methodology. Estimates for 2017 and 2022 are presented in Table 2. For all employees aged 15-64 years, the average JQI increased from 0.563 in the second quarter of 2017 to 0.572 in the same quarter of 2022. This statistically significant increase is equivalent to an improvement in the index value of 0.3 percent per annum over the five-year period.

¹ A key challenge encountered in the study was the extent to which the questionnaire has changed over time, making it impossible to extend the full index back beyond 2011. A number of indices with fewer indicators were proposed in order to address this. In addition, the authors present a version of the index that excludes the wage dimension (Monnakgotla and Oosthuizen, 2021). This was done to allow comparisons between the release of the data for the Labour Market Dynamics in South Africa, which includes all four QLFS datasets for the calendar year in addition to the wage data that is collected through the year but not released with the QLFS datasets.

Table 2. Update of Monnakgotla & Oosthuizen (2021) SA JQI to 2022

	Full JQI	JQI excluding Wage Dimension		
	2017 Q2	2017 Q2	2022 Q2	Ave. Ann. Change (%)
Overall	0.498 [0.496; 0.499]	0.563 [0.561; 0.566]	0.572 [0.567; 0.577]	0.3*
D1: Wage	0.301 [0.298; 0.303]	-	-	-
D2: Benefits and employment security	0.596 [0.593; 0.599]	0.596 [0.593; 0.599]	0.591 [0.584; 0.598]	-0.2
D3: Working time and work-life balance	0.826 [0.824; 0.828]	0.826 [0.824; 0.828]	0.844 [0.839; 0.848]	0.4*
D4: Representation and voice	0.258 [0.255; 0.260]	0.258 [0.255; 0.261]	0.271 [0.264; 0.277]	1.0*

Source: Own calculations using LMD (2017), QLFS (2022) and Kerr et al. (2019); Monnakgotla and Oosthuizen (2021).

Note: Sample is restricted to employees aged 15-64 years. An asterisk denotes statistically significant changes at the 95 percent level of confidence. Index updated in line with original methodology.

Of the three non-wage dimensions, the working time and work-life balance dimension had the highest score. In 2022, the average score on this dimension was 0.844, up from 0.826 five years earlier. This was followed by benefits and employment security with an average score of 0.591, which is slightly above the overall score for the ex-wage JQI. Representation and voice had a far lower score at just 0.271 in 2022. Over the period, however, the representation and voice score increased at 1.0 percent per annum, which was the fastest rate of increase observed across the three dimensions. The working time and work-life balance score increased at a rate similar to that of the overall ex-wage JQI, while the score for benefits and employment security fell by 0.2 percent per annum (although this change was not statistically significant).

The data reveals important variations in the average JQI, as well as different trends over time, across industries (Table 3). There is little difference in job quality across the three major sectors: in 2022, job quality for employees was 0.574, 0.573 and 0.572 in the primary, secondary and tertiary sector, respectively, although the range was somewhat larger in 2017 (between 0.559 and 0.579). Job quality improved by 0.5 percent per annum in the primary and tertiary sectors, although only the latter change was statistically significant. In the secondary sector, however, mean job quality the slight decline in average job quality between 2017 and 2022 was not statistically significant.

Table 3. Update of Monnakgotla & Oosthuizen (2021) SA JQI to 2022, by industry

	Full JQI	JQI excluding Wage Dimension		
	2017 Q2	2017 Q2	2022 Q2	Ave. Ann. Change (%)
Overall	0.498	0.563	0.572	0.3*
Primary Sector	0.473	0.560	0.574	0.5
Agriculture	0.355	0.447	0.468	0.9*
Mining and quarrying	0.687	0.766	0.785	0.5
Secondary Sector	0.512	0.579	0.573	-0.2
Manufacturing	0.556	0.629	0.638	0.3
Utilities	0.707	0.773	0.755	-0.5
Construction	0.422	0.480	0.450	-1.3*
Tertiary Sector	0.497	0.559	0.572	0.5*
Wholesale and Retail Trade	0.434	0.497	0.504	0.3
Transport, Storage, Communication	0.483	0.534	0.539	0.2
Financial and Business Services	0.533	0.588	0.610	0.7*
... Insurance	0.626	0.661	0.689	0.8
CSP Services	0.599	0.666	0.666	0.0
Private Households	0.287	0.354	0.355	0.1

Source: Own calculations using LMD (2017), QLFS (2022) and Kerr et al. (2019); Monnakgotla and Oosthuizen (2021).

Note: Sample is restricted to employees aged 15-64 years. An asterisk denotes statistically significant changes at the 95 percent level of confidence. Index updated in line with original methodology.

At the level of major industries, however, the variation is much larger. Job quality is poorest in private households (i.e., domestic workers), with a mean ex-wage JQI of 0.355 in 2022, followed by construction (0.450) and agriculture, forestry and fishing (0.468). This should not be surprising given that these are industries in which workers are known to be particularly vulnerable and less able to organise. Of these three industries, only agriculture saw a statistically significant improvement in job quality over the five-year period. The average ex-wage JQI increased by 0.9 percent per annum in agriculture, compared to a statistically significant decline of 1.3 percent per annum in construction. Job quality in private households was virtually unchanged over the period.

In contrast, mining and quarrying and utilities have the highest job quality on average. The mean ex-wage JQI in mining and quarrying is estimated at 0.785 in 2022, with utilities at 0.755. Neither of these industries saw a statistically significant change in job quality over the period. These two industries are then followed by a set of three industries with mean scores between 0.6 and 0.7: CSP services, which includes government, averages 0.666; manufacturing averages 0.638; and financial and business services averages 0.610. Of these, only financial and business services saw a statistically significant change in average job quality, namely an increase of 0.7 percent per annum. Most of these industries with high average job quality are characterised by relatively high union membership, relatively strong organisation, and/or relatively long histories of collective bargaining, suggesting that workers may be able to effectively use collective bargaining to affect aspects of job quality.

The insurance sector is found to have relatively high job quality. In 2022, the sector's ex-wage JQI is estimated at 0.689, placing it behind mining and quarrying and utilities but ahead of CSP services and manufacturing. Indeed, mean job quality in the sector is higher than all of the industries within the tertiary sector, including financial and business services, of which it forms

part. This is also true when considering the full JQI in 2017, although the insurance sector was marginally behind CSP services in 2017 based on the ex-wage JQI. In other words, job quality in the insurance sector is relatively good and, although part of this is due to relatively high wages in the sector (the gap between the insurance sector and the national economy for the full JQI is slightly larger than it is for the ex-wage JQI), it is also the case for non-wage aspects of job quality.

3. Methodology

3.1. Approach

While existing data for the South African labour market allow for us to calculate a composite measure of job quality, there are limitations to the characteristics of job quality that can be incorporated from nationally representative survey data. For example, while national labour force data may be able to provide information on wages, contract permanence, and proxies for representation and voice such as trade union membership, these surveys generally do not capture less tangible information, such as the complexity of the tasks being carried out, social support structures that exist within companies, or opportunities for consultation and engagement within a company's employment structure. Research by Holman (2013) and the OECD (2017) indicate the importance of assessing these types of job characteristics when measuring job quality. Measures of job quality presented by Yu (2020) and Monnakgotla and Oosthuizen (2021), for example, are not able to provide a comprehensive measure of job quality.

In response to this shortcoming, the research presented here aimed to produce a measure of job quality that included some of these less tangible job characteristics. The research process therefore entailed the collection of primary data through a survey of employees within firms in the insurance sector using a customised questionnaire that focused on measuring job quality. The customised questionnaire, which drew on some of the example questions from the OECD (2017) and incorporated standard questions included within the QLFS, enabled the collection of a broader range of measures of job quality than is available in official national data sources such as the QLFS.

In order to assess job quality and how it varies across different types of workers, it is essential to collect data directly from workers. This posed an important challenge for this research since we do not have direct access to workers. Instead, we are only feasibly able to access insurance sector workers through their employers, meaning that this research is only possible with full cooperation from participating employers. Recent experience in the insurance sector, however, has shown that response rates to employer surveys where employers have been randomly sampled to participate are very low. Given that we would need active cooperation from employers to access workers and to encourage their participation in the survey, it was clear that randomly sampling employers from the WSP submissions exposed the research to significant risk of low and patchy response rates at both the employer- and employee-level.

Instead, the decision was taken to approach this research as a smaller set of surveys of employees in firms that had indicated interest and willingness to participate. In a series of advertisements through the INSETA website, mailing list, and social media channels, the research was advertised to employers in the insurance sector. Interested levy-paying employers were requested to sign up to participate in the research and they were then provided with a unique link and background information on the research to share with all of their employees. Response rates were monitored and feedback was provided to employers on their progress. In an effort to incentivise participation of employers, those that reached a minimum response rate were promised a benchmarking report providing an overview of job quality at the employer-level relative to other employers. To encourage employee-level participation, employees responding to the survey were able to opt into a lucky draw.

The collection of these more detailed data from respondents therefore presented a trade-off in the representivity of the final sample under consideration. Reliance on firms expressing interest led to an idiosyncratic sample of respondents, who would, in general, not be representative of the insurance sector as a whole. For example, employers that believed job quality in their organisation was high may be more likely to choose to participate, while the opposite would be true of employers with low job quality. Achieving the requisite response rate to receive the benchmarking report would be easier for smaller employers, who may also be less likely to be able to access this kind of comparative data on their own; thus, the employer-level incentive offered may have had lower value for larger organisations, translating into lower employer participation rates amongst larger employers.

In a sense, then, this research can be thought of as a pilot study of measuring job quality focussed on the insurance sector. It is not representative of the insurance sector. However, as discussed in section 3.3, the resulting sample still provides interesting insights and is useful in that it may give a broad notion of job quality in the insurance sector, even if it is not exactly representative of the sector in its entirety. Importantly, however, the research presented below represents important preparatory work for further investigation of job quality in the insurance sector, and within the South African economy more broadly.

3.2. *Index Construction*

The job quality index constructed for this research is based on the various examples of indices discussed in section 2. In terms of the overview provided there, it is worth highlighting some of the key decisions made in the formulation of the index here.

First, the job quality index presented here is a composite measure rather than a system of indicators. The index is constructed on the basis of several dimensions of job quality, each of which are measured through a number of more detailed indicators. Thus, while a system of indicators does underpin the index and while we do discuss them, these indicators are not the primary lens through which job quality is viewed or conceptualised here.

Second, job quality is measured here through objective indicators. In other words, indicators of job quality included in the index do not attempt to measure the utility that workers derive

from their job. The objective approach, as noted in section 2.2.1.3, considers job attributes that meet employees' needs and the extent to which their jobs meet these needs. Importantly, this means that our job quality index does not include the level of job satisfaction as one of the indicators. Instead, job satisfaction will be analysed separately in relation to the overall measure of job quality to explore the potential relationship between these two variables.

Third, the job quality measure is constructed at the micro-level. Data is collected directly from employees and, as a result, it is possible to calculate a job quality index for each respondent in the dataset. Once this has been done, it is then possible to analyse job quality overall by summarising all the individual index scores. Importantly, construction of the measure at the micro-level means that job quality can be analysed across individual- and firm-level characteristics, allowing comparisons of different types of workers and different types of employers.

Fourth, as far as possible, decisions around differential weighting of components of the index are avoided and the index is constructed using equal weights. There is little empirical evidence indicating that job quality is more closely linked to particular indicators, thus supporting particular uneven weighting patterns. There is, however, one deviation from this (for balanced working hours), which will be discussed in more detail below. Apart from this, all indicators are weighted equally within their respective dimensions, and all dimensions are weighted equally within the overall job quality index.

Our job quality index is structured in the following way. First, job quality is conceptualised as having six key dimensions: wages; benefits and employment security; working time and work-life balance; working conditions; skills and career development; and representation and voice. The wage dimension aims to measure the extent to which the job provides adequate remuneration. Entitlements to particular non-wage benefits and the degree of employment security are captured within the benefits and employment security dimension. Working time and work-life balance includes measure related to working excessive hours, underemployment, and the extent to which work responsibilities intrude into employees' private time. The working conditions dimension includes a range of indicators related to the physical and emotional work environment. Within the skills and career development, indicators explore the extent to which employees are able to learn and to deploy their knowledge and skills within their jobs. Finally, the representation and voice dimension includes a series of indicators related to the extent to which employees are respected and engaged with and the extent to which they feel there is space for their voices to be heard.

Each of these dimensions receives an equal weight of one-sixth within the overall index. Thus, the job quality index is calculated as:

$$JQI_i = \frac{1}{6}W_i + \frac{1}{6}B_i + \frac{1}{6}T_i + \frac{1}{6}C_i + \frac{1}{6}S_i + \frac{1}{6}V_i$$

where W is wages, B is benefits and employment security, T is working time and work-life balance, C is working conditions, S is skills and career development, and V is representation and voice, and i denotes the individual employee concerned.

Each of these dimensions is constructed from a number of indicators based on the data collected in the survey of employees.²

Dimension 1: Wages

The wage dimension consists of a single indicator calculated from data on the individual employee’s wage. Specifically, the wage indicator considers the individual’s wage relative to the minimum wage in 2022 of R3 732 per month and ascribes a value based on their wage as a multiple of the minimum wage. The scale used is sensitive to three key considerations: first, it is grounded in the national minimum wage and considers below-minimum wage as being the poorest quality job; second, it links higher wages with higher job quality; and third, it recognises that, above a particular level, higher wages should not be interpreted as necessarily higher quality. The third consideration is important in a high inequality context like South Africa, and effectively establishes a limit above which we are no longer concerned about wages as an indicator of job quality. This limit is chosen somewhat arbitrarily as eight times the minimum wage.

Where respondents do not provide data on their wages, they are allocated the lowest value for the indicator (i.e., zero). This is done to ensure that as many respondents as possible are included within the sample—missing data would otherwise mean they would need to be dropped from the analysis—and that they are included in a way that predictably and conservatively impacts the overall measure. In this case, allocating these individuals to the worst outcome means that the final estimate of job quality is a lower-bound estimate.

Values are allocated as follows:

Score on Indicator	Criteria
1.00	Wage is at least eight times the minimum wage
0.75	Wage is at least four times but less than eight times the minimum wage
0.50	Wage is at least twice but less than four times the minimum wage
0.25	Wage is at least equal to the minimum wage but less than twice the minimum wage
0.00	Wage is less than the minimum wage, or respondent does not provide a minimum wage

Dimension 2: Benefits and Employment Security

This dimension includes nine indicators: (1) employment in terms of a written contract; (2) employment in a permanent position (permanent contract); (3) whether the employer deducts UIF contributions from the salary; (4) whether the employer requires the employee to contribute to a pension, retirement and/or provident fund; (5) whether the employer provides a subsidy for the employee’s medical aid; (6) entitlement to paid annual leave; (7) entitlement to paid sick leave; (8) entitlement to paid maternity, paternity or parental leave; (9) whether the employee expects to lose their job in the coming six months. Each indicator receives an equal weight of one-ninth within the dimension.

² The full questionnaire is available in the appendix.

Responses for the first eight indicators are collected via a yes-no question with four response options: yes, no, do not know/uncertain, and prefer not to say. The two contract-related questions specify two different contract types instead of the ‘yes’ or ‘no’ options, but can essentially be interpreted in the same way. In each case, the ‘yes’ response is linked with better job quality. As with the wage data, the other two response options are coded to reflect the worse of the two responses, which is ‘no’ in this case. Thus, these eight indicators are coded as follows:

Score on Indicator	Criteria
1.00	Yes
0.00	No, Don't know/uncertain; Prefer not to answer

For the final indicator relating to the expectation of job loss in the coming six months, the question is asked using a five-point Likert scale, with options of completely disagree, disagree, neither disagree nor agree, agree, and completely agree. In this instance, the indicator is calculated somewhat differently: those who (completely) disagree are assigned a value of one, those who (completely) agree are assigned a value of zero, and those who neither disagree nor agree are assigned a value of 0.5.

Score on Indicator	Criteria
1.00	Completely disagree; disagree
0.50	Neither disagree nor agree
0.00	Agree; completely agree

Dimension 3: Working Time and Work-Life Balance

This dimension consists of six indicators and is the only dimension where the indicators are not equally weighted. Instead, the dimension is divided into two equal parts: the first deals with balanced working hours and the second deals with work-life balance.

The work-life balance component consists of five equally-weighted indicators, covering working in free time to meet work demands, weekend work, working to tight deadlines, working late at night, and ability to take time during working hours to deal with personal matters. Each indicator receives a weight of one-tenth within the dimension.

Weekend work is asked as a yes-no question and is coded as described above. Since working on the weekend is considered to indicate lower job quality, it is coded as follows:

Score on Indicator	Criteria
1.00	No
0.00	Yes, Don't know/uncertain; Prefer not to answer

Free time to meet work demands, working to tight deadlines, working late at night, and ability to take time during working hours to deal with personal matters are asked on a five-point Likert scale with values ranging from never to always. All of these questions are phrased in such a

way that never signifies higher quality jobs and always signifies lower quality jobs. They are coded as follows:

Score on Indicator	Criteria
1.00	Never; Rarely
0.50	Sometimes
0.00	Often; Always

The working time indicator aims to measure two aspects of working time, namely the undesirability of working excessively long hours and of working fewer hours than preferred by the employee, and receives a weight of one-half within the dimension. The indicator is therefore constructed from two sub-indicators. The first quantifies excessive working hours, allocating a value of one for those who report working up to 40 hours per week and lower values for longer working hours.

Score on Sub-Indicator	Criteria
1.00	Up to 40 hours per week
0.80	41-45 hours per week
0.60	46-50 hours per week
0.40	51-55 hours per week
0.20	56-60 hours per week
0.00	61 hours or more per week

The second sub-indicator measures underemployment. An employee is considered to be underemployed if they work fewer than 35 hours per week and indicate that they would be willing and available to work additional hours at their current rate of pay.

Score on Sub-Indicator	Criteria
0.00	Up to 40 hours per week
-0.20	Works fewer than 35 hours per week AND is willing and available to work additional hours at current rate of pay; Works fewer than 35 hours per week and, in the follow-up question, selects don't know/uncertain or prefer not to answer.

These two sub-indicators are then combined additively to yield the working time indicator. This indicator takes on the value of one if the respondent works no more than 40 hours per week and is not underemployed; a value of 0.8 if the respondent works fewer than 35 hours per week and is underemployed, OR if the respondent works 41-45 hours per week; and values from 0.6 to 0.0 where the respondent works more than 45 hours per week as described above.

Score on Indicator	Criteria
1.00	Up to 40 hours per week
0.80	41-45 hours per week; Underemployed
0.60	46-50 hours per week
0.40	51-55 hours per week
0.20	56-60 hours per week
0.00	61 hours or more per week

Dimension 4: Working Conditions

Eight equally-weighted indicators comprise the working conditions dimension. These include carrying or moving heavy loads; exposure to chemicals; exposure to noise; working in tiring or painful positions; working at very high speed; flexibility to choose or change how work tasks are completed; expectation of an undesirable change in work situation; and job is emotionally demanding. Each indicator receives a weight of one-eighth within the dimension. The first five of the abovementioned indicators are asked using a five-point Likert scale with options ranging from never to always. Questions are phrased in such a way that 'never' corresponds with the best job quality.

Score on Indicator	Criteria
1.00	Never; Rarely
0.50	Sometimes
0.00	Often; Always

For the latter three indicators, response categories range from completely disagree to completely agree. The question on flexibility to choose or change how work tasks are completed is phrased positively and is scored as follows:

Score on Indicator	Criteria
1.00	Completely agree; agree
0.50	Neither disagree nor agree
0.00	Disagree; completely disagree

The questions on expectations of undesirable change in work situation and the job being emotionally demanding are scored as follows:

Score on Indicator	Criteria
1.00	Completely disagree; disagree
0.50	Neither disagree nor agree
0.00	Agree; completely agree

Dimension 5: Skills and Career Development

Four indicators combine with equal weights of one-quarter each to form the score for the skills and career development dimension. These indicators are: whether the job offers good prospects for career advancement; the respondent learns new things in the job; the respondent has enough opportunities to use their knowledge and skills in their job; and a measure of the usefulness of training received.

The first three questions are asked using the five-part Likert scale ranging from completely disagree to completely agree as described above, with the latter corresponding with good quality jobs. These indicators are coded as follows:

Score on Indicator	Criteria
1.00	Completely agree; agree
0.50	Neither disagree nor agree
0.00	Disagree; completely disagree

The fourth indicator combines two sub-indicators denoting access to training and the respondents' assessment of the usefulness of the training. The former is a simple yes-no question of whether the respondent had undergone training paid for or provided by their employer in the previous 12 months. Access to training is considered to correspond with better quality jobs, and the sub-indicator is coded as:

Score on Sub-Indicator	Criteria
1.00	Yes
0.00	No, Don't know/uncertain; Prefer not to answer

Respondents who did receive training were then asked whether they felt that their prospects for future employment were better because of this training. This was asked using the five-part Likert scale ranging from completely disagree to completely agree as described above. This sub-indicator was coded in such a way that training that was not considered to be beneficial reduced the score for access to training:

Score on Sub-Indicator	Criteria
0.00	Completely agree; agree; neither disagree nor agree
-0.50	Disagree; completely disagree

The two sub-indicators are added together to calculate the value of the indicator.

Score on Indicator	Criteria
1.00	Received training in previous 12 months AND (completely) agreed or was neutral in terms of whether the training benefited prospects for future employment
0.50	Received training in previous 12 months AND (completely) disagreed that the training benefited prospects for future employment
0.00	Did not receive training in previous 12 months (or selected don't know/uncertain, or prefer not to answer for this question)

Dimension 6: Representation and Voice

This dimension is comprised of ten equally-weighted indicators, each receiving a weight of one-tenth within the dimension. These indicators cover: the ability to influence decisions important to my work; union membership; immediate manager respects me as a person; the value of my work is properly recognised; involved in improving work organisation or processes; feeling of being unfairly treated through discrimination at work; received praise and respects my work deserves; job gives me a feeling of a job well done; have space to voice opinions in work discussion; and able to get support and help from co-workers when needed.

Union membership is answered via the standard four-part yes-no question, with membership ('yes') corresponding to good quality jobs. This indicator is coded as:

Score on Sub-Indicator	Criteria
1.00	Yes
0.00	No, Don't know/uncertain; Prefer not to answer

The other nine indicators are asked via the five-point Likert scale with options ranging from completely disagree to completely agree. For all indicators, except the discrimination indicator, agreement is considered to be associated with better quality jobs. These indicators are coded as:

Score on Indicator	Criteria
1.00	Completely agree; agree
0.50	Neither disagree nor agree
0.00	Disagree; completely disagree

For the discrimination indicator, disagreement is associated with better quality jobs and it is coded as:

Score on Indicator	Criteria
1.00	Completely disagree; disagree
0.50	Neither disagree nor agree
0.00	Agree; completely agree

Given the varying number of indicators in each of the dimensions and, in the case of dimension three, the difference in the weighting of indicators within the dimension, the effective weights of the indicators differ significantly. These various indicators are presented graphically in Figure 2, with each block's size corresponding to that indicator's weight within the overall JQI.

Figure 2. Structure of the Job Quality Index

Wage relative to minimum wage (1)		Permanent contract (1/9)	Written contract (1/9)	Employer deducts UIF contributions (1/9)	Work in free time to meet work demands (1/10)	Balanced working hours (1/2)
		Employer requires contribution to a pension fund or similar (1/9)	Employer provides a subsidy for medical aid (1/9)	Entitled to paid annual leave (1/9)	Weekend work (1/10)	
		Entitled to maternity, paternity, parental leave (1/9)	Entitled to sick leave (1/9)	Expect to lose job in next six months (1/9)	Job involves working to tight deadlines (1/10)	
					Work at least two hours between 10pm and 5am (1/10)	
					Able to take time during working hours for personal matters (1/10)	
Flexibility to choose or change how I complete work task (1/8)	Job involves carrying or moving heavy loads (1/8)	Job offers good prospects for career advancement (1/4)	Have enough opportunities to use knowledge and skills in job (1/4)	Able to influence decisions that are important for my work (1/10)	Union member (1/10)	
Exposed to handling, skin contact with chemicals (1/8)	Job involves working at very high speed (1/8)			Immediate manager/supervisor respects me as a person (1/10)	Value of my work is properly recognised (1/10)	
Exposed to noise so loud I need to raise my voice to talk to others (1/8)	Expect an undesirable change in work situation (1/8)	Useful training received (1/4)	Learn new things in job (1/4)	Involved in improving work organisation or processes (1/10)	Feel unfairly treated through discrimination at work (1/10)	
Job involves working in tiring or painful positions (1/8)	Job is emotionally demanding (1/8)			Receive praise and respect my work deserves (1/10)	My work gives me a feeling of a job well done (1/10)	
				Have space to voice opinion in work discussions (1/10)	Able to get support and help from co-workers when needed (1/10)	

Key

D1: WAGES	D2: BENEFITS & EMPLOYMENT SECURITY	D3: WORKING TIME & WORK-LIFE BALANCE
D4: WORKING CONDITIONS	D5: SKILLS & CAREER DEVELOPMENT	D6: REPRESENTATION & VOICE

Source: Own compilation.

Notes: Areas of blocks are proportional to the indicators' weights within the overall job quality index.

It is clear from the figure that the wage indicator is the most important indicator within the index from the perspective of its relative weight, accounting for one-sixth of the JQI. This is followed by balanced working hours (one-twelfth of the weight). Despite this variation and, however, it is clear that each dimension has an equal weight within the overall index and, apart from the working time and work-life balance dimension, that all indicators are equally weighted within their respective dimensions.

3.3. Sample Overview

A total of 371 responses across 15 firms in the insurance sector were obtained during the course of the data collection process. However, not all of these responses were viable for analysis, and a cleaning procedure was undertaken to ensure that the sample consisted only

of employees, and that respondents included in the dataset had completed the questionnaire in its entirety. A total of 41 respondents had opened the questionnaire but did not complete it; four individuals did not consent to their data being used in the survey; four individuals completed the survey more than once; and nine observations were of individuals who were not employees.³ These observations were dropped from the sample, resulting in a final sample of 313 observations distributed across 15 different employers.

The distribution of responses across firms is shown below in Table 4, along with the response rate per firm. It is clear there is large variation in the number of observations across firms, and there is also a large distribution of response rates. Although the variation in number of responses is not unexpected, it does mean that adjustments will need to be made to ensure that any analysis of these data does not get unduly swayed by a firm with a large absolute number of responses in the sample.

Table 4. Distribution of survey respondents by firm

	Number of Employees	Response rate
Firm 1	>200	0-20%
Firm 2	22	0-20%
Firm 3	75	21-40%
Firm 4	6	21-40%
Firm 5	112	21-40%
Firm 6	24	41-60%
Firm 7	193	41-60%
Firm 8	8	61-80%
Firm 9	6	61-80%
Firm 10	26	61-80%
Firm 11	43	61-80%
Firm 12	6	80-100%
Firm 13	71	80-100%
Firm 14	8	80-100%
Firm 15	-	-

Source: Own calculations using DPRU-INSETA Job Quality Survey (2022).

Note: Response rate is calculated as the number of respondents from a firm divided by the total number of recorded employees at that firm, as sourced from the 2022 WSP-ATR submissions. In the case of Firm 15, no existing number of employees existed in the WSP, hence the missing response rate. In analyses that focus on firm-specific estimates, Firm 15 is removed from the analysis due to the lack of a valid response rate.

In order to correct for this disproportional representation of firms in our sample, we construct a rudimentary analysis weight. This weight is calculated within firms as the inverse of the number of responses, and the calculated weight is assigned to all observations within a firm.⁴ The construction of such a weight allows us to normalise any calculated statistics across firms, in that the weights ultimately lead to each firm being equally weighted in any aggregate statistics calculated from our data. Put simply, any weighted statistic calculated from these data can be interpreted as a response from the average employee in the average firm in our

³ These observations were of individuals who were, for example, the owner of the business, or a senior executive with no line manager.

⁴ In other words, the weight for Firm 1 would be calculated as $\frac{1}{2}$, meaning that each of the two observations from Firm 1 will be assigned a weight of 0.5.

sample. At this point, we stress that this interpretation is not equivalent to the average representative employee or the average representative firm in the insurance sector, but rather simply the average employee in the average firm within our sample.

For the bulk of the analysis, we make use of these analytic weights in all estimations. However, for the sake of transparency, we present both an unweighted and a weighted breakdown of our sample according to certain key demographic characteristics in Table 5. Based on these results, we can see that our sample is predominantly female, between the ages of 25 and 44, and with at least a matric qualification or equivalent (NQF 4). Nearly half of the respondents in our sample are White, while just over one-third are African. Finally, the bulk of our sample is employed in skilled occupations—particularly clerical roles—with approximately one-third employed in high-skilled occupations such as managerial or professional occupations. These observations are consistent when adjusting for the analytic weights, although the magnitudes of the proportions do shift slightly.

Table 5. Demographic overview of sample, weighted and unweighted

	Number	Unweighted (%)	Weighted (%)	WSP (%)
By Gender				
Male	82	0.26	0.18	0.39
Female	229	0.73	0.81	0.61
By Race				
African	117	0.37	0.35	0.56
Coloured	34	0.11	0.14	0.13
Indian/Asian	20	0.06	0.06	0.09
White	135	0.43	0.43	0.21
By Age Group				
15-24 years	21	0.07	0.05	0.48
25-34 years	102	0.33	0.36	
35-44 years	103	0.33	0.26	0.39
45-54 years	57	0.18	0.21	
55-64 years	23	0.07	0.09	0.11
65+ years	7	0.02	0.03	0.02
By Educational Attainment				
NQF 1-3	8	0.03	0.02	0.02
NQF 4	106	0.34	0.36	0.61
NQF 5	47	0.15	0.21	0.13
NQF 6	44	0.14	0.12	0.06
NQF 7	70	0.22	0.16	0.11
NQF 8+	38	0.12	0.12	0.06
By Occupation				
<i>High-skilled</i>	106	0.34	0.36	0.36
Managers	53	0.17	0.23	0.13
Professionals	53	0.17	0.13	0.22
<i>Skilled</i>	201	0.64	0.63	0.63
Technicians	57	0.18	0.14	0.36
Clerical	96	0.31	0.34	0.23
Service and Sales	45	0.14	0.16	0.05
Skilled Agricultural, Crafts	3	0.01	0.00	0.00
<i>Low-skilled (Elementary)</i>	6	0.02	0.01	0.01

Source: Own calculations using DPRU-INSETA Job Quality Survey (2022); INSETA (2022).

These results are generally broadly comparable to representative data sources for the insurance sector. The final column of Table 5, for example, presents the breakdown of employment in the insurance sector according to the 2022 WSP submissions, as presented in the latest Sector Skills Plan. Relative to the WSP data, women are somewhat over-represented within the sample, as are Whites and those with educational qualifications at NQF level 5 and above. Even though this is the case, the reader is cautioned that this broad consistency does not imply that the survey is representative of the sector.

Another challenge faced in conducting our survey is that of item non-response.⁵ The presence of item non-response in a survey can lead to substantial biases in the findings if not handled appropriately. In our questionnaire, we attempted to minimise item non-response by requiring answers to all Likert-style questions. However, some questions necessitated a “Don’t Know” or “Prefer not to Answer” option. For example, questions that included options for “Don’t Know” or “Prefer not to Answer” include questions on wages; whether individuals’ employers contributed to pension funds or medical aid schemes for them; and whether they had found training paid for by the employer useful in furthering their career prospects, among others.

Table 6 presents the pattern of missing data across all dimensions used in calculating the JQI for our sample, as well as the type of missing data it represents, i.e., whether the individual refused to disclose it, or whether the individual did not know the answer. It is clear that the largest issues arise from individuals responding with “Don’t Know” for Dimension 2 on benefits and employment security, as well as individuals preferring not to disclose their wages in Dimension 1. The issue with disclosing wages is expected, particularly since it is well-documented that missing wage data are common and that these data are usually more likely to be missing when the respondent is a high earner (Wittenberg, 2017).

Table 6: Pattern of missing data in survey responses by JQI dimension (number of observations)

	Don't know	Prefer not to answer	All missing
All dimensions	55	30	61
Dimension 1: Wages	0	21	21
Dimension 2: Benefits and Employment Security	46	7	50
Dimension 3: Working time and work-life balance	5	3	8
Dimension 4: Working conditions	0	0	0
Dimension 5: Skills and career development	14	8	22
Dimension 6: Representation and voice	7	6	13

Source: Own calculations using DPRU-INSETA Job Quality Survey (2022).

The more interesting finding here is that a much more substantive problem with item non-response arises from Dimension 2, where individuals were asked about the provision of certain non-wage benefits by their employer. In particular, a pattern emerged whereby individual respondents did not know whether their employer contributed on their behalf to the Unemployment Insurance Fund (UIF), pension schemes, medical aid schemes, or whether they

⁵ Item non-response is defined as the failure to obtain information for a particular question in a questionnaire, resulting in missing data. This is different to unit non-response, which is the case where all information for a given respondent is missing. Unit non-response was dealt with by removing all respondents who had not completed the questionnaire.

were entitled to paid annual, parental, or sick leave. This result is particularly interesting as it suggests that workers are not familiar with the non-wage benefits that are provided to them, and perhaps interventions to educate workers on their benefits may be required in the future.

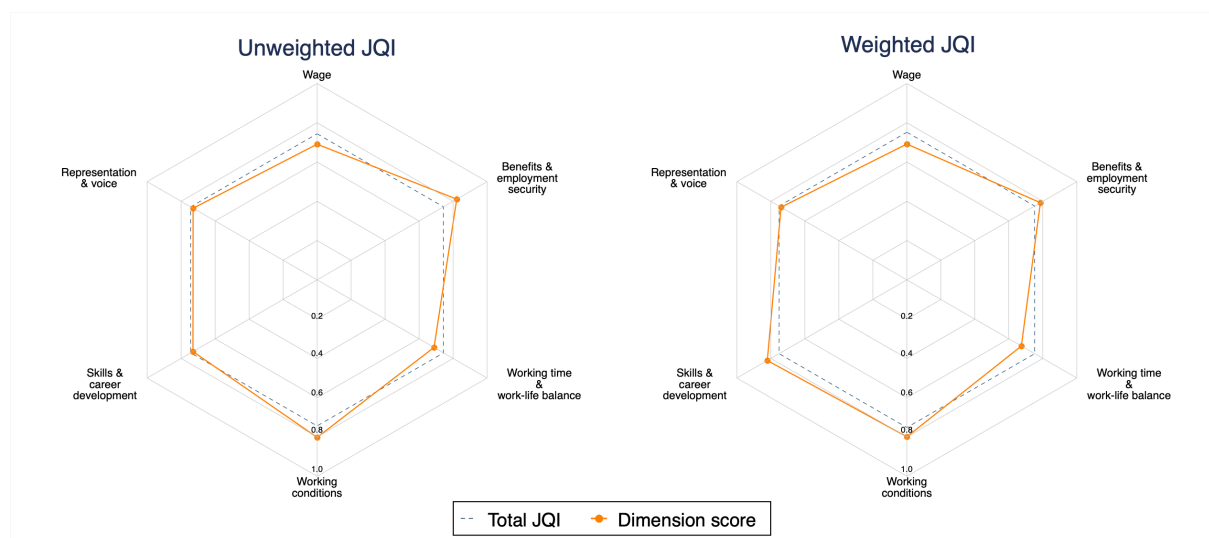
Overall, approximately one in five respondents have missing data for some item used in the calculation of the JQI. In order to ensure that we do not lose observations in our calculations, we choose to map all missing data to the worst outcome for the given component. For example, when an individual did not know if their employer contributed to medical aid on their behalf, we mapped this response to “No”. In this way, we treat all missing data as conservatively as possible, and the resultant estimates of the JQI from our survey therefore represent lower-bound estimates of the job quality of employees across firms in our sample. This is to say, job quality may well be higher than what is reported here, although it will certainly not be lower.

4. Job Quality in Insurance Sector Firms

4.1. Overview

As already noted, there is large variation in the number of observations across firms, and there is also a large distribution of response rates. In order to correct for this disproportional representation of firms in our sample, a rudimentary analysis weight is constructed. Figure 3 compares the mean JQI and the dimension scores, both weighted and unweighted, for the sample of firms within the insurance sector. It is clear from the figure that there is little variation in terms of scores for the weighted JQI and the unweighted JQI. Using the weighted results, the mean JQI in the sample of firms is 0.752, slightly higher than the unweighted mean of 0.744.

Figure 3. Decomposition of JQI Dimensions, Weighted and Unweighted



Source: Own calculations using DPRU-INSETA Job Quality Survey (2022).

In terms of the individual dimensions, the working time and work-life balance dimension is the weakest dimension, with scores of 0.674 (weighted) and 0.688 (unweighted). In contrast, the skills and career development has the highest weighted score (0.821), while the benefits and employment security has the highest unweighted score (0.822). This confirms that firms with relatively large numbers of respondents are able to sway the unweighted scores, in this case towards higher scores for benefits and employment security and lower scores for skills and career development. The average score on the representation and voice dimension is 0.740 (weighted) and 0.729 (unweighted). In contrast, the score on the wage dimension remains virtually unchanged whether weighted (0.692) or unweighted (0.691), as is the case for working conditions (0.799 weighted and 0.802 unweighted).

4.2. *Job Quality across Individual Characteristics*

Table 7 provides the average job quality index for workers classified according to various demographic characteristics. Within the firms surveyed, men tend to have higher quality jobs than women. Men scored an average score of 0.770 (0.759 unweighted) compared to 0.749 (0.740 unweighted) for women, a difference of 0.021 index points (0.019 unweighted). According to the detailed estimates of the dimension scores presented in Table 9, although they have lower quality jobs than men, women score substantially higher than men in the benefits and employment security with weighted average scores of 0.81 compared to 0.68 for men. In contrast, the margin in favour of males is particularly large for representation and voice (0.81 for males compared to 0.73 for females), and wages (0.75 for males and 0.68 for females).

There are stark differences in job quality across population groups. Whites and particularly Asians enjoy noticeably higher job quality than Coloureds and Africans. Asian employees have the highest job quality on average (with a weighted average score of 0.882), followed by Whites (0.754). Job quality amongst African and Coloured employees within the sample is slightly lower than that of Whites when considering the weighted scores; however, the gap is more substantial when considering the unweighted scores, with Coloureds trailing Whites by almost 0.05 points, and Africans trailing by almost 0.07 points.

Table 7. Mean Job Quality Index across Worker Characteristics, Weighted and Unweighted

	Number	Unweighted	Weighted
Overall	313	0.744	0.752
<i>By Gender</i>			
Male	82	0.759	0.770
Female	229	0.740	0.749
Prefer not to say	2	0.482	0.495
<i>By Race</i>			
African	117	0.709	0.739
Coloured	34	0.724	0.725
Indian/Asian	20	0.804	0.882
White	135	0.771	0.754
Other	1	0.702	0.702
Prefer not to say	6	0.738	0.696
<i>By Age Group</i>			
15-24 years	21	0.629	0.626
25-34 years	102	0.739	0.743
35-44 years	103	0.765	0.777
45-54 years	57	0.759	0.742
55-64 years	23	0.744	0.816
65+ years	7	0.721	0.732
<i>By Education Attainment</i>			
NQF 1-3	8	0.625	0.717
NQF 4	106	0.727	0.739
NQF 5	47	0.731	0.733
NQF 6	44	0.755	0.749
NQF 7	70	0.760	0.760
NQF 8+	38	0.790	0.821

Source: Own calculations using DPRU-INSETA Job Quality Survey (2022).

At the more disaggregated dimension level, Asian respondents consistently scored highest in each of the six dimensions, with particularly high scores for benefits and employment security (0.96 compared to 0.79 overall for this dimension), and skills and career development (0.94 compared to 0.82 overall). Asian respondents also scored substantially higher than average in the wage dimension (0.90 compared to 0.69 overall), and representation and voice (0.88 compared to 0.74 overall). However, it should be noted that there are only 20 Asians within the sample. In contrast, Coloureds and Africans scored relatively poorly on wages (0.58 and 0.60 respectively). African employees had the lowest benefits and employment security score (0.73), while Coloureds had the lowest working time and work-life balance score (0.63) and the lowest score for representation and voice (0.66). Somewhat interestingly, given the evidence on their general labour market advantage, White employees did not have the highest score in any of the dimensions.

The data reveals that young employees between the ages of 15 and 24 years are more likely to experience low job quality than older workers. With a weighted average score of 0.626, this cohort trails the average by 0.126 index points (or roughly 17 percent). Job quality tends to rise with age, with 55-64 year olds highest at 0.816, followed by 35-44 year olds (0.777), 25-34 year olds scored 0.743 and 45-54 year olds scored 0.742. Job quality scores for 15-24 year olds are driven down in particular by the wage dimension (0.32 compared to 0.69 overall), representation and voice (0.58 compared to 0.74 overall), and benefits and employment

security (0.0.79). Nevertheless, this cohort achieved the highest score across all age groups for the working time and work-life balance dimension and was slightly above the average score for skills and career development. In contrast, older working-age cohorts performed particularly well in terms of wages, and benefits and employment security, and, while the post-retirement cohort (aged 65 years and older) have high scores for wages, working conditions and representation and voice, they have low levels of benefits and employment security, and score relatively poorly on skills and career development. While these patterns may not be surprising, it should be noted that there are only seven respondents in this oldest age cohort.

Better educated individuals are more likely to have better job quality than those with lower levels of education. The gap between individuals with the lowest and highest education is large: average job quality scores for those with NQF level 1-3 qualifications is 0.717 for the weighted sample and 0.625 for the unweighted sample, while employees with qualifications at NQF 8 or above had the highest average scores at 0.821 for the weighted sample and 0.790 for the unweighted sample.

Employees with NQF level 8 or higher qualifications score substantially higher than all other cohorts in both wages and benefits and employment security. In terms of wages, this cohort scores 0.87 compared to 0.69 overall, while scoring 0.92 for benefits and employment security (compared to 0.79 overall). Their advantage is much smaller in terms of representation and voice (0.81 compared to 0.74 overall). For all other dimensions, this group scores close to the average for all workers in the sample. Lower scores for those with lower levels of education are driven primarily by low scores on the wage dimension, on benefits and employment security and on working time and work-life balance.

Table 8 takes the education-related analysis a step further and considers how job quality varies across different occupations and skill levels. What is immediately clear is that job quality is positively related to skills level (i.e., workers at higher skill levels enjoy better quality jobs). High skilled employees have the highest job quality (a weighted score of 0.771), followed by skilled employees (0.743), and low skilled employees (0.545). At the occupational level, managers and professionals tend to have higher job quality, followed by technicians and clerical workers. In terms of the six dimensions of job quality, low skilled employees scored particularly poorly on the wage dimension (0.18), the skills and career development (0.40), representation voice (0.59), and working conditions (0.62).

Table 8. Mean Job Quality Index across Worker Characteristics, Weighted and Unweighted

	Number	Unweighted	Weighted
Overall	313	0.744	0.752
<i>High Skilled</i>	106	0.791	0.771
Managers	53	0.805	0.780
Professionals	53	0.776	0.755
<i>Skilled</i>	201	0.726	0.743
Technicians	57	0.753	0.746
Clerical	96	0.720	0.743
Service and Sales	45	0.697	0.737
<i>Skilled Agricultural</i>	3	0.815	0.816
Low Skilled	6	0.511	0.545
Elementary	6	0.511	0.545

Source: Own calculations using DPRU-INSETA Job Quality Survey (2022).

In line with the observations for educational cohorts, more highly skilled workers tend to perform better than other workers in the wage and benefits and employment security dimensions. Both managers and professionals score more than ten points higher than third-placed technicians in terms of wages⁶, while also having above average scores for benefits and employment security. In the remaining dimensions, workers in these occupations score around or just below the overall scores, although their scores on working time and work-life balance are relatively low. Less skilled occupations, in contrast, perform relatively poorly on the wage dimension, but relatively well in terms of working conditions and skills and career development. This latter point is reassuring from the perspective of skills development and broader objectives around upskilling the South African workforce. The handful of elementary workers in the sample perform poorly on all dimensions except benefits and employment security. They score just 0.18 on the wage dimension and 0.40 on skills and career development. Their scores suggest that although general conditions of employment are not problematic, there are clear problems around skills, around working conditions, and around representation and voice that may need attention. The low score on wages is not surprising, given the construction of this dimension; however, it does allude to the extent of inequality within the South African labour market and the role that employers have in this area.

⁶ Skilled agricultural workers and operators and assemblers technically score higher, but only three respondents are classified within this occupational category.

Table 9. Mean Job Quality Dimension Scores by Demographic Characteristics, Weighted

	Number	Overall JQI	Dimension 1: Wages	Dimension 2: Benefits and Employment Security	Dimension 3: Working time and work-life balance	Dimension 4: Working conditions	Dimension 5: Skills and career development	Dimension 6: Representation and voice
Overall	313	0.75	0.69	0.79	0.67	0.80	0.82	0.74
By Gender								
Male	82	0.77	0.75	0.68	0.72	0.84	0.82	0.81
Female	229	0.75	0.68	0.81	0.66	0.79	0.82	0.73
By Race								
African	117	0.74	0.60	0.73	0.70	0.80	0.82	0.77
Coloured	34	0.73	0.58	0.80	0.63	0.80	0.87	0.66
Indian/Asian	20	0.88	0.90	0.96	0.72	0.89	0.94	0.88
White	135	0.75	0.78	0.80	0.66	0.79	0.79	0.71
By Age Group								
15-24	21	0.63	0.32	0.61	0.71	0.71	0.83	0.58
25-34	102	0.74	0.58	0.79	0.68	0.81	0.86	0.73
35-44	103	0.78	0.76	0.76	0.68	0.83	0.83	0.79
45-54	57	0.74	0.82	0.85	0.64	0.73	0.73	0.69
55-64	23	0.82	0.81	0.89	0.67	0.84	0.87	0.81
65+	7	0.73	0.82	0.41	0.67	0.92	0.75	0.82
By Educational Attainment								
NQF 1-3	8	0.72	0.79	0.44	0.72	0.90	0.69	0.76
NQF 4	106	0.74	0.65	0.82	0.67	0.77	0.83	0.70
NQF 5	47	0.73	0.59	0.83	0.65	0.83	0.83	0.66
NQF 6	44	0.75	0.65	0.66	0.68	0.82	0.85	0.83
NQF 7	70	0.76	0.80	0.70	0.69	0.80	0.78	0.80
NQF 8+	38	0.82	0.87	0.92	0.69	0.80	0.83	0.81

	Number	Overall JQI	Dimension 1: Wages	Dimension 2: Benefits and Employment Security	Dimension 3: Working time and work-life balance	Dimension 4: Working conditions	Dimension 5: Skills and career development	Dimension 6: Representation and voice
Overall	313	0.75	0.69	0.79	0.67	0.80	0.82	0.74
By Skill Level								
High-skilled	106	0.77	0.85	0.90	0.64	0.74	0.78	0.72
Manager	53	0.78	0.89	0.92	0.62	0.73	0.80	0.73
Professionals	53	0.75	0.79	0.86	0.66	0.75	0.75	0.71
Skilled	201	0.74	0.61	0.72	0.70	0.84	0.85	0.75
Technicians	57	0.75	0.69	0.68	0.74	0.86	0.76	0.74
Clerks	96	0.74	0.54	0.81	0.66	0.85	0.87	0.73
Services	45	0.74	0.66	0.57	0.74	0.79	0.87	0.80
Skilled agriculture	3	0.82	1.00	0.81	0.65	0.81	0.77	0.86
Low-skilled (Elementary)	6	0.54	0.18	0.81	0.67	0.62	0.40	0.59

Source: Own calculations using DPRU-INSETA Job Quality Survey (2022).

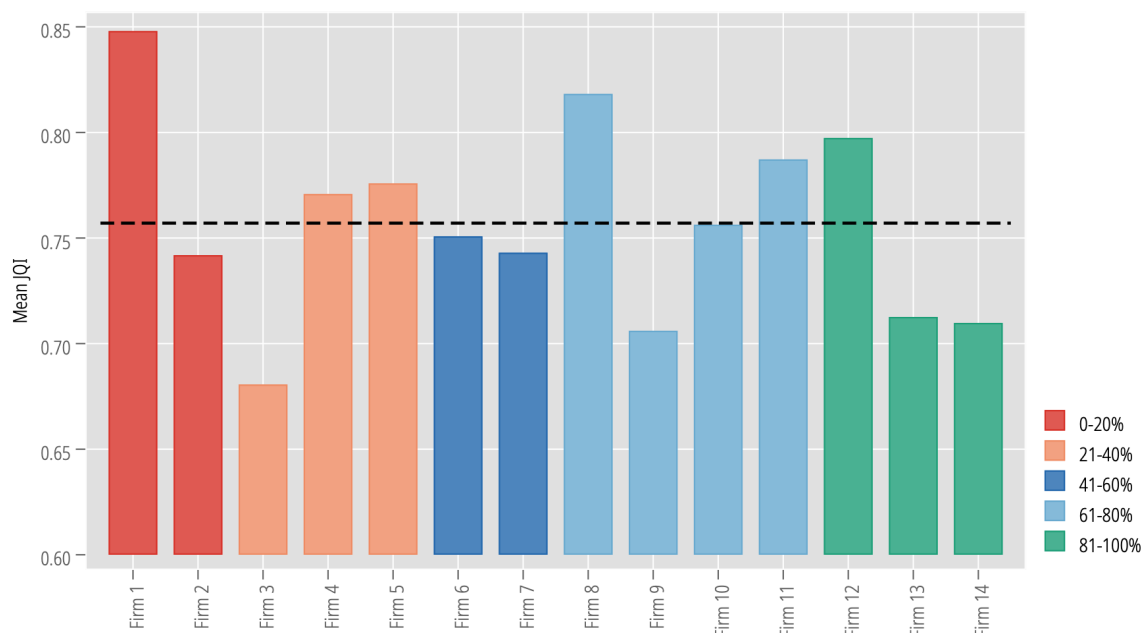
Note: 1. Cells are shaded according to their value: cells with values below 0.67 are shaded blue, while those with values of 0.82 or above are shaded green. These values are arbitrarily chosen as the lowest and highest average dimension scores. 2. Estimates weighted using calculated analytic weights. 3. Categories of “Prefer not to Answer” and “Other” for race and gender have been removed from the table due to small sample size and lack of variation.

4.3. Job Quality across Firm Characteristics

As was noted in the literature review, job quality has been found to vary with particular characteristics of firms. Since the survey focussed on employees and did not collect data on employers in any detail, this section analyses job quality in line with the two key pieces of information that are available from the WSP data, namely firm size and subsector.

First, it is worth considering the average job quality index across participating employers. Figure 3 presents estimates of the average job quality index by firm and the response rate of employees within the firm. It is clear from the figure that there is significant variation in average job quality across firms. The job quality scores range from 0.68 to 0.84. The majority of employers (11 of the 14), however, have average JQIs within the 0.70-0.80 range.

Figure 4. Average Job Quality Index and Response Rate by Firm



Source: Own calculations using DPRU-INSETA Job Quality Survey (2022).

Note: 1. The horizontal reference line at 0.752 indicates the average weighted JQI score across all firms. 2. Firm 15 (1 observation) is removed from analysis due to unspecified response rate.

As was seen in Table 4, response rates varied all the way from around one percent to 100 percent. The average response rate for employees in the survey was 55 percent, which is a reasonable level for this type of survey. In seven of the 14 firms presented in Figure 4, more than 60 percent of employees submitted responses to the survey, while response rates of over 80 percent were achieved by three firms. Importantly, firms with high response rates were not necessarily the smallest: of the four firms with more than 30 respondents, three achieved response rates of over 50 percent.

Table 10 presents the estimates of the average JQI according to the firms' size and subsector. In terms of firm size, weighted job quality score is the highest for large firms (0.796), followed

by small firms (0.760), and lowest for medium sized firms (0.723). The weighted estimates here are the most useful since they correspond to a standard interpretation, namely the average large firm has a JQI of 0.796. Indeed, when considering the JQI by firm characteristics, the weighted average provides an estimate of the average JQI within the average firm of a particular type, while the unweighted average provides an estimate of the JQI of the average employee within firms of that type. Interestingly, small firms perform relatively well in terms of job quality, which somewhat contradicts the evidence that finds a positive correlation between firm size and job quality. That said, the small size of the sample and the particular nature of the insurance sector relative to other economic sectors may explain this finding.

Table 10. Job Quality Index by Firm Size and Subsector, Weighted and Unweighted

	Number of Respondents	Unweighted	Weighted
Overall	313	0.744	0.752
<i>By Firm-Size</i>			
Large (150+)	105	0.745	0.796
Medium (50 - 149)	127	0.729	0.723
Small (1 - 49)	80	0.766	0.760
<i>By Sub-Sector</i>			
Healthcare Benefits Administration	60	0.713	0.713
Short-Term Insurance	208	0.759	0.765
Activities auxiliary to Financial Intermediation	12	0.709	0.708
Funeral Insurance	23	0.681	0.681
Insurance and Pension Funding	2	0.848	0.848
Life Insurance	2	0.771	0.771
Unit Trusts	5	0.818	0.818

Source: Own calculations using DPRU-INSETA Job Quality Survey (2022).

The vast majority (66.5 percent) of respondents are employed in firms within the short-term insurance sector, with another 19.2 percent employed in healthcare benefits administration. Of these two subsectors, the short-term insurance sector has the highest average JQI: the JQI within the average participating firm in the short-term insurance sector was 0.765, with the average employee's JQI estimated at 0.759. Within healthcare benefits administration, the average participating firm and the average employee both have JQIs of 0.713. According to the data collected, job quality is estimated to be slightly lower within activities auxiliary to financial intermediation and funeral insurance, the only two subsectors with more than a handful of respondents.

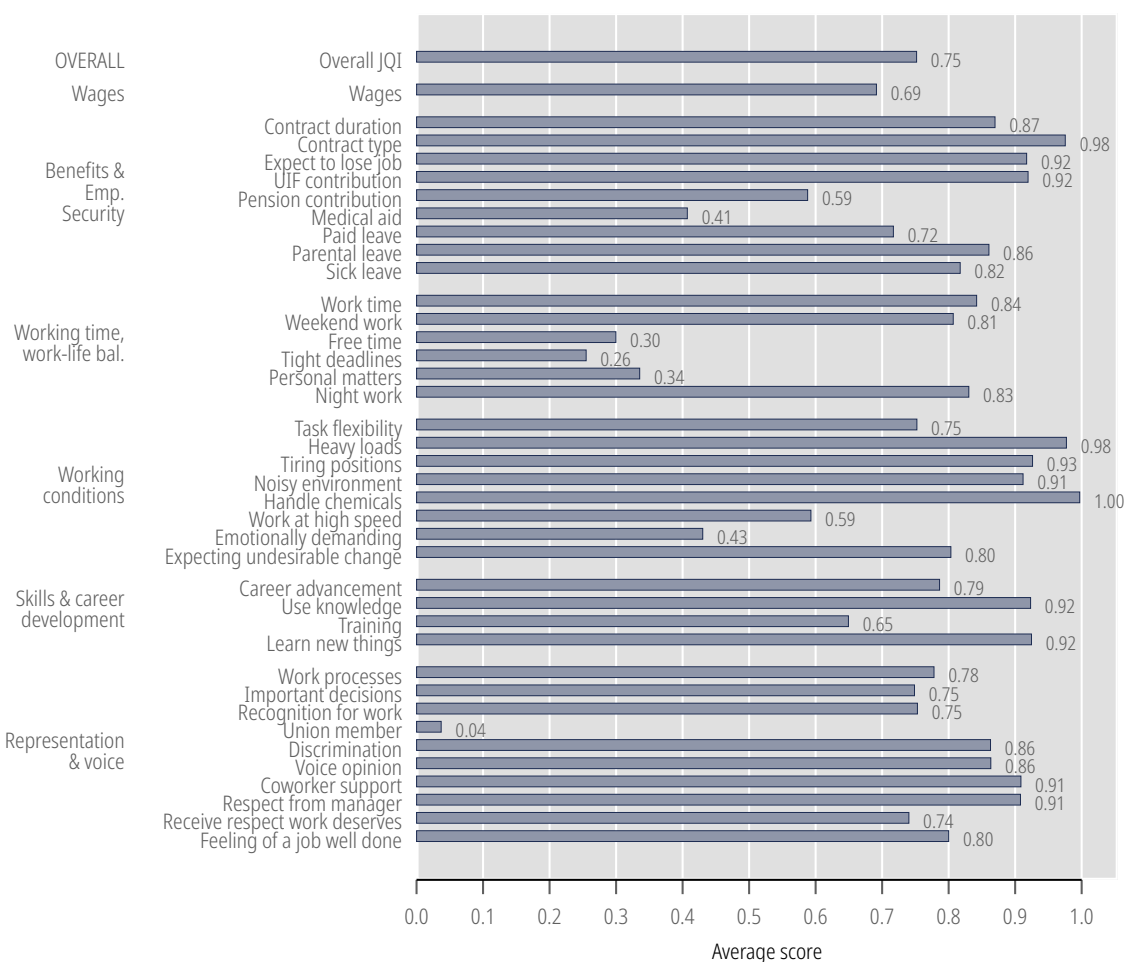
4.4. Indicator Scores

As discussed in section 3.2, the six dimensions of the job quality index are constructed as weighted averages of the normalised scores for each indicator, with the weights reflecting the relative importance assigned to the indicator within the dimension. In total, 38 indicators are included within the JQI. Given the variation in scores across dimensions, this section probes the indicator scores in more detail in order to identify particular areas where respondents fared relatively poorly. These scores are presented in Figure 5. Given that these are weighted scores, the interpretation would be that, for example, on average across their employees, the average employer scores 0.84 on the work time indicator. Where the underlying indicators are

dummy variables, e.g. union membership, the interpretation would be that, in the average participating firm, four percent of workers are union members.

The first dimension—wages—consists of a single indicator and therefore there is no difference between the indicator score presented here and the dimension score presented in Table 9, for example. Given the coding of the variable, the data indicates that, for the average participating firm, the average employee earns between two and four times the minimum wage.

Figure 5. Average indicator scores by job quality dimension, weighted



Source: Own calculations using DPRU-INSETA Job Quality Survey (2022).

The second dimension, benefits and employment security, consist of nine indicators for which the average scores range from 0.98 all the way down to 0.41. At the upper end, average scores are highest for contract type (0.98), proportion not expecting to lose their job (0.92), and UIF contributions (0.92). However, the average participating firm scores 0.41 for medical aid (i.e., 41 percent of the average firm’s employees report medical aid contributions) and 0.59 for pension contributions. Given the formal nature of the insurance sector, jobs are predominantly

formal and are protected by the Basic Conditions of Employment Act (BCEA), and therefore the higher scores for contract type, contribution to UIF and job security.

Average scores for the six indicators within the working time and work-life balance dimension range between 0.26 to 0.84, a range similar to that observed for benefits and employment security. Three indicators have average scores above 0.80: work time (0.84), night work (0.83), and weekend work (0.81). For the latter two, these indicators are formulated in the negative. The other three indicators have very low scores: tight deadlines averages 0.26 across participating firms, working in free time (0.30), and flexibility to take care of personal matters in working hours (0.34 for personal matters). Considering these indicators, it would seem that employees in the participating firms work a reasonable number of hours, and relatively rarely work late at night or on weekends. However, employees do seem to work in their free time to meet work demands, face tight deadlines, and do not generally have flexibility to take time off during working hours, all of which can be considered a second, more 'advanced' tier of benefits that facilitate work-life balance.

In terms of working conditions, four of the eight indicators average more than 0.90, while two score below 0.60. Participating firms perform well in that very few employees are exposed to chemicals, carry heavy loads, work in tiring positions, or are required to work in a noisy environment. In contrast, firms perform much more poorly in terms of the extent to which employees find the work emotionally demanding (a score of 0.43), and are required to work at high speed (0.59). Between these two extremes are task flexibility (0.75), and the extent to which employees expect an undesirable change in their work situation (0.80). These scores are close to the average for this dimension (0.80).

For the fifth dimension, skills and career development, firms perform well in terms of two indicators namely having enough opportunities for employees to use their knowledge and skills in their job and learning new things in their job. Scores for both of these indicators are estimated at 0.92 on average across firms. A somewhat weaker performance is observed in terms of the extent to which workers' jobs offer good prospects for career advancement (0.79). The lowest score in this dimension is for the training indicator, which itself is comprised of two variables that record whether or not an employee received training provided by their employer in the previous 12 months, and whether employees felt that the training they received positively impacted their future employment prospects. The score for this indicator averaged just 0.65 for participating employers, considerably lower than the average of 0.82 for this dimension. Such a finding points to either low participation rates in such training, or a relatively widespread perception that the training was not particularly useful from the perspective of future job prospects.

There is one clear outlier amongst the ten indicators within the representation and voice dimension: within the average participating firm, just four percent of employees indicated that they were a member of trade union or other workers' organisation. Particularly strong scores are observed for access to support from coworkers (0.91), respect from manager (0.91), discrimination at work (0.86), and space to voice opinions (0.86). The remaining indicators scored close to the average of 0.74 for this dimension.

4.5. *Job Quality and Job Satisfaction*

Although this paper has thus far focussed on a multidimensional measure of job quality, other measures to assess the quality of the working environment also exist. Most notably, the OECD (2017) suggest that an alternative approach to measuring job quality would be to make use of a unidimensional “job satisfaction” measure, due to the simplicity of interpreting the results. However, measures of job satisfaction can be biased by individual preferences and thus be less reliable in capturing objective measures of job quality, such as wage rates or contract type (OECD, 2017). It has been found that job satisfaction seems to correlate more strongly with qualitative aspects of the working environment, such as worker autonomy or work intensity (Spector, 1997). This result makes it more difficult to isolate exactly what aspect of an individual’s working conditions is driving their assessment of satisfaction. Nevertheless, Green (2006) suggests that trends in job satisfaction can still be used to draw useful insights on overall job quality within a unit of analysis.

This section focuses on a comparison of the job quality index calculated for this sample of insurance sector employees and their satisfaction with their job. In the questionnaire, respondents were asked to indicate whether they were satisfied with their jobs or not, which resulted in a single binary indicator variable indicating whether individuals were satisfied (variable equals 1) or not (variable equals 0). However, 38 respondents indicated that they did not know or preferred not to answer this question; as a result, these individuals were coded as being dissatisfied to remain consistent with our approach of providing the most conservative estimates of job satisfaction and job quality throughout this paper. All estimates of job satisfaction presented below are, therefore, necessarily lower bounds on the true satisfaction for respondents to this survey.

Table 11 presents the proportion of individuals (weighted and unweighted) who report being satisfied with their jobs, across a standard set of individual characteristics. The first key result that emerges is that the majority of respondents indicate that they were satisfied with their jobs across almost all demographic groups. De Bustillo et al. (2011) find that average job satisfaction across 32 regions was approximately 71 percent. Given that between 78 percent and 88 percent⁷ of the sample indicated they were satisfied with their jobs, this seems to be broadly in line with, if not slightly higher than, what has been found in the literature. This is true whether the results are weighted to normalise for firm responses or not, however, the weighted figures show a higher level of satisfaction amongst employees on average than the unweighted figures. The mechanics of this result suggest that this means there are higher levels of dissatisfaction in larger firms; a finding discussed in more detail later in this section.

The least satisfied groups of individuals in the sample are those with educational attainment below NQF 4 (i.e., below matric or equivalent), as well as young individuals and those in elementary occupations. However, when weighting the data, the only group who retain their lower levels of job satisfaction are those in elementary occupations, with only 64 percent of

⁷ Depending on whether one chooses to weight the results (88 percent) or not (78 percent).

individuals in low-skill occupations being satisfied with their jobs on average across participating firms. Conversely, individuals employed in managerial or service and sales occupations seem to exhibit the highest level of job satisfaction on average across participating firms.⁸

Table 11. Rate of job satisfaction across employee characteristics, weighted

	Number	Unweighted	Weighted
Overall	313	0.78	0.88
By Gender			
Male	82	0.82	0.90
Female	229	0.77	0.88
By Race			
African	117	0.74	0.85
Coloured	34	0.76	0.83
Indian/Asian	20	0.75	0.94
White	135	0.84	0.93
By Age Group			
15-24 years	21	0.67	0.86
25-34 years	102	0.75	0.85
35-44 years	103	0.79	0.88
45-54 years	57	0.84	0.89
55-64 years	23	0.83	0.96
65+ years	7	1.00	1.00
By Education Attainment			
NQF 1-3	8	0.63	0.90
NQF 4	106	0.79	0.90
NQF 5	47	0.74	0.86
NQF 6	44	0.86	0.91
NQF 7	70	0.77	0.82
NQF 8+	38	0.76	0.89
By Skill Level			
<i>High-skilled</i>	106	0.84	0.89
Manager	53	0.87	0.98
Professionals	53	0.81	0.75
<i>Skilled</i>	201	0.76	0.87
Technicians	57	0.68	0.74
Clerks	96	0.75	0.89
Services	45	0.87	0.95
Skilled agriculture	3	1.00	1.00
<i>Low-skilled (Elementary)</i>	6	0.50	0.64

Source: Own calculations using DPRU-INSETA Job Quality Survey (2022).

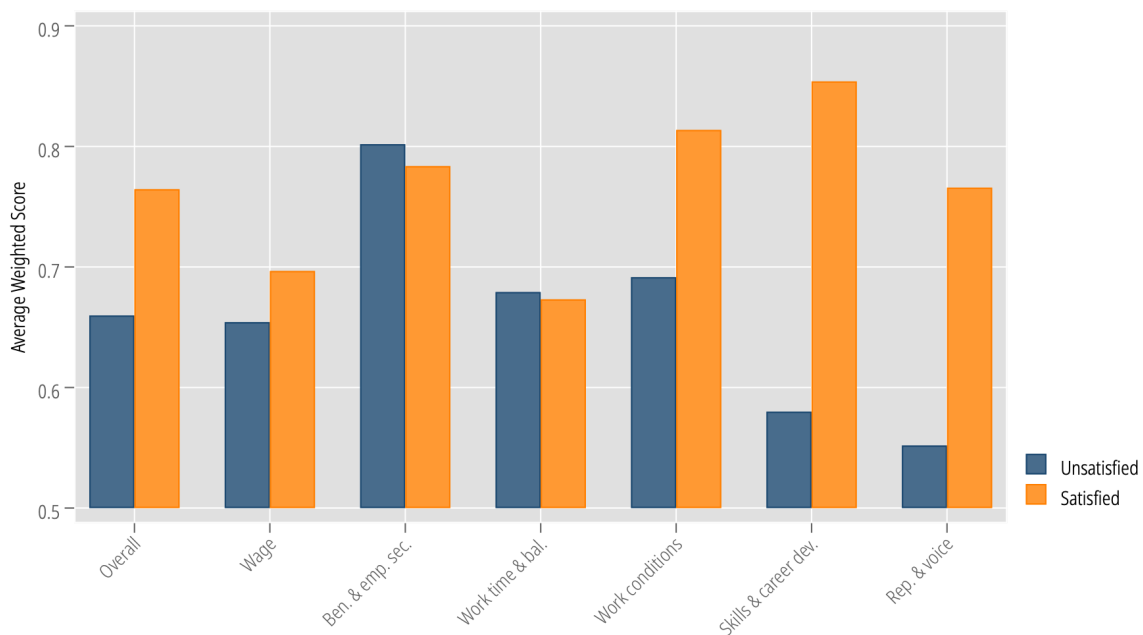
Note: 1. Categories of "Prefer not to Answer" and "Other" for race and gender have been removed from the table due to small sample size and lack of variation. 2. Weighted estimates make use of calculated analytic weights, which reweight observations so that all firms are weighted equally in the sample. 3. Averages presented are of a binary satisfaction variable, where 0 represents dissatisfaction and 1 represents satisfaction in the job.

In order to understand the relationship between job quality and satisfaction more clearly, Figure 6 presents the average job quality score across all job quality dimensions separately for

⁸ Although 100 percent of all individuals employed in skilled agriculture occupations reported satisfaction with their jobs, we do not believe this is a particularly useful finding due to the incongruence of this occupation in the insurance sector as a whole, as well as the small sample size from which such a conclusion is drawn.

those respondents who indicated they were satisfied with their job and those who indicated they were not satisfied. It is clear that, overall, those individuals who are satisfied with their jobs have a substantially higher average JQI value than those who are not satisfied with their jobs: On average, those individuals who were satisfied with their jobs had an average JQI of 0.76, while those who were unsatisfied had an average JQI of approximately 0.66. While these data suggest a correlation between job quality and job satisfaction, establishing a causal relationship is not supported by the data and we therefore do not investigate this. However, it does not seem unreasonable to believe that if an individual is employed in a lower-quality job, they are less likely to be satisfied with their employment conditions.

Figure 6. Average job quality index by dimension and satisfaction



Source: Own calculations using DPRU-INSETA Job Quality Survey (2022).

Note: 1. Estimates weighted using calculated analytic weight.

We further make use of the six dimensions that comprise the JQI to determine which elements of job quality may be driving differences in satisfaction. To this end, it is clear that there are large differentials between satisfied and dissatisfied employees in the levels of working conditions, skills and career development, and representation and voice. Generally speaking, those individuals who indicate they are satisfied in their jobs have better quality working conditions, better opportunities for developing skills and their careers, and better representation in their workplaces. Again, it is not unreasonable to believe that poor outcomes in these dimensions of job quality may lead to dissatisfaction on an employee's part, thus resulting in employees without these benefits indicating dissatisfaction in their job overall.

Interestingly, there is very little difference between the average scores for wages, benefits and employment security, and working time and work-life balance between satisfaction groups. Particularly interesting is that, although slight, those individuals who indicate being dissatisfied

in their job actually have higher scores for their benefits and work-life balance components than those who indicate they are satisfied. It is unclear exactly why this may be, but one possible explanation is that individuals who are dissatisfied in their jobs are more likely to put up boundaries and refuse to work after hours, thus providing them with better work-life balance. Alternatively, low-skill jobs, such as cleaning work, may not require much, if any, after-hours work to complete tasks, and thus work-life balance may be better than for those individuals who work in higher-skill occupations.

Further disaggregating these results by demographic characteristics, the data suggest that, generally, the average dimension score for all demographic groups follows the same pattern as the overall figure. The figures in Table 12 are colour-coded based on the average quality component score: scores at least 0.10 below the average JQI (i.e. less than or equal to 0.65) are shaded red, while those at least 0.10 above the average JQI (i.e., greater than or equal to 0.85) are shaded green. The patterns evident in the table indicate that dimension scores seem to be slightly higher in general for individuals who report being satisfied in their jobs, although this difference is starkest in the latter three dimensions, namely working conditions, skills and career development, and representation and voice. Differences in job quality scores also seem to be starkest in the groups where the lowest incidence of satisfaction was reported: those with low educational attainment, and those in elementary occupations.

Table 12. Mean Job Quality Dimension Scores by Demographic Characteristics, Weighted

	Number	Overall JQI		Dimension 1: Wages		Dimension 2: Benefits and Employment Security		Dimension 3: Working time and work-life balance		Dimension 4: Working conditions		Dimension 5: Skills and career development		Dimension 6: Representation and voice	
		Not Satisf.	Satisf.	Not Satisf.	Satisf.	Not Satisf.	Satisf.	Not Satisf.	Satisf.	Not Satisf.	Satisf.	Not Satisf.	Satisf.	Not Satisf.	Satisf.
Overall	313	0.66	0.76	0.65	0.70	0.80	0.78	0.68	0.67	0.69	0.81	0.58	0.85	0.55	0.77
By Gender															
Male	82	0.68	0.78	0.72	0.76	0.80	0.67	0.66	0.72	0.73	0.85	0.59	0.84	0.58	0.83
Female	229	0.66	0.76	0.65	0.69	0.81	0.81	0.68	0.66	0.69	0.80	0.58	0.86	0.55	0.75
By Race															
African	117	0.65	0.75	0.63	0.60	0.77	0.72	0.66	0.71	0.69	0.82	0.58	0.86	0.58	0.81
Coloured	34	0.63	0.74	0.64	0.57	0.78	0.81	0.72	0.62	0.69	0.82	0.53	0.94	0.43	0.71
Indian/Asian	20	0.66	0.90	0.74	0.92	0.87	0.97	0.53	0.74	0.69	0.90	0.47	0.98	0.64	0.90
White	135	0.70	0.76	0.74	0.78	0.87	0.80	0.69	0.65	0.74	0.79	0.62	0.80	0.53	0.73
Prefer not to say	6	0.66	0.73	0.54	0.34	0.78	0.74	0.70	0.68	0.59	0.88	0.64	0.87	0.69	0.85
By Age Group															
15-24	21	0.58	0.63	0.27	0.33	0.48	0.63	0.80	0.69	0.69	0.71	0.65	0.86	0.59	0.58
25-34	102	0.66	0.76	0.63	0.58	0.81	0.78	0.70	0.68	0.72	0.83	0.57	0.91	0.53	0.77
35-44	103	0.69	0.79	0.76	0.76	0.85	0.75	0.63	0.69	0.71	0.85	0.62	0.86	0.56	0.82
45-54	57	0.64	0.75	0.63	0.84	0.80	0.86	0.69	0.63	0.60	0.74	0.54	0.75	0.59	0.70
55-64	23	0.66	0.82	0.95	0.81	0.85	0.89	0.51	0.68	0.64	0.85	0.50	0.89	0.54	0.82
65+	7		0.73		0.82		0.41		0.67		0.92		0.75		0.82
By Educational Attainment															
NQF 1-3	8	0.57	0.73	0.33	0.84	0.83	0.40	0.73	0.72	0.50	0.94	0.50	0.71	0.50	0.78
NQF 4	106	0.64	0.75	0.53	0.66	0.73	0.83	0.74	0.66	0.69	0.77	0.65	0.85	0.53	0.72
NQF 5	47	0.66	0.74	0.71	0.58	0.84	0.82	0.67	0.64	0.74	0.84	0.50	0.88	0.47	0.69
NQF 6	44	0.72	0.75	0.63	0.65	0.80	0.64	0.69	0.68	0.80	0.83	0.79	0.85	0.62	0.86
NQF 7	70	0.66	0.78	0.68	0.82	0.81	0.68	0.64	0.70	0.64	0.83	0.56	0.83	0.63	0.83
NQF 8+	38	0.67	0.84	0.88	0.87	0.86	0.93	0.60	0.70	0.64	0.82	0.44	0.88	0.57	0.84

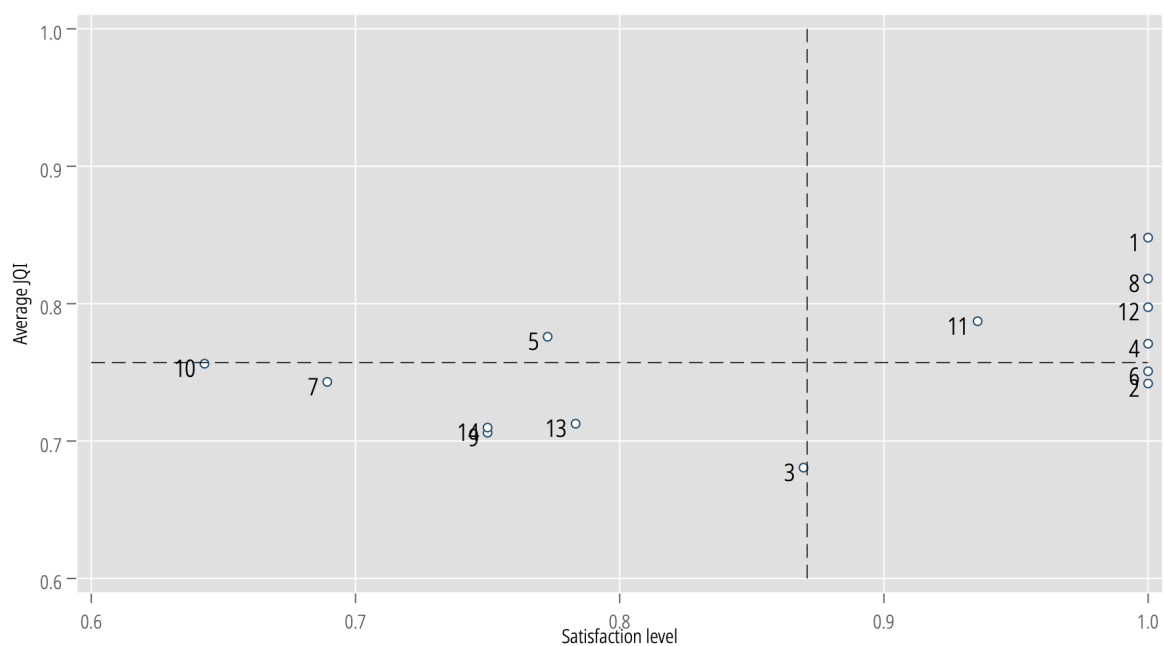
	Number	Overall JQI		Dimension 1: Wages		Dimension 2: Benefits and Employment Security		Dimension 3: Working time and work-life balance		Dimension 4: Working conditions		Dimension 5: Skills and career development		Dimension 6: Representation and voice	
		Not Satisf.	Satisf.	Not Satisf.	Satisf.	Not Satisf.	Satisf.	Not Satisf.	Satisf.	Not Satisf.	Satisf.	Not Satisf.	Satisf.	Not Satisf.	Satisf.
By Skill Level															
High skill	106	0.69	0.78	0.71	0.87	0.85	0.90	0.63	0.64	0.68	0.74	0.64	0.80	0.60	0.74
Manager	53	0.69	0.78	0.84	0.89	0.98	0.92	0.57	0.62	0.71	0.73	0.57	0.80	0.50	0.73
Professionals	53	0.68	0.78	0.69	0.82	0.83	0.87	0.64	0.67	0.68	0.78	0.65	0.79	0.61	0.75
Skilled	201	0.65	0.76	0.64	0.60	0.78	0.71	0.70	0.69	0.71	0.86	0.56	0.89	0.53	0.78
Technicians	57	0.68	0.77	0.75	0.67	0.84	0.63	0.69	0.75	0.69	0.91	0.58	0.83	0.52	0.82
Clerks	96	0.65	0.75	0.59	0.54	0.76	0.82	0.71	0.65	0.70	0.87	0.57	0.91	0.57	0.75
Services	45	0.55	0.75	0.37	0.67	0.61	0.56	0.69	0.75	0.77	0.79	0.43	0.89	0.45	0.82
Skilled agriculture	3		0.82		1.00		0.81		0.65		0.81		0.77		0.86
Low-skilled (Elementary)	6	0.45	0.60	0.25	0.14	0.87	0.77	0.73	0.64	0.27	0.81	0.25	0.48	0.32	0.75

Source: Own calculations using DPRU-INSETA Job Quality Survey (2022).

Note: 1. Cells are shaded according to their value: cells with values below 0.65 are shaded red, while those with values of 0.85 or above are shaded green. These values are arbitrarily chosen as 0.10 points in either direction of the average score. 2. Estimates weighted using calculated analytic weights 3. Categories of "Prefer not to Answer" and "Other" for race and gender have been removed from the table due to small sample size and lack of variation..

Finally, Figure 7 presents a disaggregation of the relationship between job quality and job satisfaction, by firm by plotting each participating employers' average JQI against the proportion of its employees who indicate they are satisfied in their jobs. The vertical and horizontal dotted lines represent the average proportion of satisfied employees and the average JQI, respectively, for the entire sample. Firms located in the top-right quadrant of the figure exhibit both above average job quality as well as an above average proportion of satisfied employees. In fact, in the case of most of these firms, all respondents indicated that they were satisfied, however, this result should be met with caution, as a large proportion of these firms are both small firms, and/or have relatively low employee response rates (below 50 percent).

Figure 7. Average job quality index and average satisfaction level by firm



Source: Own calculations using DPRU-INSETA Job Quality Survey (2022).

Note: 1. Dotted lines represent the weighted average satisfaction levels and JQI across all firms in the sample. 2. Firms are numbered in ascending response rate order. 3. Firm 15 (1 observation) removed from analysis due to unspecified response rate. 4. Estimates weighted using calculated analytic weights.

On the other hand, firms that appear in the bottom-left quadrant of Figure 7 have below average JQIs as well as below average proportions of satisfied employees. The two largest firms in the sample are Firm 5 and Firm 7: one of these firms appears in this bottom-left quadrant, while the other appears in the top-left quadrant (above average JQI, below average satisfaction). As mentioned above, it is possible that this lower proportion of satisfied workers may be related to firm size in that workers may feel less personally cared for in larger firms and thus be less inclined towards feeling satisfied in their jobs. Furthermore, larger firms may also be more likely to hire workers across a broader range of skill categories, thus resulting in more low-skilled workers appearing in the sample for these firms. Since employees in low-skilled occupations were more likely to indicate dissatisfaction with their employment conditions, this

may ultimately drop average satisfaction levels in these firms. In short, the presence of a below-average proportion of satisfied employees may not be cause for concern, although it may be prudent for firms in the insurance sector to be cognisant that there may be a potential need to address the overall satisfaction of employees in their companies, and that this need may increase with the size of the firm.

5. Conclusion

The quantity of jobs receives frequent and regular attention in national statistical reports and policymaking. However, apart from broad statements about the importance of decent work, the quality of jobs is often overlooked. At the same time, our ability to assess job quality is dependent on the type of data available and current nationally representative household surveys in South Africa are not particularly well geared towards informing a holistic view of job quality.

While the quality of jobs may be important in its own right, particularly when considering the circumstances of the most marginalised groups of workers, it also links to some of the important challenges faced by employers in a skills-constrained economy like South Africa's. Skills shortages and the transferability of skills between firms and across sectors, combined with the various costs associated with staff turnover, mean that there are strong incentives for employers to retain appropriately skilled and experienced staff and one way of improving staff retention is through improving job quality.

The focus of this research has been to analyse job quality in the insurance sector. Given that the only way to access employees in the sector is through their employers, it was not possible to conduct a survey on a representative sample of employees. Further, challenges around ensuring employer participation and cooperation in a survey of this nature implied very substantial risks for research that attempted to target a representative random sample of employers. Instead, participation in the research was opened to interested employers. This means that the results presented here describe job quality within the participating employers, and should not be extrapolated to the insurance sector as a whole. Nevertheless, the results presented here should be viewed as providing a flavour of the type of results that could potentially come from a larger scale representative survey of the insurance sector. Given growing competition for skills, the sector will arguably need to invest in this kind of research going forward if it is to ensure a sustainable, skilled workforce.

In collecting data from employees, this research has presented an innovation within the South African context by collecting types of data that are rarely, if ever available, from nationally representative surveys conducted by Statistics South Africa. This is particularly true in relation to working conditions, work-life balance, training and skills development, and various aspects around representation and respect within the workplace. Many of these are relatively simple questions that appear to have been well understood and answered, and may be relatively easily deployed in other surveys.

In updating the results of previous work by Monnakgotla and Oosthuizen (2021), the insurance sector is revealed to have relatively high job quality on average compared to other sectors within the South African economy. As of the second quarter of 2022, job quality—as measured by an ex-wage job quality index—in the insurance sector was found to be higher than that of the broader financial and business services industry, which in turn outperformed the national economy. The data also revealed the sector’s advantage in job quality was not driven by its relatively high wages, although they are certainly an important factor.

Based on our survey of 15 employers of varying sizes in the insurance sector, a six-dimensional job quality index was constructed, with the dimensions covering the aspects of wages, benefits and employment security, working time and work-life balance, working conditions, skills and career development, and representation and voice. These six dimensions were measured through 38 indicators, which themselves were constructed from more than 40 different variables.

Overall, the survey found that, amongst participating employers, the average job quality index was 0.752, with employees scoring more highly on skills and career development and benefits and employment security. The weakest dimension was working time and work-life balance, where the score was more than ten percent below the average JQI.

At the outset, this research aimed to answer four key questions with respect to job quality in the insurance sector. **First, how does the quality of jobs vary within the insurance sector across worker characteristics?** According to the data, job quality within the participating employers was found to be higher for males than for females; for Asians and, to a lesser extent, Whites relative to Africans and Coloureds; for older working-age employees as opposed to youth and employees post-retirement age; for more highly educated workers; and for employees in more highly skilled occupations, such as managers and professionals.

Second, how does the quality of jobs vary within the insurance sector across employer characteristics? For the majority of the 15 employers, average job quality scores ranged between 0.70 and 0.80, with 0.68 and 0.84 representing the extremes. Job quality was found to be highest on average within large employers with 150 employees or more, followed by small employers. Amongst the insurance sub-sectors with sufficient responses, job quality was highest on average within short-term insurance, followed by healthcare benefits administration.

Third, how is job quality related (or not related) to workers’ subjective experience of their jobs? Rates of job satisfaction in the survey were relatively high amongst workers in participating firms. In the average participating firm, close to nine in ten workers indicated that they were satisfied in their jobs. Further, those who were satisfied in their jobs recorded higher job quality scores on average compared to those who were not satisfied (0.76 compared to 0.66). While scores were very similar for these two groups in terms of benefits and employment security and working time and work-life balance, satisfied workers recorded slightly better scores in terms of wages. However, satisfied workers recorded substantially higher scores than their dissatisfied counterparts in the dimensions related to working conditions, skills and career

development, and representation and voice. This may suggest that these dimensions may be key to understanding job satisfaction. At the firm level, however, a strong relationship between the proportion of workers reporting being satisfied and the average JQI was not found.

Finally, what are the key areas of success or failure in the provision of quality jobs in the insurance sector? Ideally, this question would be answered relative to other sectors, emphasising the need for additional research in this area, possibly in collaboration with SETAs in similar sectors. Amongst participating firms, there were a number of indicators where average scores were considerably below the average JQI. These include indicators related to pension contributions and medical aid (within the benefits and employment security dimension); intrusion of work into free time, working to tight deadlines, and flexibility to take time off during working hours to deal with personal issues (within the working time and work-life balance dimension); the extent to which work is emotionally demanding and, to a lesser extent, the need to work at high speed (within the working conditions dimension); and union membership (within the representation and voice). The score on the latter indicator, however, may simply be a reflection of the type of firms participating in the research.

It is important to note that low scores do not necessarily equate to under-performance relative to other sectors, since we do not have data for these sectors. Instead, participating firms are under-performing on these indicators relative to their average JQIs and relative to the scores for other indicators within each of these dimensions. One interesting finding that stands out is that of the indicator scores within the working time and work-life balance dimension. Here it seems that participating firms are getting the basics right: scores are good in terms of balanced working hours and low incidence of work late at night or over weekends. However, in terms of what might be considered more 'advanced' aspects that are critical to work-life balance—working in free time to meet work demands, facing tight deadlines, and flexibility to take time off during working hours for personal issues—participating firms' performance is much weaker. While we do not have comparative evidence here, these are arguably the kinds of aspects of job quality that may prove to be a disadvantage (or an advantage if they are provided) as insurance sector employers compete with each other and with employers in other sectors to attract and retain appropriately skilled and experienced workers.

Finally, given that this research is commissioned by INSETA, it is important to note that skills and career development is the dimension with the highest average score out of the six dimensions. Overall, most categories of workers recorded high average scores. The only real exceptions were those in elementary occupations and those with NQF level 1-3 qualifications (in both instances, an admittedly small number of respondents). More interestingly, across indicators within this dimension of job quality, the weakest average scores are observed for the training and career advancement indicators. While the latter is arguably outside of the scope of the SETAs, the former is certainly relevant since the indicator measures access to training and accounts for the employee's perception of the usefulness of that training. Within this context, the average score of 0.65 on the training indicator suggests that the average worker is much closer to receiving training of dubious usefulness (coded as a score of 0.50) than they are to receiving useful training (coded as a score of 1.00).

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Appendix One

6.1. *Survey Instrument*

Q1 Dear Participant,

The Insurance Sector Education and Training Authority (INSETA) and the Development Policy Research Unit (DPRU), at the University of Cape Town (UCT), is conducting research to obtain a comprehensive view of job quality in South Africa's insurance sector:

Background and context

Job quality has been linked to key outcomes from the perspective of both employees and employers, the latter including productivity and staff retention. In the South African context of skills shortages and competition between employers for suitably qualified workers, employers in the insurance sector do not have a robust understanding of job quality in the sector, how this might vary for different groups of workers or employers, or how this might be related to job satisfaction in the sector.

Survey

We invite you to participate in this study. Your valued participation in this survey will contribute to a richer understanding of job quality in the sector. The survey will request information pertaining to:

- Wage category
- Benefits and employment security
- Work-time and work-life balance
- Working conditions
- Skills and career development
- Representation and voice

The findings of this research, based in part on the data collected through this survey, will help the INSETA to direct its resources appropriately in order to support skills development and interventions in the future. The research report will be made available to all INSETA stakeholders and the general public.

Please note all data collected will remain confidential and will be used solely for analytical purposes. At no point will you or your employer's anonymity be compromised in the analysis of the data provided. The DPRU has received ethics approval from UCT's Ethics Committee (Reference: REC 2022/04/008).

Participation in this study is voluntary and poses no risks to you as the respondent. You may withdraw from the study at any time with no consequence to you or your company. This survey should take approximately 10-15 minutes to complete.

To thank you for your time for answering the questions, you will have an opportunity to enter a lucky draw to win a gift voucher on completion of the survey.

If you have any questions or concerns regarding this survey, please contact the Research Team at insetajobquality@vula.uct.ac.za.

Your participation will assist in the successful execution of this research and will be greatly appreciated!

Do you give consent to participate in this study?

- Yes (1)
- No (2) *Skip To: End of Survey If Q1 = No*

Q2 Please complete your details below.

Kindly note that this information will not be processed nor will it be made public in any way. Confidentiality will be maintained at all times.

Employee number: _____

Q3 Please confirm your employee number: _____

Q4 Company name: _____

Q5 Gender:

- Male (1)
- Female (2)
- Other (3)
- Prefer not to say (4)

Q6 Age (in years):

- ▼ 15 (1) ... Older than 80 (67)

Q7 Race:

- African/Black (1)
- Coloured (2)
- Indian/Asian (3)
- White (4)
- Other (5)
- Prefer not to answer (6)

Q8 What is your **highest** level of education that you have successfully completed?

- Grade 9 or less (1)
- Grade 10/Standard 8/Form 3 (2)
- Grade 11/Standard 9/Form 4 (3)
- Grade 12/Standard 10/Form 5/Matric (4)

- NTC 1/N1/ NC (v) level 2 (5)
- NTC 2/N2/ NC (v) level 3 (6)
- NTC 3/N3/ NC (v) level 4 (7)
- N4/NTC 4 (8)
- N5/NTC 5 (9)
- N6/NTC 6 (10)
- Certificate with less than Grade 12/Standard 10 (11)
- Diploma with less than Grade 12/Standard 10 (12)
- Certificate with Grade 12/Standard 10 (13)
- Diploma with Grade 12/Standard 10 (14)
- Higher Diploma (15)
- Post Higher Diploma (Masters, Doctoral Diploma) (16)
- Bachelors Degree (17)
- Bachelors Degree and Post Graduate Diploma (18)
- Honours Degree (19)
- Higher Degree (Masters/PhD) (20)
- Don't know (21)
- If other, please specify: (22) _____

Q9 The questions in this survey relates to your current job at your organisation. Please answer each question/statement as honestly as possible. Which of the following best describes your current occupation? Please see the attached for a description of the occupations: [Occupation Descriptions](#)

- Manager (*e.g. CEO, Director, General Manager*) (1)
- Professional (*e.g. Business Analyst, Finance Professional, Management Consultant*) (2)
- Technician and associate professional (*e.g. Bookkeeper, Insurance Broker, Technician*) (3)
- Clerical support worker (*e.g. Call Centre Agent, Office Support, Receptionist*) (4)
- Service and sales worker (*e.g. Salesperson, Office Cashier, Security Guard*) (5)
- Skilled agricultural, forestry, fishery, craft and related trades workers (*e.g. Electrician, Motor Mechanic, Plumber*) (6)
- Plant and machine operator, assembler (*e.g. Delivery Driver; Printing Machine Operator, Taxi Driver*) (8)
- Elementary occupation (*e.g. Cleaner, Caretaker, Handy Person*) (9)

Q10 Which of these statements best describes your employment status?

- I am an employee and have a line manager or supervisor (1)
- I am self-employed (2)
- I am the business owner (3)
- I am the chief executive of the business (4)

Q11 On what basis are you paid?

- Hourly (1)
- Weekly (2)
- Monthly (3)

Display This Question: If Q11 = Hourly

Q12 What is your hourly wage category before deductions (i.e. gross wage)?

- R0 – R21.69 (1)
- R21.70 – R43.38 (2)
- R43.39 – R86.76 (3)
- R86.77 – R173.52 (4)
- R173.53 or more (5)
- Prefer not to say (6)

Display This Question: If Q11 = Weekly

Q13 What is your weekly wage category before deductions (i.e. gross wage)?

- R0 – R868 (1)
- R869 – R1 735 (2)
- R1 736 – R3 470 (3)
- R3 471 – R6 941 (4)
- R6 942 or more (5)
- Prefer not to say (6)

Display This Question: If Q11 = Monthly

Q14 What is your monthly wage category before deductions (i.e. gross wage)?

- R0 – R3 731 (1)
- R3 732 – R7 461 (2)
- R7 462 – R14 923 (3)
- R14 924 – R29 845 (4)
- R29 846 or more (5)
- Prefer not to say (6)

Q15 Are you employed on the basis of:

- A written contract (1)
- A verbal agreement (2)

Q16 Is the contract / agreement a:

- Fixed-term contract (1)
- Permanent contract (2)
- Don't know / uncertain (3)
- Prefer not to answer (4)

Q17 Does your employer deduct UIF contributions from your salary?

- Yes (1)

- No (2)
- Don't know / uncertain (3)
- Prefer not to answer (4)

Q18 Does your employer require you to contribute to a pension/retirement/provident fund?

- Yes (1)
- No (2)
- Don't know / uncertain (3)
- Prefer not to answer (4)

Q19 Does your employer provide a subsidy for your medical aid?

- Yes (1)
- No (2)
- Don't know / uncertain (3)
- Prefer not to answer (4)

Q20 Are you entitled to any paid vacation leave?

- Yes (1)
- No (2)
- Don't know / uncertain (3)
- Prefer not to answer (4)

Q21 Are you entitled to any paid sick leave?

- Yes (1)
- No (2)
- Don't know / uncertain (3)
- Prefer not to answer (4)

Q22 Are you entitled to any maternity/paternity/parental leave?

- Yes (1)
- No (2)
- Don't know / uncertain (3)
- Prefer not to answer (4)

Q23 Do you work on weekends (i.e. Saturday and/or Sunday)?

- Yes (1)
- No (2)
- Don't know / uncertain (3)
- Prefer not to answer (4)

Q24 How many hours do you usually work each week (Monday to Sunday)?

▼ 1 hour per week (1) ... More than 45 hours per week (46)

Display This Question: If $Q24 \geq 1$ hour per week and $Q24 \leq 35$ hours per week

Q25 Are you willing and available to work additional hours at your current rate of pay?

- Yes (1)
- No (2)
- Don't know / uncertain (3)
- Prefer not to answer (4)

Q26 Are you satisfied with your job?

- Yes (1)
- No (2)
- Don't know / uncertain (3)
- Prefer not to answer (4)

Q27 I have undergone training paid for / provided by my employer in the last 12 months:

- Yes (1)
- No (2)
- Don't know / uncertain (3)
- Prefer not to answer (4)

Display This Question: If $Q27 = \text{Yes}$

Q28 I think that my prospects for future employment are better because of the training that I received:

- Completely disagree (1)
- Disagree (2)
- Neither disagree nor agree (3)
- Agree (4)
- Completely agree (5)
- Don't know / uncertain (6)

Q29 Are you a member of a trade union or other workers' organisation?

- Yes (1)
- No (2)
- Don't know / uncertain (3)
- Prefer not to answer (4)

Q30 Read through the following statements and indicate the extent to which each statement applies to your current job:

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
I work in my free time to meet work demands (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My job involves working to tight deadlines (2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
For me, arranging to take an hour or two off during working hours to take care of personal matters is difficult (3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I work at night for at least 2 hours between 10 PM and 5 AM (4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My job involves carrying or moving heavy loads (5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q31 Read through the following statements and indicate the extent to which each statement applies to your current job:

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
My job involves working in tiring or painful positions (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At work, I am exposed to noise so loud that I have to raise my voice to talk to people (2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
At work, I am exposed to handling or being in skin contact with chemical products or substances (3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My job involves working at very high speed (4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q32 Read through the following statements and indicate the extent to which you agree or disagree with each statement:

	Completely disagree (1)	Disagree (2)	Neither disagree nor agree (3)	Agree (4)	Completely agree (5)
I have flexibility to choose or change how I complete my work task (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am expecting to lose my job in the next 6 months (2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am expecting an undesirable change in my work situation (3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My job is emotionally demanding (5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have enough opportunities to use my knowledge and skills in my current job (6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q33 Read through the following statements and indicate the extent to which you agree or disagree with each statement:

	Completely disagree (1)	Disagree (2)	Neither disagree nor agree (3)	Agree (4)	Completely agree (5)
My job offers good prospects for career advancement (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I learn new things in my job (3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am involved in improving the work organisation or the work processes of my department or company (4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can influence decisions that are important for my work (5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The value of my work is properly recognised (6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q34 Read through the following statements and indicate the extent to which you agree or disagree with each statement:

	Completely disagree (1)	Disagree (2)	Neither disagree nor agree (3)	Agree (4)	Completely agree (5)
My work gives me the feeling of a job well done (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Considering all my efforts and achievements, I receive the praise and respect that my work deserves (2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel unfairly treated through discrimination at work (3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have space to voice my opinion in work discussions (4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can get support and help from my co-workers when needed (5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Display This Question: If Q10 = I am an employee and have a line manager or supervisor

Q35 Read through the following statements and indicate the extent to which you agree or disagree with each statement:

	Completely disagree (1)	Disagree (2)	Neither disagree nor agree (3)	Agree (4)	Completely agree (5)
In general, my immediate manager/supervisor respects me as a person (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q36 To thank you for your time for answering the questions, you will have an opportunity to enter a lucky draw to win a R1 000 voucher from either xxxxxx, xxxxxx, xxxxxx, xxxxxx or xxxxxx.

Do you wish to enter the lucky draw? If "yes" is selected, you will be directed to a new survey to enter your contact details.

- Yes, I want to enter the lucky draw (1) *Participant redirected to entry system*
- No, I do not want to enter the lucky draw (2)