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The impact of the manufacturing sector not attracting millennials in South Africa

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A research article submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration

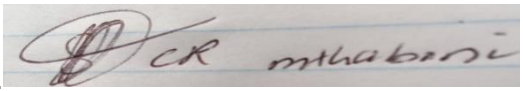
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DECLARATION

I, Christopher Rhulani Mthabini, declare that this research article is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the Graduate School of Business Administration, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

(Christopher Rhulani Mthabini)

Signed at WBS……

On the 29th…day of September 2018

DEDICATION

This paper is dedicated to my late mother, Agnes Mthabini. Thanks for planting the seed of education; many thanks for the encouragement and support that you gave me. I wish you were around to witness what I have become through education. Also, to my family for enduring my absence from home while I was busy pursuing the research.

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ABSTRACT

The research paper aims to determine the role of millennials in the manufacturing sector and the impact that this generation has on the future of manufacturing. The focus of the study is to identify the challenges that millennials face in the manufacturing sector as well as their expectations in the workplace, and to establish retention strategies that organisations can use to attract and retain this generation in the sector. South Africa's manufacturing industry needs talented human resources that can sustain the industry without relying on importing technical skills from other countries, and the millennials form an integral part of the current workforce in the country. The study was conducted on millennials aged 22 to 37 years who are currently employed in the manufacturing and supporting sectors in Gauteng and Mpumalanga. A qualitative research method with open-ended questions was used to gather the information, while Microsoft Excel advance software was used for the data analysis after the coding of the responses. A total of 29 interviews representing the four different racial groups in South Africa in different career levels within their organisations were conducted. This generation has realistic expectations from their jobs such as innovation, leadership, development, benefits, recognition, technology, career growth and work-life balance. The findings about the millennials and the manufacturing sector from the study were used to recommend solutions and strategies that employers in the sector can use to attract and retain this generation of employees. With the future of manufacturing being threatened by not having new talent entering the sector and the current aging workforce nearing retirement without transferring their skills, it is imperative for the industry to nurture the millennials to form an integral part of the manufacturing sector. A partnership between the government and the manufacturing sector is key for the development and growth of the country.

Keywords: millennials, manufacturing sector, career growth, development, retention, work-life balance, job expectations, leadership styles, employee engagement, South Africa, technology, mentoring, generation, talent, recruitment

CHAPTER 1

1. Background of the study

1.1 Introduction

Manufacturing is vital to economic growth in most advanced nations; it affects both direct and indirect employment (Rosenfeld & Wojan, 2016). In South Africa, the manufacturing sector has declined in both its contribution to economic growth and employment between 2001 and 2014 (Bhorat & Rooney, 2017). There is perception that the growth of trade between South Africa and China has had a negative impact within the manufacturing sector in South Africa (Edwards & Jenkins, 2015). The manufacturing sector in South Africa is seen to have the greatest potential to create jobs with acceptable salary levels for unskilled and semi-skilled workers (Mosai, 2016).

Millennials comprise the generation born between 1981 and 2000; they are highly educated, confident, driven (Phillipe, 2013) and respond to different management styles; this generation is creative and technologically inclined. Millennials grew up in a household with either a single parent or both parents who both had careers; millennials were also faced with major events like political and economic instability (Linden, 2015). This generation is loyal to a meaningful and challenging job rather than to an organisation; they enter the workplace with high demands and greater expectations and have a tendency to change jobs for different reasons.

They are being shaped by external forces such as change in the psychological contract, globalisation, employment outsourcing and explosion of digital technologies (Anitha & Aruna, 2016). This generation is perceived to be new in the labour force, but already have clear expectations about employers and if an employer cannot meet their needs, they will move on without hesitation due to them being in high demand (Thompson, 2011).

1.2 Purpose of the study

The purpose of the study is to investigate the impact of a skills shortage and an aging workforce on the manufacturing sector in South Africa. The correct skills are key to a company achieving its objectives in any industry (Hecklau, Galeitzkea, Flachsa & Kohl, 2016). Companies are spending a lot of money on developing employees to meet the increasing customer demands.

With the manufacturing sector being key to the country's Gross Domestic Product (GDP) (Szirmai & Verspagen, 2015) and millennials not finding the industry attractive as such, the country is faced with a challenge. It is within this context that this report was motivated to examine reasons why millennials are not actively pursuing careers in manufacturing. The study will cover management theories such as talent management, employee engagement and retention.

1.4 Context of the study

Studies have shown that jobs in the manufacturing sector are not attractive to millennials. When millennials think of the manufacturing sector (Rosenfeld & Wojan, 2016), they think of a dirty environment with physical, hard and repetitive tasks. They do not see it as a high-tech environment (Premier Tech Chronos, 2017). The change in the psychological contract explains that employment is no longer centred on a single, primary employer. Instead, employees operate in a workplace without boundaries, one in which they expect to move frequently between organisations, and between divisions within firms, throughout their careers.

Employers and employees have a new understanding of their mutual obligations, in which expectations of job security and promotional opportunities have been replaced by expectations of training, human capital development and networking opportunities (Stone, 2016, p. 1). Potoczak (2016) posits that manufacturers are faced with an aging workforce that may retire before they have enough time to share key knowledge and transfer experience. The author further states that millions of jobs will go unfilled as the manufacturing sector faces a growing skills

gap worldwide. The manufacturing sector faces a transition from traditional workers retiring and new technology-driven millennials entering the workforce (O'Donnell, 2017).

O'Donnell further states that manufacturers are forced to revamp their operations with the Internet of Things and artificial intelligence to empower and attract millennials to the industry. However, Makhene (2016), who is the CEO of Odgers Berndston, says that manufacturing is usually not deemed as an attractive career for millennials when considering possible industry choices, as it is not perceived to be an innovative industry and millennials have not made a connection between technology and manufacturing, which makes it a challenge for the sector to attract and retain millennials.

Manufacturing companies have been perceived as an industrial model adopting the Fordist approach, where the work is routine with no flexible working hours (Thompson, n.d.). By introducing automation and robotics for dangerous and physical work, companies empower their workers to obtain diverse skills within the production process, as operating robotic technology requires more training and manufacturers must train their existing workforce to allow robotics to collaborate with the human element rather than replacing it (Premier Tech Chronos, 2017).

1.5 Problem statement

The manufacturing sector has a skills shortage and an aging workforce approaching retirement, in addition to struggling to attract millennials to pursue a career in the sector in South Africa (Fear, 2015). The rapid rate of change is making many skills redundant, leaving employees overwhelmed due to sophistication and technology having a major impact. The manufacturing sector worldwide has seen a shift from traditional labour-intense manufacturing practices to models embracing the latest technology (Makhene, 2016). This is supported by Pacelli (2017). Manufacturers can highlight that the industry offers

job security and makes positive impacts and contributions to local communities and the economy.

1.5 Research objectives and questions

1.5.1 Objective of the research

The paper will focus on identifying and describing reasons why millennials are not finding the manufacturing sector an attractive career option. The paper will provide recommendations on how to address this problem. The following objectives will be pursued by the study:

- Reviewing the role played by Technical Vocational Education and Training (TVET) colleges and the National Skills Fund in addressing skills shortages.
- Reviewing the effectiveness of training and development in the manufacturing sector.
- Evaluating job expectations for millennials.
- Critically assessing the extent to which the involvement of labour brokers in the manufacturing sector contributes to millennials not pursuing careers in manufacturing.
- Evaluating available strategies to attract and retain millennials within an organisation.

1.5.2 Research questions

The research seeks to provide answers to the following questions that impact productivity within the manufacturing sector

- Does the lack of interest by millennials regarding careers in the manufacturing sector have an implied and significant impact on the future of manufacturing in South Africa?
- What is the relationship between youth unemployment and millennials not pursuing careers in manufacturing?

- Do millennials have the correct skills required in the manufacturing sector?
- How does this the lack of interest by millennials in pursuing careers in manufacturing in South Africa impact the GDP?
- What socio-economic impact does this problem pose to the country?
- Are there any political (government) policies that deal with the manufacturing sector in South Africa?

1.6 Significance of the study

The study is intended to fill in a gap that exists due to limited research addressing the lack of interest by millennials in the manufacturing sector in South Africa. As the manufacturing sector shifts from labour-intense processes to automation and robotics, the leaders will have the necessary knowledge of which skills to attract into the sector so as to be able to design and maintain this new technology. Another goal is to help improve business practices and workplace environments that are attractive to millennials in the manufacturing sector in South Africa. Research has shown that organisations are struggling to retain high-performing millennials due to many reasons that are within the organisations' control at times.

1.7 Limitations of the study

The study will not bring a solution to the problem of the millennials not pursuing manufacturing jobs in South Africa due to practicality of the solutions. The findings of the study will be used to compile recommendations that can be used for future studies on the topic. The study will not cover the automotive and aviation industries, which also have a manufacturing component in their respective industries, but have a high level of technological advanced applications.

Other limitations to the research are as follows:

- Availability of participants (millennials).
- Willingness of millennials in the sector to answer interview questions.
- Getting the required number of interviews.

- Delay in getting proposal approval from supervisor and institution.
- Access to data analysis software for the qualitative data.
- Spoiled responses, which will reduce the total number of valid responses.

1.8 Conclusion

For the manufacturing sector to be able to continue providing jobs and tangible products to its customers, the labour market should provide the necessary skills required by the organisations. The leadership of the organisations must formulate the necessary strategies to attract the correct potential employees who can subsequently be developed and integrated into key roles within the organisation. Millennials now form a majority of the labour force in South Africa. Employers in the manufacturing sector must factor the needs of this generation into their operations. The literature review that will unpack the key research questions of the study will be covered in the following chapter.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The stagnation of the South African manufacturing sector has resulted from cheap labour supply from Asia and South Africa's skills shortages, the latter being the biggest contributor to youth unemployment (Bhorat & Rooney, 2017). Companies can manufacture their goods at cheaper rates and import them into South Africa.

This research study will examine what skills millennials need to have to stand a chance of getting the jobs available in the manufacturing sector as well as which retention strategies organisations must apply to retain millennials. Issues perceived to be related to the problem of millennials not being attracted to pursue careers in the manufacturing sector will be reviewed in this chapter.

2.2 Skills shortage, training and development

Analysts have said that South Africa's unemployment is structural, with the skills level of the unemployed lower than what the economy requires (Pauw, Van Der Westhuizen & Oosthuizen, 2008). According to Daniels (2007), the Skills Education Training Authorities (SETA), the Department of Labour and the Department of Further Education and Training are underperforming on their mandate to provide skills training for the unemployed and are failing to tie up the skills shortage due to a lack of productivity. The author further states that the labour market is experiencing a mismatch between the types of workers supplied and those demanded.

In developed countries, skills development, technical and vocational education are becoming important policy issues in addressing GDP growth (Allais, 2012). Durandt and Powell (2015) posit that new graduates lack the required experience needed to fill job openings, which prevent them from getting employed on a full-

time basis. With manufacturing requiring experience in addition to the relevant qualification, it is a challenge for millennials to pursue a career in manufacturing.

Millennials are optimistic about their future earnings but are worried about their immediate employability; while their concerns are whether they have the correct training and skills required by employers (Brack & Kelly, 2012). Millennials feel vulnerable about their employability and are concerned about the skills and required training for them to compete successfully in the job market (Brack & Kelly, 2012). Skills mismatch is a major concern for the manufacturing sector. To address these and other challenges, the Department of Higher Education and Training has tasked the SETAs to facilitate bilateral relations between the government and employers (Petersen, Kruss, McGarth & Gastrow, 2016).

The authors further suggest that the SETAs must collaborate with the manufacturing sector to agree on programmes that will equip the millennials with the correct qualifications, skills and practical training for them to be able to fill the new technology-based job openings. The South African government, at the time of the study, was allocating 1.5% of its GDP to education and training, which was channelled through to TVET colleges and the National Skills Fund. The government views the TVET colleges as a priority to addressing the skills shortages and a vehicle to empower millennials with the necessary qualifications needed in manufacturing.

Training and skills development in the form of learnerships, artisan courses and workplace training help to upskill the youth and help them to escape poverty. This will give the country a more skilled workforce to combat the challenges it faces and strengthen the economy (Engelbrecht, 2017). According to Brack and Kelly (2012), training and development for millennials include on-the-job training, coaching, mentoring, e-learning and technological cost-effective methods that help in retaining and development of staff.

The South African government launched a programme called the Employee Tax Incentive in January 2014, also known as the youth wage subsidy. This initiative

allows businesses to claim back a certain portion of tax in return for employing and empowering youths. According to Anitha and Anura (2016), millennials prefer e-learning and Wikis as training methods as opposed to classroom training. The organisation should act as a supportive platform through study sponsorship for employees' self-development and enhancement as well as life-long learning.

Onboarding and early development programmes should be used to provide millennials with the tools to overcome the skills gaps and complexities in the workplace (Stewart, Oliver, Cravens & Oishi, 2017). Induction alone cannot cover the gaps that new employees may have; however, a tailor-made programme for the role that the new employee will be filling will set them up for success. The government, in partnership with the private sector, has launched an initiative called Youth Employment Services (better known as YES), which is aimed at skilling and providing jobs for the youth (Manyathela, 2018).

Development is a process rendered by organisations in improving employee skills and individual growth, enabling them to perform better in their present roles and preparing them for future roles within the organisation (Anitha & Aruna, 2016). The authors further state that provision of proper career development by an organisation is a vital tool for better employee engagement. Millennials thirst for knowledge and have great ambition for quick progression in the workplace; they have different expectations and requirements from management (Anitha & Aruna, 2016).

Studies have identified mentoring as key to millennials' development and as a business element that can lead to retention (Ukeni & Reynolds, 2017). The authors further state that giving feedback to millennials is easily executed through mentorship programmes, which also reduce employee turnover by providing professional supervision in nurturing talent.

2.3 Temporary employment service in the industry

Temporary employment service is defined as any person who for reward procures to a client or render services for the client and is remunerated by the labour broker

(Van Eck, 2010). The author further states that South African businesses have shifted from full-time employment to labour brokers, thereby terminating the relationship between employee and employer. There has been a significant increase in the number of labour brokers in South Africa that offer temporary employment based on the output demands of the company (Bhorat, Cassim & Yu, 2016).

The number of qualified millennials in the country has increased the available workforce, resulting in high levels of unemployment among the youth (Pauw et al., 2008). Policy-makers in many countries are concerned about job security, given the global financial crisis, rising demographic pressures, high unemployment rates and concerns over automation replacing humans in jobs. The combination of these factors make it seem imperative that policy-makers apply increasingly more active labour market policies (McKenzie, 2017).

Labour brokers seek employment and remuneration for their temporary employees in companies that require short-term employees. This means that the company employing the temporary employee has little responsibility towards the employee and only pays for the duration of the temporary employee's services (Botes, 2013). Van Eck (2010) says that employees placed by labour brokers are always at a disadvantage when it comes to bargaining for wages and other benefits, as they are not covered by trade unions. Dibble (1999) states that employers outsource jobs because of skills shortages within the available workforce in the country.

Table 2.1 shows a distribution of employment in South Africa post-apartheid, with manufacturing showing an annual growth of 1.2%. It can be seen in the extent to which the labour force has grown and to which the unemployment rate has risen in relation to the labour force. In 2014, the unemployment among the youth was 36% – an indication that the labour market is excluding millennials, who form part of the youth segment of the labour force. The temporary employment services also grew significantly during the same period (Bhorat et al., 2016). This is an

indication of the challenges that South Africa faces currently and going into the future.

The authors states that the likelihood of the temporarily placed employees being employed permanently is around 19.9%, with an average number of youth entering the labour market at 1.9% annually.

Table 2.1 shows the distribution of employment changes in South Africa from 1994 to 2014 Quarter 1.

Distribution of employment changes in South Africa from 1994 to 2014 Quarter 1				
Employment change	**Year**	**Year**	**Change %**	**Average annual growth rate %**
	1994	2014 (Q 1)		
Labour force	11 676 million	20,153 million	72.6	2.9
Employment	9 645 million	15 084 million	56.4	2.4
Unemployment	2 032 million	5 069 million	149.5	4.9
Unemployment rate%	17.6	25.2	43.18	
Jobs in manufacturing sector	1 452 million	1 808 million	24.51	1.2
Temporary employment services	199 000	970 000	387.4	8.7

Source: Bhorat et al., 2016

2.4 Job expectations of millennials

Understanding the organisational preference of job seekers is crucial for any organisation regarding the recruitment, motivation and retention of employees

(Linden, 2015). Companies may create better job offerings for millennials if they understand the job expectations of millennials. Job satisfaction for employees increases and strengthens relationships with co-workers, families and communities. Linden further states that millennials have different perspectives when they enter the workforce and prefer a continuous process of growth. Recruiting and hiring help to attract new talent into an organisation, but it is not known what factors are successful in attracting millennials into applying for certain jobs in an organisation. This generation has different expectations from other generations (Arora & Kshatriya, 2015).

Arora and Kshatriya (2015) states that there are keys factors that millennials rate and evaluate before accepting a job offer. This view is supported by Smith (2012) as well as El Ouirdi, El Ouirdi and Pais (2015).

- Job security – how strong is the industry/organisation regarding offering long-term employment?
- Challenging job profile – how likely is it that the job will challenge their intellectual capacity?
- Remuneration – will the salary meet their life style?
- Employment prestige and reputation – how will their position in the organisation be perceived by their peers?
- Employer location – ease of accessing the location using public or private transport and flexibility of getting to work.
- Type of leader and leadership style – millennials prefer transformational leadership (Lee, Mullins & Cho, 2016).
- Work-life balance – millennials want to have their social life not continuously interrupted by work commitments for them to take vacation every year.
- Well-defined career path?

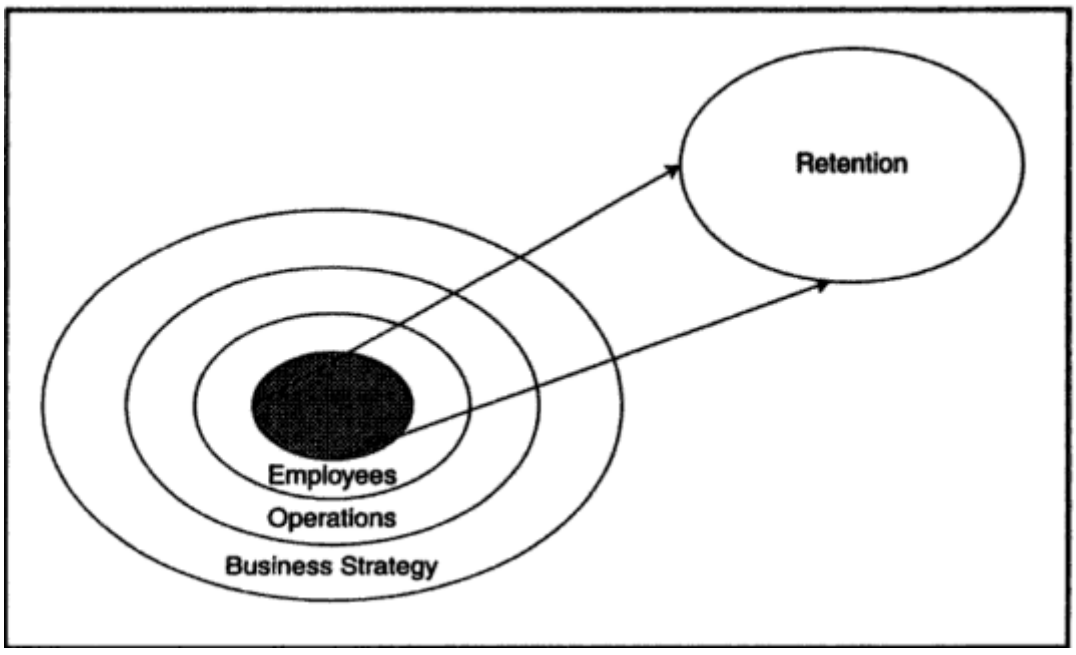
Millennials place a high value and priority on work-life balance, with a high degree of flexibility in their working hours and a good environment with clear policies and procedures (Dibble, 1999). The author further states that performance

management, development and workplace benefits are also of key importance on what millennials expect in the workplace. According to NG, Schweitzer and Lyons (2010), millennials identify themes such as work-life balance, meaningful work experience, career advancement, good pay and benefits as key to a desirable career.

The millennial generation expects autonomy, a friendly work environment, challenging jobs, working with positive people and being treated with respect in the workplace (Raines, 2002). This is supported by Deal, Altman and Rogelberg (2010), who elaborated that this generational cohort reported higher job satisfaction than other generations, which is attributed to their team work, collaboration and use of technology.

2.5 Ways to attract and retain millennials in to the manufacturing sector

Figure 2.1: Retention framework as the core of business strategy



Source: Dibble, 1999

Retention is a measure of how long employees stay with an organisation and is impacted by social, professional, financial and environmental factors (Humpreys, Wakerman, Pashen & Buykx, 2017). According to Bersin (2013), the cost of

losing an employee can be as high as twice the employee's annual salary. From Figure 2.1 it is evident that employee retention must form part of the company's strategy in all departments. Globalisation and technology have changed the competitive climate for organisations and have forced organisations to reconsider the role that employees play in the overall success of the organisation.

According to Humpreys et al. (2017), retention strategies must have incentives that are sufficient and flexible to meet the needs of the employees. Talent management comprises activities that involve systematic identification of key roles that contribute to the organisation's success by developing a pool of high-potential and performance talent (Ariss, Cascio & Paauwe, 2014). It is imperative for any organisation to include talent management in their business strategy when recruiting new employees. The authors further state that the organisation needs to identify key organisational positions that will give them a competitive advantage.

The identified roles are filled using internal development as well as external recruitment. According to Dibble (1999), money and career growth are the top two biggest concerns for millennials in their quest to stay or leave a company.

Ariss et al. (2014) state that for global organisations, the process requires initiatives that contribute to attracting, selecting from the recruitment process, developing from the existing pool and retaining the best employees in key roles. The organisation must cultivate a culture of high performance, employee motivation and extra role performance among employees to get the best from their talent pool and avoid staff turnover.

Millennials are known to be educated and may consider manufacturing as a dirty and not innovative sector in which to work. Below are potential ways to attract them to pursue a career in manufacturing (Anderson, 2014).

- Have a flat organisational structure that promotes collaboration.
- Give them attention and immediate feedback.

- They value liking what they do and being challenged by a job over the amount of money they are earning.
- Use advance technologies such as additive manufacturing (3D printing), nanotechnology and apps that promote collaboration to solve problems.
- Partner with colleges to host plant tours and speak at graduation ceremonies to promote your company and its products to the students.
- Have internship programmes – use school holidays to offer students an opportunity to see the real world of manufacturing and use this as an opportunity to identify who can be a fit for your company.
- Have a casual workplace, as millennials do not separate their personal and professional lifestyles.
- Ask them to recommend a friend who is looking for a job – peer referral.

Makhene (2016) agrees with Anderson (2014) and goes on to add the following as key to attracting millennials:

- Understand today's digital natives – how millennials think, operate and value what they bring to an organisation. Have a strategy to integrate them to your company by pairing them with the current workforce, thus enabling diversity of skills at all levels.
- Embrace technology – leaders must surround themselves with experts who can advise them with new technology to take their companies forward. Millennials need to be assured that the organisation is committed to an overarching digital strategy as a key driver for its future growth.
- Facilitate collaboration – collaborate with the government to influence alignment with policy-makers. Business and tertiary institutions need to have programmes that will build competencies in engineering and specialist skills, and use apprenticeships and vocational training to improve the ways in which these skills are developed. Leaders in the manufacturing sector need to into enter agreements with educational institutions through sponsorship of courses to ensure that the relevant qualifications and skills are produced to meet the sector's needs.

To retain millennials in companies, create an organisational culture that is flexible, promotes open communication, encourages sharing of ideas and innovation, and offers flexibility (Brack & Kelly, 2012). The authors further state that millennials expect open and honest communication from their leaders as this helps them to better understand their role in the organisation. Millennial employees' needs are addressed through perks, benefits, development and advancement; while customised leadership styles for management with leadership development for millennials are encouraged, this can be achieved through mentoring and training programmes that focus on responding to individual concerns and the formation of working relationships (Nolan, 2015).

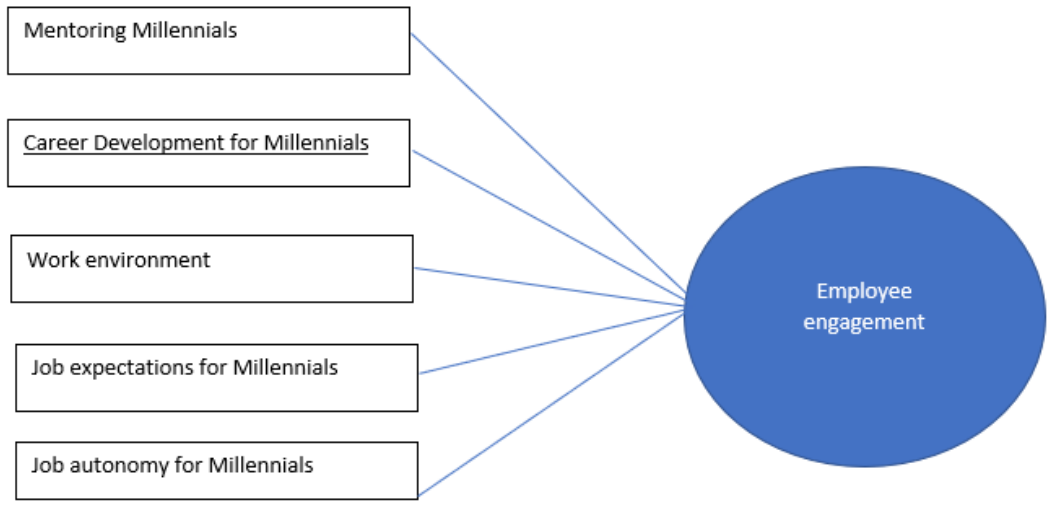
According to Zeeshan and Iram (2012), organisations need to treat their employees as valuable assets rather than replaceable assets, and must apply different retention strategies to different generations of employees.

2.6 Employee engagement

Figure 2.2 depicts a conceptual framework with various independent variables that have a great impact on employee engagement for the millennial generation. Employee engagement is key to a competitive advantage – it deals with psychological state as well as behavioural and trait engagement of employees in an organisation (Macey & Schneider, 2008).

According to Anitha and Aruna (2016), millennials prefer flexibility as well as professional satisfaction in their career. The idea of having fixed working hours and a fixed work station does not appeal to them. What brings them satisfaction is the result of their efforts rather than the physical end of the working day. By examining the characteristics of the millennial generation of workers, their career development needs and provisions made by employers, the millennial generation's potential in the workplace can be maximised (Schwieger, Surendran & Beard, 2008).

Figure 2.2 Conceptual framework on employee engagement



Source: Anitha & Aruna, 2016

According to Macey and Schneider (2008), there is a positive correlation between employee engagement, productivity, employee retention and profitability. Employee engagement is viewed as an opposite of burn-out (Saks & Gruman, 2011) and requires involvement with personal fulfilment activities by the employees. The authors further state the importance of goal-setting and review as an enhancement tool for keeping employees engaged. Employees need to be provided with the necessary resources to stay engaged; this may involve activities such as job design, coaching, leadership, training and social support (Saks & Gruman, 2011).

2.6.1 Mentoring millennials

Millennials prefer mentoring by someone who plays a nurturing role rather than a line manager, as they see it as knowledge transfer that will translate into fast-tracking their development; they find companies that use this approach as attractive to them (Ukeni & Reynolds, 2017). Reverse mentoring for organisations that offer employee development is a strategy that an organisation can use to recruit and retain millennials (Murphy, 2012). The author further elaborates that

this method stimulates young employees to be challenged in a meaningful way, thus making them feel valued by their organisations.

This type of mentoring is used by universities and organisations worldwide as a skills transfer tool and is not age dependent (Chaudhuri & Ghosh, 2012). According to Chaudhuri and Ghosh (2012), millennials bring their tech-savvy skills to their workplace and can help the older generation to access to information through the millennials' knowledge of technological advancement. Through the pairing of younger employees with the senior employees with the purpose of sharing expertise on different levels, companies can benefit in knowledge transfer without cost (Murphy, 2012).

2.6.2 Career development of millennials

Millennials view training as a vehicle for career development in that it provides them with resources to learn new skills and build new knowledge, makes them feel valuable to the organisation and helps them to cope with the demands of their jobs (Saks & Gruman, 2011). The authors further state the importance of performance appraisals and continuous feedback for this generation in their development journey. This generation of employees values peer feedback by developing relationships that can further their careers and prefer collaboration as a form of learning and development (Schwieger et al., 2008).

Soft-skills training for millennials is essential in empowering them with assertiveness, in assisting them with ways to process feedback and in setting long-term career goals (Brack & Kelly, 2012). This view is also supported by Schwieger et al. (2008), who posit that it provides them with critical communication skills, both verbal and written. The use of e-learning methods for training is much appreciated by this tech-savvy generation compared to the traditional classroom method of learning. Through e-learning, millennials use technology and gather the necessary information at their own pace (Brack & Kelly, 2012).

Employees' experience of work varies from excitement based on new challenges they face in the job and boredom due to repetitive work (Bloch, 2005). The author further states that it is very important for employers to prevent employees from feeling stuck and make their work challenging and fulfilling. According to Jones, Burke and Westman (2006), the relationship between employer and employee has declined, with employees no longer expecting job security but expecting training and development as tools to enhance their job performance.

2.6.3 Work environment

The millennial generation is different from previous generations and their workplace preference differs. They prefer a workplace that is open for new ideas and promotes collaboration (Shaw & Fairhurst, 2008). Shaw and Fairhurst (2008) further state that an environment with graduate development programmes is conducive for this generational cohort.

2.7 Work-life balance

The world economy today requires a 24/7 team of employees to cover organisational demands (Isaksson, 2018). Manufacturing volume demands and flexibility have resulted in 24-hour operations. For any full-time employee, a work-life balance can be challenging to achieve, regardless of their work schedules (Phillipe, 2013).

Research shows that single dedicated shift workers are most likely to be satisfied with their work-life balance when compared with other shift patterns working employees; those with split or irregular shifts are the least satisfied with their work-life balance as they have less control of their schedules. Phillipe (2013) states that millennials value freedom at work and often define it as work-life balance; they are more likely to negotiate the terms under which they work at every stage of their careers.

The millennial generation prefers meaningful work that betters the lives of others and enjoys a full balanced life while taking vacation time to travel (Eisner, 2005).

Millennials always consider work-life balance when thinking of changing jobs or prior to accepting job offers (Phillipe, 2013). According to Sayah and Süß (2013), a work-life balance is a balanced ratio between a person's working life and private life that corresponds to the subjective needs of employees. This is supported by Cascio (2000), who states that work-life balance is an employer initiative aimed at helping employees to balance work and non-work demands.

High levels of work-life balance are associated with job satisfaction in any industry and have a positive effect on the performance of both the employee and the organisation (Haar, Russo, Sunne & Ollier-Malaterre, 2014). With some jobs considered to be physical work, long hours and challenging working conditions (Wu, Rusyidi, Claiborne & McCarthy, 2013), the relationship between work-life balance and job satisfaction becomes constrained; manufacturing is classified as one such industry. Research has shown that employees working permanently suffer the same work-life balance challenges as contractual workers (Sayah & Süß, 2013). According to Sayah and Süß (2013), employers sponsor work-balance initiatives at work to assist their staff to manage the demands of work and personal life.

2.8 Conclusion

Millennials have high expectations about their choice of employer. They want to be associated with reputable brands and want to be able to progress in the organisation. Organisations should align its talent management practices with its strategy and values, rather than copying from successful organisations. With the rise of the temporary employment services in the manufacturing sector in South Africa, the youth face a big challenge of securing permanent employment.

Millennials are known to be highly educated and always wanting to study more, but are perceived to be lacking the necessary acquired skills and experience to get the available jobs. Mentorship, training and career development is vital in transferring skills from highly experience employees to junior ones. The role of colleges and universities is to prepare students for their future work on theoretical

principles, leaving the practical aspect to the employers. The following chapter will focus on the process which will be followed in conducting the study by outlining the research design and data-collection method.

CHAPTER 3: RESEARCH DESIGN AND DATA COLLECTION

3.1 Research methodology

Introduction

The literature review that has an impact on the success of the manufacturing sector and millennials' job expectations was discussed in the previous chapter. This chapter will provide an overview of the process to be followed in trying to answer the primary research questions. Through this process, the main research objective will be unpacked and provide solutions.

Research methodology is the process used to discover underlying motives and desires using in-depth interviews; it can be understood as the science of studying how research is applied scientifically (Kothari, 2004). The aim of this study is to establish reasons why millennials do not find the manufacturing sector an attractive field in which to pursue careers and to put forward recommendations on how to solve this problem. The qualitative research method will be used for the study; a literature review of this method will be discussed in detail in this chapter.

3.2 Research methodology/paradigm

Research design can be defined as the logical sequence that connects the empirical data to a study's initial research question and to its conclusions (Watkins, Meiers & Visser, 2012). The study will be conducted using qualitative research methods, which will be appropriate to answer the research questions. Lewis (2015) and Van Hoek (2016) define qualitative research as a process that uses inductive data analysis to establish the meaning that participants attach to a problem or issue by identifying patterns.

This research method seeks answers to questions, collects evidence and produces findings that are applicable beyond the immediate boundaries of the study (Mack, Woodsong, Guest, Macqueen & Namey, 2005).

There are three common qualitative research methods, with each method being suited to obtaining a specific type of data (Mack et al., 2005).

- Participant observation – for collecting data on naturally occurring behaviours.
- In-depth interviews – for collecting data on individuals' personal histories, perspectives and experiences.
- Focus groups – for eliciting data on the cultural norms of a group and in generating a broad overview of issues.

The study will use in-depth open-ended questions delivered in an interview style, as it allows participants to respond in their own words when the researcher probes for more elaboration on their responses.

The data will be collected using in-depth interviews with each participant; the interview with its open-ended questions will be standard for all participants and will take between 20 to 30 minutes per participant. The targeted number of interviews for this study is 40.

3.3 Research design

Leedy and Ormrod (2011), define research design as a detailed plan which is critical for solving the identified research problem. The authors further state that the research design is the overall strategy chosen to integrate the different components of the study in a lucid and logical way, to ensure that the research problem is addressed effectively. The research is suited to the purposeful sampling technique used in interviews to get the views and opinions of the target population participating on the research (Boejie & Hox, 2005).

3.3.1. Research interview questions

1. What is your age, race and gender?
2. What technical qualification do you have?
3. Is it from a TVET college or university?
4. Are you employed part-time or full-time?

5. What level are you within your organisation?
6. Why did you choose to pursue a career like the one you chose? Analysis part.
7. What expectations do you (millennials) have in the workplace?
8. How likely are you to stay with your employer if it does not meet your job expectations? How long would you stay before pursuing external career opportunities?
9. What employer workplace benefits are important to you?
10. What leadership style(s) do you respond to best or prefer in the workplace?
11. What are your development needs?
12. What is your preference between working flexible hours and shift-dictated hours?
13. How important is work-life balance to you?
14. In your opinion, is manufacturing very attractive compared to other industries?
15. Do you prefer working in an urban or industrial area?
16. Is job security of importance to you?
17. Do you consider individual performance feedback to be important to you? What kind of feedback do you prefer? One-on-one, 360-degree or recognition?
18. Do you think you get remunerated well considering your experience and qualifications? Possible answers with packages or basic salary review.
19. What level of education do you need to be successful in the manufacturing sector? From TVET and university.
20. What are the things you like dislike about the sector? I.e.:
    - Pay?
    - Overtime?
    - Reward and recognition?
21. Why do you not want to grow in your career? Mainly TVET qualifications respondents.

3.4 Population and sample

According to Leedy and Ormrod (2015) and Cresswell (2009), the following types of sampling can be used:

- Purpose sampling – data review is done in conjunction with data collection.
- Quota sampling – sampling characteristics which include age, gender, race, profession and culture.
- Snowball sampling – participants with whom contact has already been made refer the researcher to their networks who could participate in the study.

Quota sampling will be used for the study as it covers broad aspects of the population targeted on this study. The targeted sample size for the research is 40 participants, conducting both face-to-face and telephonic interviews.

3.4.1 Population

South Africa has nine provinces, with Gauteng as the economic hub of the country and home to most universities and Further Education and Training institutions. The population will be employees working in the manufacturing sector in Gauteng, students in Gauteng universities as well as matriculants in both the Gauteng and Mpumalanga provinces. Mpumalanga is more rural, compared to Gauteng. The population will be millennials born between 1981 and 2000. A population is a group of individual persons, objects, or items from which samples are taken for measurement.

3.4.2 Sample and sampling method

The employees will be from a manufacturing sector at organisations around Gauteng and will be chosen randomly to represent career levels from entry to management level. The sample comprises 40 employees from different companies within the manufacturing and supporting functions. The participants have a minimum National Qualification Framework (NQF) Level 5 qualification

according to the South African Qualification Authority. The following demographics will be covered:

- Age
- Race
- Qualification
- Gender
- Employment status

Qualitative investigations entail the use of small samples. The choice of sample size is important as it determines the extent to which the researcher can make generalisations (Onwuegbuzie & Leech, 2005).

3.5 Reliability and validity: Qualitative research

Collected data must be accurate pertaining to the characteristics and dynamics of the research topic being studied. This is validity and it determines whether the research actually measures that which it was intended to measure, whereas reliability refers to the consistency in the patterns and dynamics they reflect (Leedy & Ormrod, 2015); even if the questions were rephrased, the topics would still be addressed. The results will be deemed accurate if the research instrument produces similar results under different conditions.

Tewksbury (2009) states that qualitative research is one of the two primary approaches in conducting social science research and considers it a superior means for conducting meaningful research in criminology and criminal justice. The author suggests that the advantages of qualitative methods are that they provide a depth of understanding of crime, criminal justice system operations and processing that exceeds detached statistical analyses. According to other researchers, qualitative research refers to meanings, concepts, definitions, characteristics and symbols.

According to Eiselen, Uys and Potgieter (2005), there are two types of questions that can be used in a research, namely open-ended and closed-ended questions.

The open-ended question can only be coded after the interview has been conducted, whereas close-ended questions have a predetermined answer. The study will use open-ended questions; each interview will be in a semi-structured format to give the interviewees an opportunity to freely talk about their views and experiences (Hox & Boeije, 2005).

3.6 Research limitations

Research limitations include the extent to which the study is reliant upon the availability of millennials working in the manufacturing industry, as well as millennials who are university and college students at the time of the study. Another challenge will be cancellations of planned and booked interviews. Should the study not achieve the desired quota of participants, it will have limitations on achieving the objectives of the study as well as the intended recommendations**.**

The study is limited to the following:

- Millennials currently studying, unemployed or employed.
- No other generation outside the millennials will be covered.
- The recommendations will not be tested.
- The results of the recommended solutions will not be covered by the study.

3.7 Ethics

According to Leedy and Ormrod (2015), research ethics deals with the interaction between the researcher and the participants of the research topic.

Formal informed consent is needed for all qualitative research methods except in the case where the researcher is doing participant observation. The consent can be oral or written. The researcher must clearly explain the purpose of the study to the participants (Leedy & Ormrod, 2015).

- Informed consent – the targeted participants will be given a choice to participate or not participate in the study.

- Right to privacy – the participants' views, opinions and identity will be kept confidential.
- The participants' right to just and fair treatment must be upheld.
- Honesty with professional colleagues: Researchers must report their findings in a complete and honest fashion without misrepresenting what they have done or intentionally misleading others as to the nature of their findings.

CHAPTER 4: DATA ANALYSIS

4.1. Introduction

This chapter will seek to provide answers regarding the reasons why millennials are not pursuing careers in the manufacturing sector in South Africa. A complete analysis of the transcribed interview responses will be covered in this section.

Data is defined as factual information which, when interpreted, can be used to make a decision about a specific action by examining patterns and using the information to enhance knowledge (Academy for Educational Development, 2006). The aim of this chapter is to report on the findings of the study on the role of millennials in the manufacturing sector in South Africa. Marshall and Rossman (1999) describe data analysis as the process of bringing order, structure and meaning to the mass of collected data.

Watkins et al. (2012) posit that data plays an important role in supporting decision-making and needs to be converted to meaningful information for it to be interpreted.

A qualitative data collection method of open-ended question interviews was used for data collection. Data analysis is a set of procedures that can be applied to collected data to obtain a set of results (Academy for Educational Development, 2006).

4.2 Qualitative data analysis

Qualitative data can be analysed using informal methods like counting the frequency of occurrence for the event being observed and content analysis by selecting a sample and determining coding units (Collis & Hussey, 2009). According to Collis and Hussey (2009), main features of this method of data collection are reducing, restructuring and de-textualising the data. According to Debowski and Hanmer-Lloyd qualitative data analysis software such as NVivo and ATLAS.ti can assist the researcher with importing text, storing data, coding the data, as well as searching and retrieving text segments.

A total of 29 interviews were conducted, face-to-face and telephonic, where participants could answer the 21 questions used for the research study. The raw data from the interview was summarised into codes for ease of interpretation. The instrument used to compute the data analysis for this research is Excel Advanced.

4.3 Sample description

The target population for the interviews was a number of 40 respondents; the interviews comprised face-to-face and telephonic interviews according to availability and geographical location of the interviewees. From the target sample, 29 interviews were conducted, which represent a 73% respondent rate. The age group of the target population fell between 22 and 37 years of age; the target population comprised the four ethnic groups namely black, coloured, Indian and white respondents. The sampling questions covered demographics like race, age, gender as well as career level and qualifications.

4.4 Profiling the sample

The total sample size was 40 respondents, with 29 respondents completing the interviews. Table 4.1 shows the breakdown of the 29 respondents by race, gender, age, qualifications and career level at their organisations. Some 78% of the respondents were university graduates employed permanently in different career levels within their organisations. The three respondents on a senior management level all had more than one degree, with one on a master's degree level. Some 17% of the respondents with TVET college diplomas were all in entry-level positions. Of the 29 respondents interviewed, 11 were face-to-face interviews which represented 38% of the population, and 18 were telephonic which represented 62% of the total respondents. The targeted population was a balanced mix of both genders and different ethnic groups.

Table 4.1: Profile of the sample size broken down into demographics.

Race and number of participants	Gender	Age	Qualifications	Level in organisation
• 3 whites • 1 coloured • 3 Indians • 20 blacks	• 14 females • 15 males	22-37	• 2 currently studying • 5 college diplomas • 22 university degrees	• 9 entry level • 4 junior management • 13 middle management • 3 senior management

Source: Research study

4.5 Analysis of the responses

The interviews were conducted using open-ended questions targeting 40 respondents and comprising 15 face-to-face and 25 telephonic interviews. The face-to-face interviewed respondents represented 73% of the target population, while the telephonically interviewed respondents represented 72% of the target population. A total of 11 booked interviews did not take place due to availability of the interviewees at the confirmed time; the follow-up appointments also did not yield positive results.

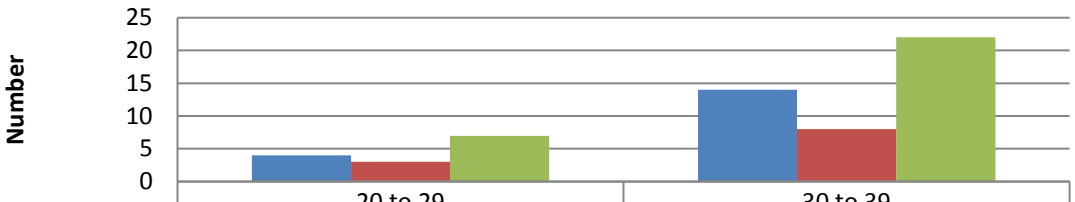
4.6 Interpretation of the responses

The responses gave an indication of where the millennials were in terms of educational qualifications, career, work expectations and quality of life. From the respondents, a reflection on career growth and mobility were identified as the key expectations of the millennials. Work-life balance was top priority for 85% of the respondents. The following section covers the results of the analysis in detail.

4.6.1 Age

Figure 4.1 reflects the age of the respondents.

Figure 1: Age of respondents



	20 to 29	30 to 39
Telephonic	4	14
Face to face	3	8
Total	7	22

Source: Research study

The age range of the respondents was between the ages of 22 and 37 years, all falling under the millennial generation born between 1981 and 2000.

4.6.2 Race

Figure 4.2 reflects the race of the respondents.

Figure 2: Race of the respondents



	Black	Coloured	Indian	White
Telephonic	14	0	2	2
Face to face	8	1	1	1
Total	22	1	3	3

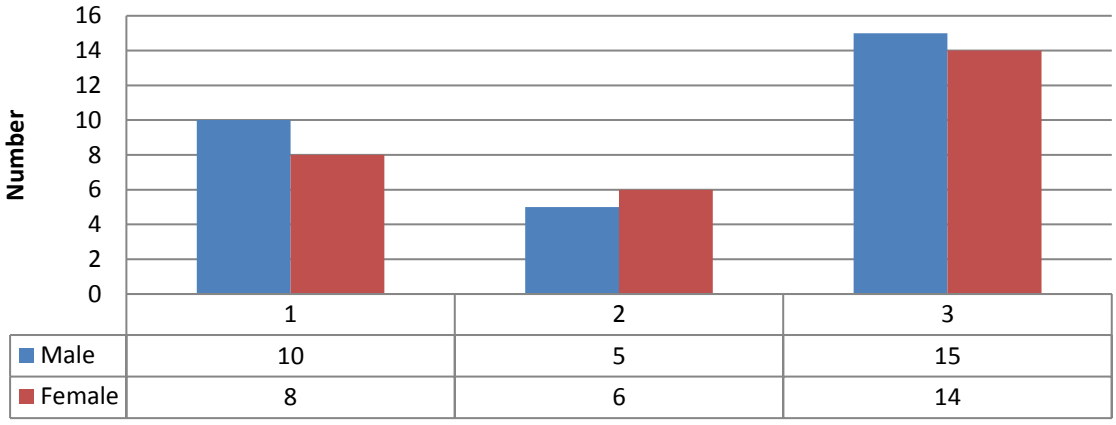
Source: Research study

From the table on race, black respondents represented 76% of the total respondents, which suggested that manufacturing companies is complying with government policies such as Employment Equity and Broad-Based Black Economic Empowerment. This is relevant to the research question on government and political policies that deals with the manufacturing sector.

4.6.3 Gender

Figure 4.3 reflects the gender of the respondents.

Figure 3: Gender of respondents



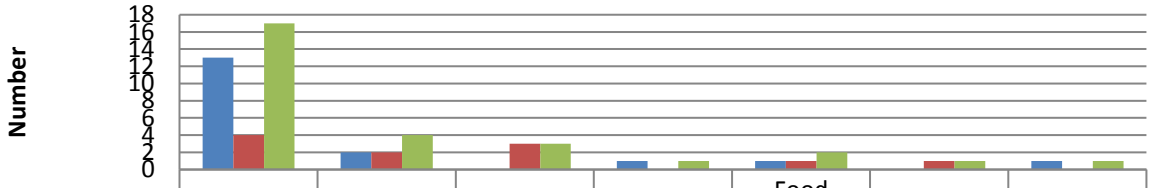
Source: Research study

The split of gender representation among the respondents was 51% male and 49% female. Contrary to the industry being believed to be male dominant, this suggests that women are also pursuing careers in manufacturing, on the production floor and support functions. Through its policies, the government is driving transformation in the workplace to have representation of different genders of all races in all positions and levels in the workplace. The split of gender representation is relevant to the question whether the manufacturing sector is implementing these government policies.

4.6.4 Qualification

Figure 4.4 reflects the qualification level of the respondents.

Figure 4: Qualification level



	Enginnering Degree	Accounting and Business commerce Degree	HR Degree	IT	Food Technology, Manufacturing and Operation Degree	MBA	Currently Studying
Telephonic	13	2	0	1	1	0	1
Face to face	4	2	3	0	1	1	0
Total	17	4	3	1	2	1	1

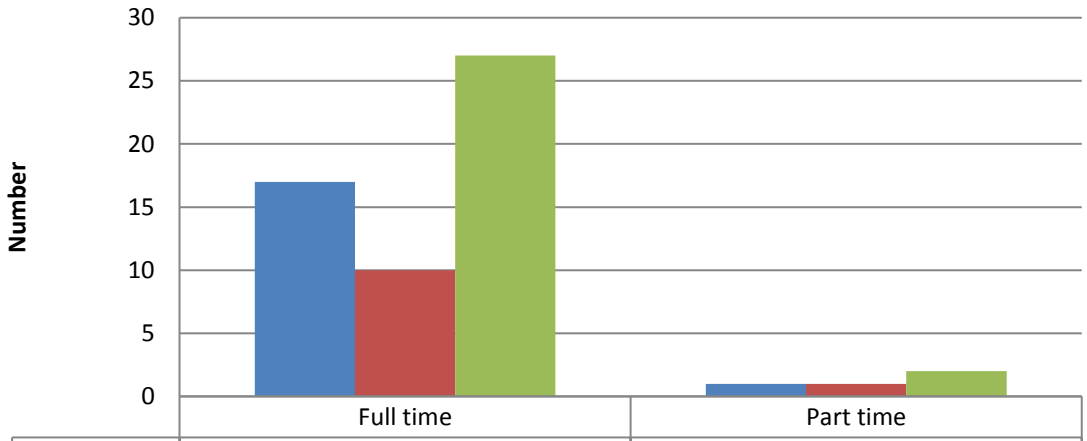
Source: Research study

From the qualification table, it can be seen that the respondents had a minimum NQF Level 5 qualification. The qualification split leaned more towards a university degree, with some respondents indicating that they were furthering their studies part-time. This seeks to address the issue of education for millennials and the role of colleges in skills development. With the government at the time of the study allocating 1.5% of GDP to skills development the colleges, it creates a strong foundation for vocational education and training for the manufacturing sector, which consumes most of the engineering qualified students.

4.6.5 Employment

Figure 4.5 reflects the employment status of the respondents.

Figure 4.5 : Employment status



	Full time	Part time
Telephonic	17	1
Face to face	10	1
Total	27	2

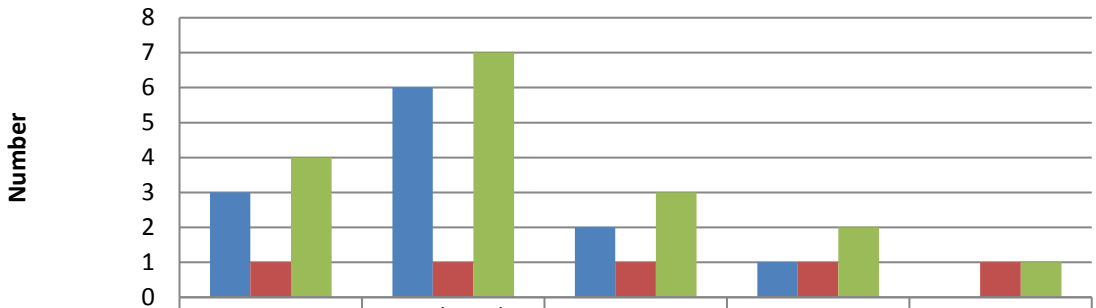
Source: Research study

Only two of the respondents indicated that they were employed on part-time basis; one had a contract with an employer whereas the other one was working through a labour broker. Some 27 of the respondents were employed on a full-time basis, which is a reflection on the need for job security for this generation. This figure seeks to address the question of unemployment and the use of labour brokers, with the split showing a figure of 3.4% employment through a labour broker out of the total sample size of 29.

4.6.6 Position/level in the organisation

Figure 4.6 reflects the position/level in the organisation of the of respondents.

Figure 6: Position/level in the organisation



	Entry Level	Technical (Artisians and Engineer)	Junior Management	Management	Senior Management
Telephonic	3	6	2	1	0
Face to face	1	1	1	1	1
Total	4	7	3	2	1

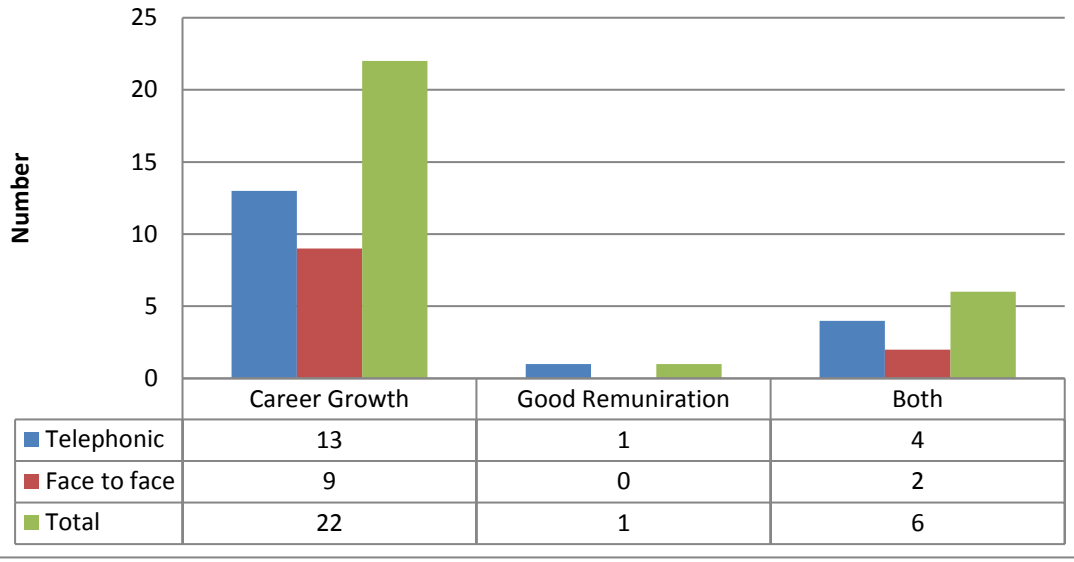
Source: Research study

The respondents represented various levels in their organisations, from entry level to senior management. The manufacturing sector hires a lot of artisans and engineers due to the technicality of the industry, and through further studies and career development these employees advance to managerial positions. This represents the question of career growth expectations of millennials in the workplace. It is an illustration that the manufacturing sector does offer career growth in line with millennials' expectations.

4.6.6 Millennials' expectations

Figure 4.7 reflects the workplace expectations of the respondents.

Figure 7: Millennials' expectations



	Career Growth	Good Remuniration	Both
Telephonic	13	1	4
Face to face	9	0	2
Total	22	1	6

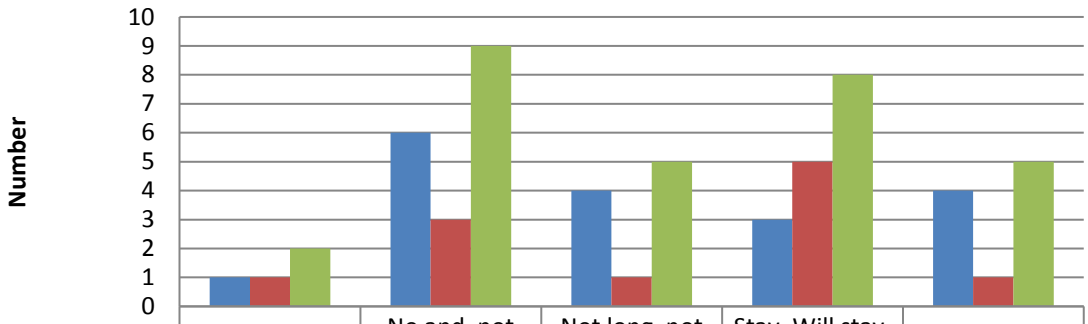
Source: Research study

In the table it can be clearly seen that career growth was key to the respondents, with 22 of the respondents placing it ahead of remuneration. This clearly indicates that millennials consider career development to be key for them in the workplace. Through development they get to learn new skills and improve their current level of skills, which addresses the skills shortages. This generation prefers collaboration in their work environment, which allows them to share knowledge and transfer skills to their counterparts and colleagues.

4.6.7 Likelihood of staying without expectations met

Figure 4.8 reflects the likelihood of respondents staying with an employer should their career and workplace expectations not be met by the employer.

Figure : 8 Likelyhood of staying without expectations met



	Less Likely	No and not likely	Not long, not stay long	Stay, Will stay, Yes	Unlikely
Telephonic	1	6	4	3	4
Face to face	1	3	1	5	1
Total	2	9	5	8	5

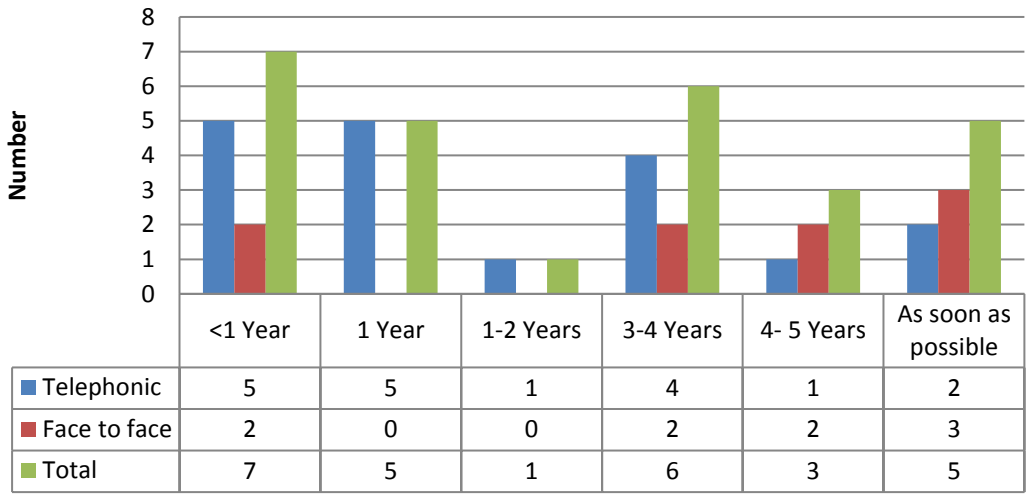
Source: Research study

Some 72% of the respondents indicated that they would not stay with an employer who failed to meet their job expectations and would actively seek other opportunities. None of the respondents indicated that they would leave without securing another job; they would stay with the current employer until they got another job due to their financial commitments that needed to be serviced every month. This seeks to address the myth that millennials do not stay with one employer for a long time and highlights the retention challenges that employers face with this generation of employees. The figure does illustrate that millennials will pursue a career elsewhere if their current employer does not meet their expectations.

4.6.8 Tenure before leaving

Figure 4.9 reflects the tenure before pursuing a move by the respondents should their expectations not be met by their current employer.

Figure 9: Tenure before pursuing a move



	<1 Year	1 Year	1-2 Years	3-4 Years	4- 5 Years	As soon as possible
Telephonic	5	5	1	4	1	2
Face to face	2	0	0	2	2	3
Total	7	5	1	6	3	5

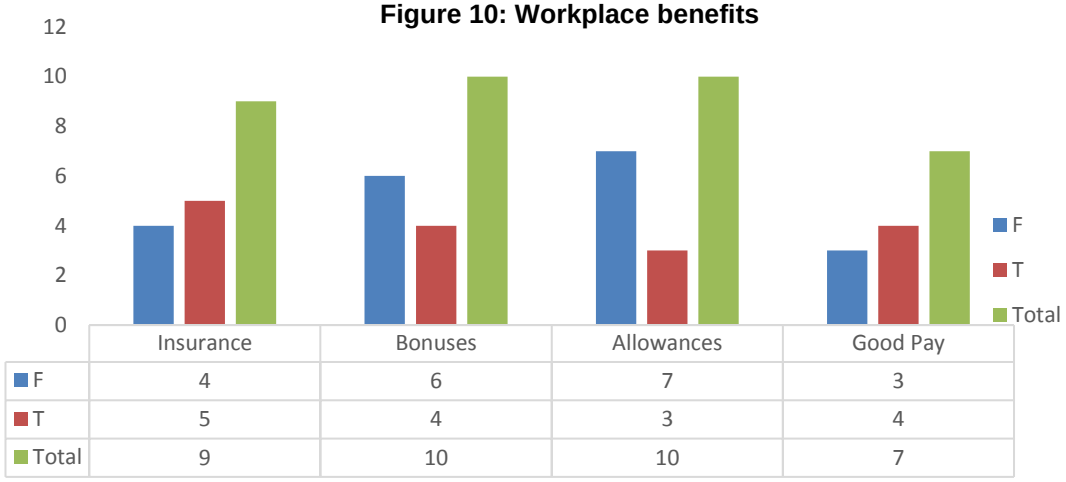
Source: Research study

Some 17 of the respondents indicated that they would leave their current employer within the first year of joining the organisation if the employer did not meet their expectations. This poses a challenge to organisations as it results in high employee turnover, recruitment costs and loss of skills. This seeks to address the challenge of retention of millennials as employees by organisations in different industries.

4.6.9 Workplace benefits

Figure 4.10 reflects the workplace benefits of the respondents.

Figure 10: Workplace benefits



	Insurance	Bonuses	Allowances	Good Pay
F	4	6	7	3
T	5	4	3	4
Total	9	10	10	7

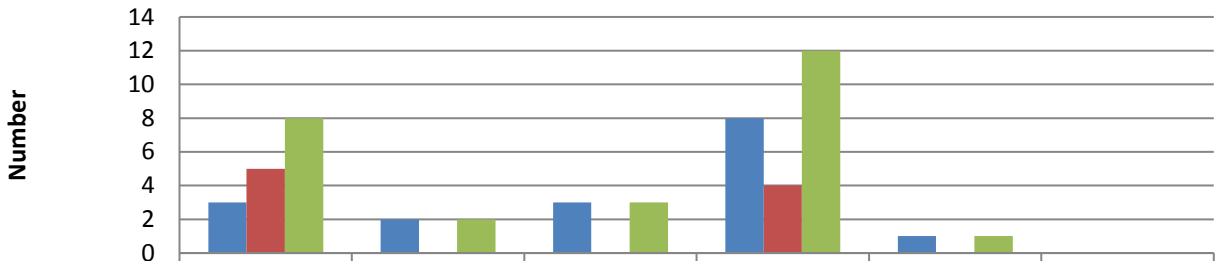
Source: Research study

The table depicts different workplace benefits expectations over and above a salary. Salary alone is not a motivator for the millennial generation – they expect group life insurance to cover them for disabilities and life risks while also expecting to share the profits of the organisation through bonuses and performance incentives. Some respondents mentioned that they paid extra on retirement annuities or had a top-up retirement savings account over and above what was offered by employers. This highlights a gap that organisations can use as a retention strategy by providing higher retirement benefits to their employees. The manufacturing sector can explore this opportunity to attract millennials through retirement benefits that are over and above the industry norm.

4.6.11 Preferred leadership style

Figure 4.11 reflects the position of the respondents regarding the preferred leadership style.

Figure 11: Preferred leadership style



	Visionary	Coaching	Affiliative	Demotracratic	Pacesetting	Commanding
Telephonic	3	2	3	8	1	0
Face to face	5	0	0	4	0	0
Total	8	2	3	12	1	0

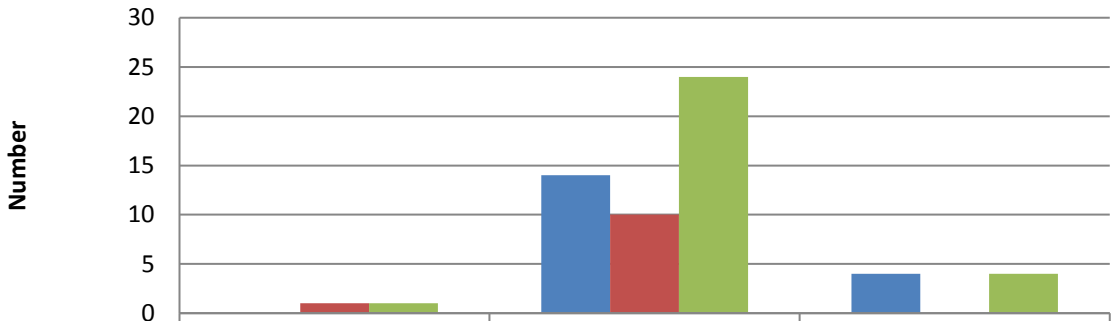
Source: Research study

The trend leans more towards democratic leadership style and to visionary leadership and less towards pace-setting, coaching and affiliative leadership. Some respondents alluded to the fact that their reasons for leaving their employers were due to the type of leader and style of leadership of the leader to whom they reported. Manufacturing companies can develop their managers/leaders in line with the leadership style preferences of the millennials, which will help their organisations to attract and inspire this generational cohort to work for them.

4.6.12 Preference of working hours

Figure 4.12 reflects working hours preference between shift and flexible hours.

Figure 12: Shift or flexible hours



	Shift	Flexible	Both
Telephonic	0	14	4
Face to face	1	10	0
Total	1	24	4

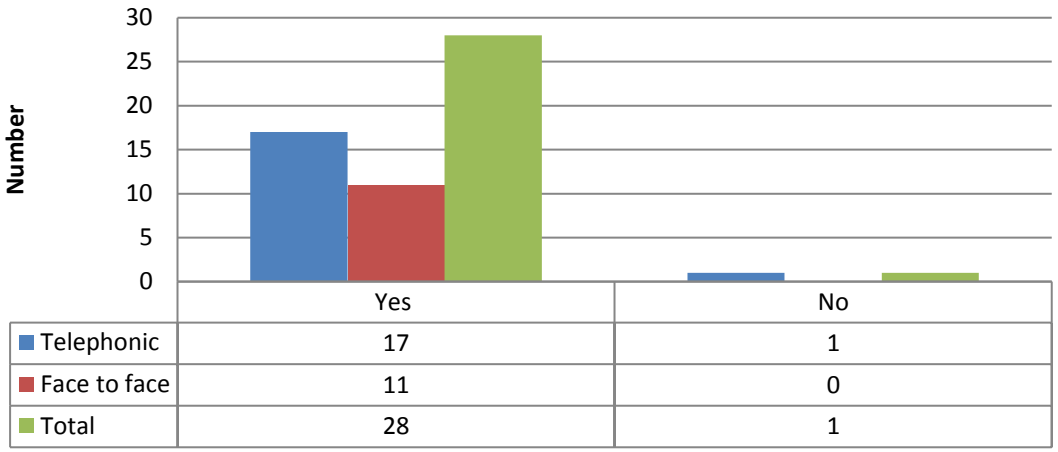
Source: Research study

This seeks to answer the issue of flexibility in the workplace, with 82% of the respondents preferring to work flexible hours compared to a restricted working time of shift patterns. Some respondents indicated that flexibility enabled them to plan their day and enabled them to slot in time for studying and socialising, thereby avoiding using an entire day's annual leave when they did not need a full day out of the office. The only respondent who preferred shifts alluded to getting more time to rest when off-shift as they worked four days and got four days off from their shift pattern. The shift pattern is beneficial to industries that require 24-hour active operations and are therefore unable to offer flexibility due to operational requirements.

4.6.13 Work-life balance

Figure 4.13 reflects importance of work-life balance for the respondents.

Figure 13: Work-life balance



	Yes	No
Telephonic	17	1
Face to face	11	0
Total	28	1

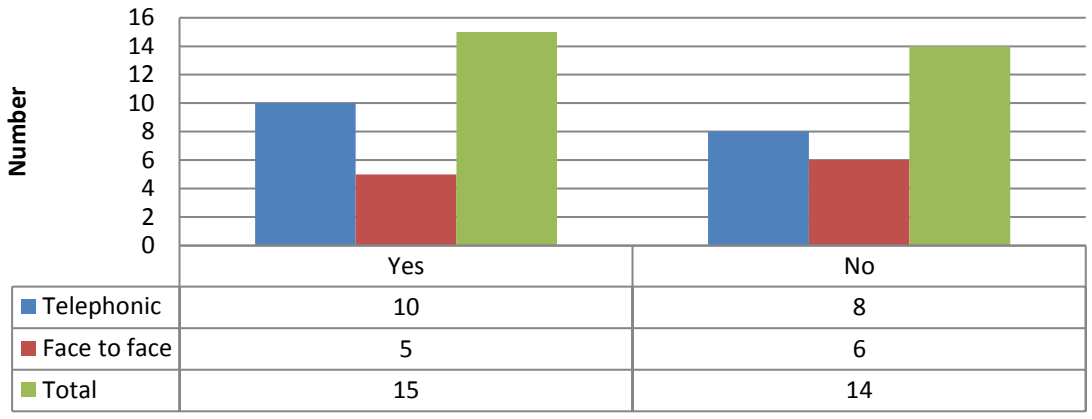
Source: Research study

Millennials are known for their love of socialising and travelling the world. In the above figure, 28 of the respondents vehemently agreed that work-life balance was very important to them and that they preferred a job that made it possible to realise this rather than having a high-paying job that required them to spend most of their time working. Several respondents indicated that they preferred a job with extensive travelling rather than one that required them to report for duty at the same place, every day.

4.6.14 Manufacturing attractive compared to other industries

Figure 4.14 reflects the views of the respondents regarding manufacturing attractiveness when compared to other industries.

Figure 14: Manufacturing attractive compared to other industries



	Yes	No
Telephonic	10	8
Face to face	5	6
Total	15	14

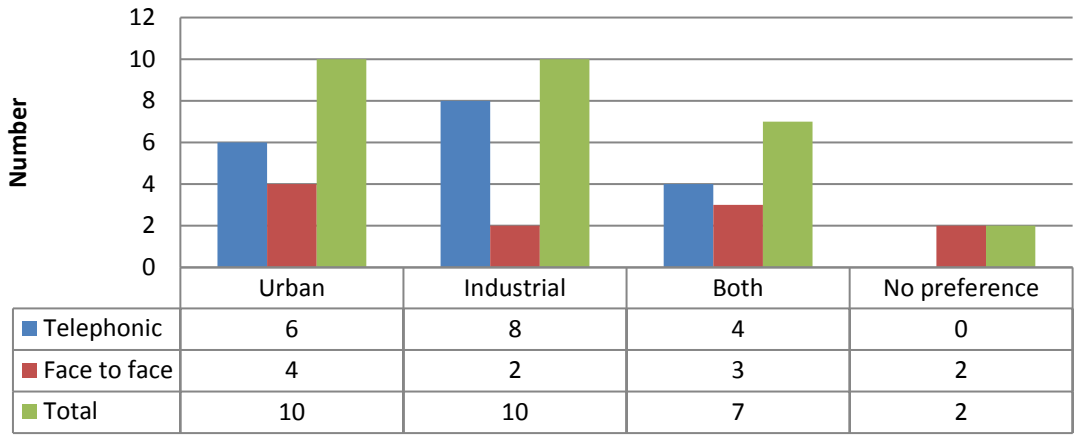
Source: Research study

Fifteen of the respondents highlighted that manufacturing was attractive compared to other industries based on market-related salary, use of technology, ability to employ more youth and producing tangible goods. Some 14 of the respondents did not find it to be attractive for reasons such as geographic location of the manufacturing plants, and the industry being dirty and requiring repetitive manual work. Innovation is necessary for the millennial generation in the workplace. This figure addresses the question of the impact of millennials not showing interest in the manufacturing sector.

4.6.15 Workplace area preference

Figure 4.15 reflects the position level of the respondents regarding workplace area of preference.

Figure 15: Workplace area preference



	Urban	Industrial	Both	No preference
Telephonic	6	8	4	0
Face to face	4	2	3	2
Total	10	10	7	2

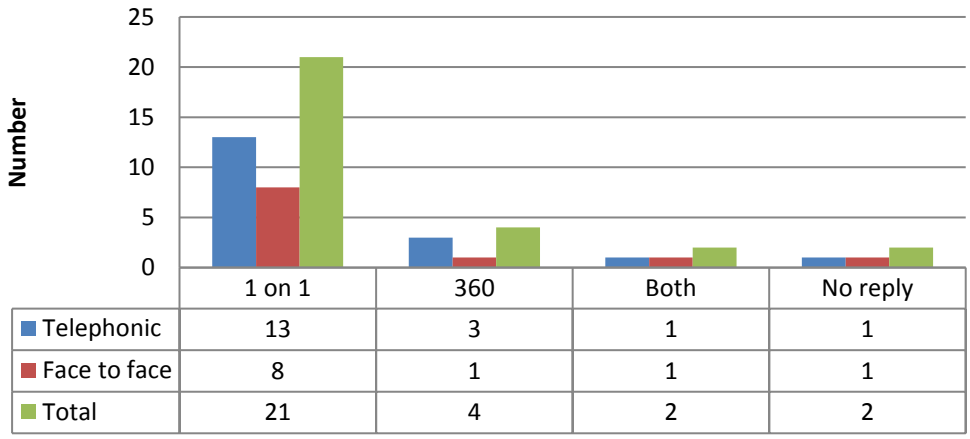
Source: Research study

From the above figure, there was a 50-50 split on the work area preference from the respondents. The respondents in favour of urban areas did not prefer commuting extended distances to their workplace, but preferred working closer to their place of residence and having access to shopping malls during the day. The industrial preferences were from those respondents who did not like traffic congestion in urban areas and highlighted that they preferred the quiet industrial areas.

4.6.16 Performance feedback

Figure 4.16 reflects the position level of the respondents regarding performance feedback in the workplace.

Figure 16: Performance feedback



	1 on 1	360	Both	No reply
Telephonic	13	3	1	1
Face to face	8	1	1	1
Total	21	4	2	2

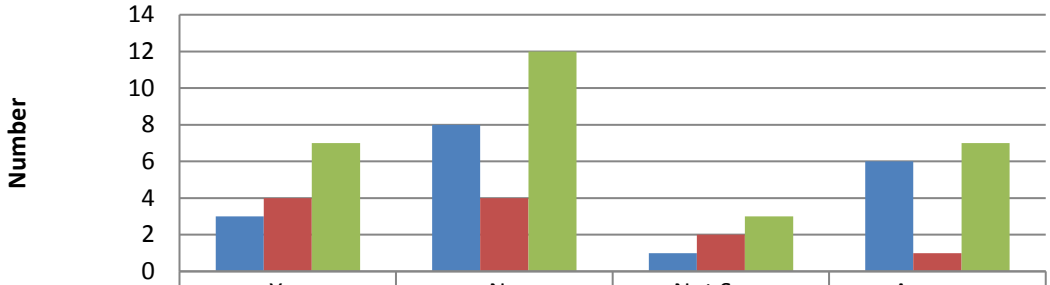
Source: Research study

The figure above illustrates that performance feedback is crucial for millennials, with 21 respondents in favour of one-on-one feedback to help them improve their performance and close their gaps, while four respondents preferred 360-degree feedback as it encompass the full view of their performance and behaviour from manager, subordinates and peers. The traditional one-on-one feedback is used by a lot of organisations in South Africa, with some multinationals preferring 360-degree feedback for managers.

4.6.17 Remuneration in relation to experience

Figure 4.17 reflects the position level of the respondents regarding remuneration.

Figure 17: Remuneration enough for experience



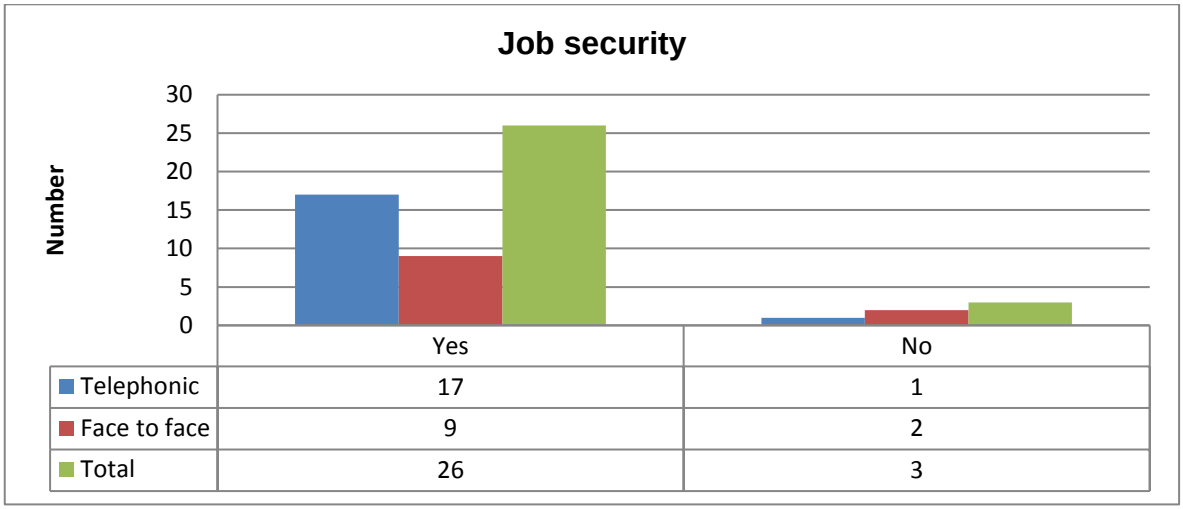
	Yes	No	Not Sure	Average
Telephonic	3	8	1	6
Face to face	4	4	2	1
Total	7	12	3	7

Source: Research study

Marked-related salaries are one of the millennials' expectations. Only seven respondents said that they were being paid enough for their worth, followed by seven saying their salary was market-related and 12 disagreeing to their pay being market-related. Organisations that do not pay market-related salaries struggle to attract and retain talent. Organisations determine salaries based on what they can afford to pay for talent. Government policies dictates minimum salaries to which companies must adhere, but there is no limit set for maximum salaries. Companies that do not restrict themselves to just paying market-related salaries are able to attract and retain talent through higher salaries. This figure talks to the socio-economic impact of millennials not pursuing jobs in the country's manufacturing sector – as the cost of living increases, the level of salaries must offset the impact on consumers.

4.6.18 Job security

Figure 4.18 reflects the position of the respondents regarding job security.



	Yes	No
Telephonic	17	1
Face to face	9	2
Total	26	3

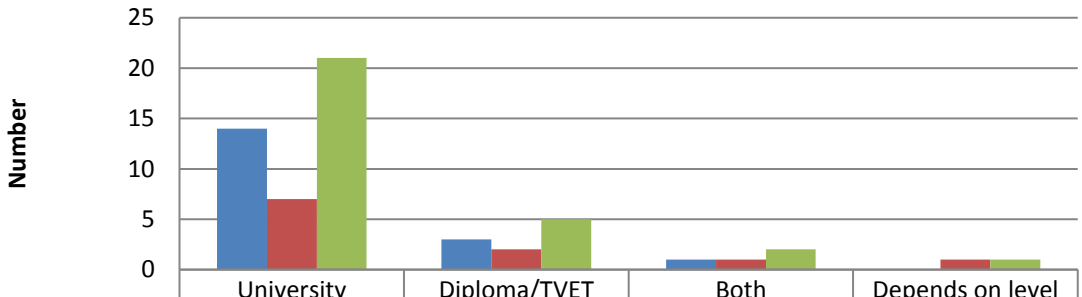
Source: Research study

According to the World Bank, South Africa has the highest level of unemployment in the world, with most of the youth unable to find jobs. From the table above, 26 of the respondents considered job security to be very important as it helped them to plan for their future, pay for their education and take care of their families. The three respondents who said that it was not important to them highlighted that they had their own small businesses, which earned them more than their salaries from the employers. This figure talks to the research question on the relationship between unemployment and millennials not pursuing careers in manufacturing.

4.6.19 Level of education to guarantee success in manufacturing

Figure 4.19 reflects the position level of the respondents regarding the level of education needed to be successful in manufacturing.

Figure 19: Level of education to be succesful in manufacturing



	University	Diploma/TVET	Both	Depends on level
Telephonic	14	3	1	0
Face to face	7	2	1	1
Total	21	5	2	1

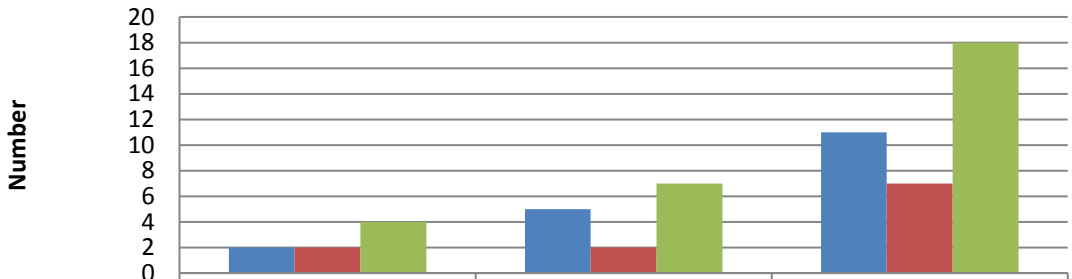
Source: Research study

Career growth is very important to millennials and they measure growth based on success at the workplace. Some 21 respondents believed that a university degree was necessary to guarantee success in the manufacturing industry, as it opened channels of growth. This illustrates that education is important for career growth and the higher education institutes have a role to play in addressing the employability of the millennials.

4.6.20 Reason for not growing into managerial roles in manufacturing

Figure 4.20 reflects the position level of the respondents regarding the reason for a lack of interest in growing to managerial positions in the manufacturing sector.

Figure 20: Reason for not growing



	More responsibility	less benefit for Management	Not applicable
Telephonic	2	5	11
Face to face	2	2	7
Total	4	7	18

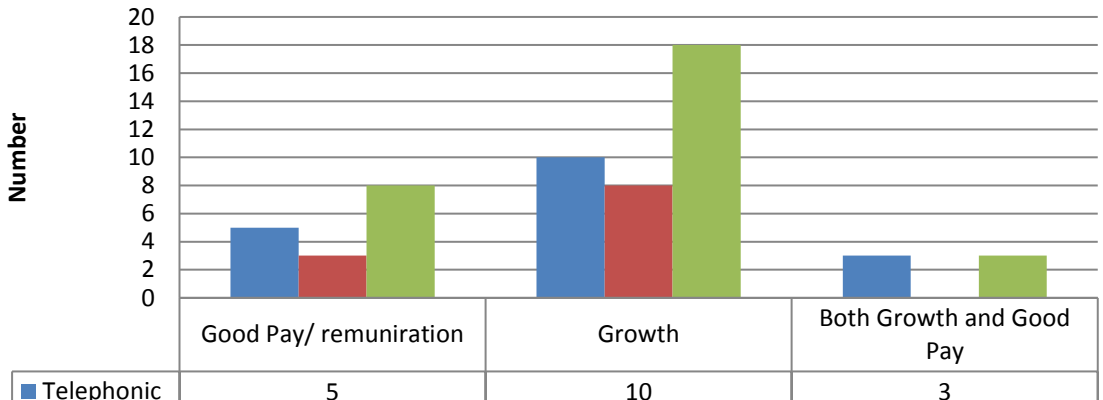
Source: Research study

Growth comes with responsibility and benefits. Eleven of the respondents alluded to not wanting to take on more responsibility that is not complemented by benefits in the manufacturing sector. They believed that managers worked long hours and took accountability for a business unit's performance without being compensated for the additional work and responsibility.

4.6.21 Likes about the manufacturing sector

Figure 4.21 reflects the level of the respondents on what they like about the manufacturing sector.

Figure 21: Likes about the manufacturing sector



	Good Pay/ remuniration	Growth	Both Growth and Good Pay
Telephonic	5	10	3
Face to face	3	8	0
Total	8	18	3

Source: Research study

Eighteen of the respondents had a view of the industry having high growth prospects for an individual due to the various available portfolios in the sector, should you do not want to specialise. Eight respondents believed the industry paid good salaries, whereas three of the respondents believed there were both good pay and growth potential in the manufacturing industry. Some respondents felt that the industry had the ability to employ more of the country's youth and reduce socio-economic issues around the communities where the manufacturing factories were based.

4.6.22 Dislikes about the manufacturing sector

Figure 4.22 reflects the position level of the respondents what they dislike about the manufacturing sector.

Figure 22: Dislikes about the manufacturing sector



	Long hours	Pay not good	No growth/ repertive work
Telephonic	4	5	9
Face to face	1	2	8
Total	5	7	17

Source: Research study

Some 17 of the respondents disliked the repetitive type of work in the manufacturing sector and saw this type of work as not inspiring individual growth. Seven of the respondents believed that remuneration in the industry was not good and five respondents did not like the long hours of work. Most female respondents felt that the industry was resistant to change and was very male dominant. Some respondents said the industry was not innovative and did not embrace technology such as the Internet of Things. This seeks to address the issue of lack of interest by millennials in pursuing careers in the manufacturing sector and the impact it could have on the future of manufacturing in South Africa.

4.7 Summary of findings

In view of the results from Section 4.5, the respondents highlighted a few themes about millennials with different qualifications from different educational institutions such as universities and TVET colleges. The millennial generation from different races had a lot in common in terms of work ethics and expectations. Their expectations were more than just a salary from their employers; they wanted an environment where they could grow, be innovative, and experience challenging work, development and collaboration.

With the manufacturing industry perceived to be resistant to change and relying heavily on experience rather than development, there is a huge risk of not recruiting new talent into the industry and thereby missing an opportunity for skills transfer from the highly experienced staff nearing retirement to the new generation of employees. Manufacturing companies need to have a certain degree of flexibility for the non-shift workers and need to use collaborative strategies to get the best out of the millennial workforce. Millennials prefer a workplace that allows work-life balance and career alignment, with benefits and perks that include development, advancement and a flexible management style.

A lack of soft skills and work experience has been identified as a huge contributor to unemployment among millennials and the youth. The unemployment rate among the millennials with tertiary qualifications is constraining the growth of economy in South Africa. Training and development is on the forefront of expectations for this generation in the workplace. Manufacturing companies must spend the resources and time to train and development this generation wherever they employ them. Millennials prefer working in an environment that is conducive for growth and want constant feedback on their performance to help close any identified gaps.

Manufacturing companies are faced with challenges of attracting and retaining this generation of employees and the traditional retention strategies used for previous generations is not working on the millennial generation. Millennials

embrace diversity in the workplace, fit in well with different cultures and have a high level of confidence. This generation prefers flexibility in their hours of work and takes responsibility for the execution of allocated work; however, with manufacturing requiring production personnel to be at their workstation at specified times to oversee their production lines, it is not practical for the industry to have that level of flexibility.

The millennial generation expects workplace benefits over and above the traditional benefits offered by employers. This is forcing many organisations to consider the perks that they offering to new recruits so as to retain their skills within the organisation. In the interviews, the respondents highlighted the salary differences with different companies within the sector as a concern. It is clear from the preferred leadership styles that this generation embraces freedom to work independently from their managers without being micro-managed.

With technology advancement, globalisation and extensive social media platforms, this generation can collaborate with colleagues from different parts of the world to solve complex issues and come up with innovative ideas to help their organisations achieve business goals.

Work-life balance is elusive for millennials in the manufacturing sector due to the long hours and volume of manufacturing demands resulting in overtime work. With overtime considered to be voluntary by the country's labour laws, employees in the manufacturing sector often work continuous shifts to meet such demands.

Millennials have the potential to become top-performing employees if managed correctly by the companies that employs them. Manufacturing companies must formulate proper onboarding strategies to integrate this generation into their organisations. This generation often consults their parents when making decisions regarding job offers or changing employment, which leads to them expecting their managers to play a parental role at the workplace. Managers with emotional intelligence have a better chance of managing this generation and getting the best out of them.

The respondents identified overtime and shift work as the main contributor to the lack of balancing between work and life needs in the sector. Work-life balance has direct correlation to staff turnover, absenteeism, productivity and job satisfaction. The manufacturing sector provides allowances for the long hours and shifts to technical and entry level staff in the form of shift allowance and overtime payment. Yet this is only attractive to employees at that level and results in those employees not wanting to grow their careers in fear of losing out on the allowances.

Manufacturers are often forced to recruit millennials without the related work experience for junior management positions and spend a lot of money on the training and development of junior managers. The manufacturing sector is perceived to be offering most of the workplace benefits that millennials desire; the missing link lies in meeting their expectations. Most organisations dismiss ideas from millennials on the basis that they do not have years of experience and subsequently end up losing the opportunity of having a creative employee on their side.

For a department to perform to its best ability, the head of such a department needs to have the relevant technical skills and the knowledge of the processes within the department. With most artisans in the manufacturing sector having the knowledge of the processes but not wanting to grow into managerial positions due to fear of forfeiting overtime benefits and having to take accountability, the millennials who join this sector with the hope of growth stand a better chance fulfilling their career growth expectations.

4.8 Conclusion

The findings have revealed that millennials are different from previous generations in the workplace. The most common themes for this generational cohort is challenging work, autonomy, benefits, career projection and work-life balance. Future research will have to test the effectiveness of the strategies identified in this paper. With this generational cohort currently filling the job

market, it is imperative for employers to understand the motivational drivers of this generation to best determine the best and most effective strategies to attract and retain them at the workplace.

Job market dynamics have changed drastically, with millennials continuously studying to improve their chances of being employable. Companies are now faced with the challenge of attracting and retaining employees. With millennials currently forming a large part of the workforce, should companies apply the correct retention strategies they can attract and retain this generation of employees and benefit from their ability to multitask on different projects and at different levels.

The manufacturing sector may argue that the previous generation of employees has experience and is able to achieve manufacturing output, and that there is subsequently no need to employ millennials, who companies feel will eventually leave. However, with the introduction of robotics and advanced technology, and millennials being accustomed to and more accepting to advanced technology, the sector is forced to make this generation part of their future growth strategy.

The manufacturing sector will have to invest in developing millennials to fill job openings on all levels of the organisation. In so doing, they will be fulfilling the job expectations of this generation cohort. This study has achieved the objective of finding reasons why millennials are not finding the manufacturing sector to be attractive. The findings of the data analysis highlights the need for the industry to transform, be innovative, use technological advances and focus on the development of employees as well as on mentoring.

4.9 Recommendations

Organisations need to understand the motivators and demotivators of millennials and have active development programmes that line managers and employees follow thoroughly to keep this generation engaged. JSE-listed companies in the manufacturing sector must use the employee share option as a retention strategy for their employees; this will encourage millennials to stay with their organisation

to avoid losing their allocated portion of shares and other benefits should they leave.

Organisations must use employee development as a tool to upskill their employees and address the skills shortage problem in the industry. A market-related salary alone is not sufficient to keep a millennial employee engaged with the company; companies need to use proper retention strategies to retain this generation of employees. Proper performance appraisals with feedback are key in the development of millennials employees; organisations must leverage on this to get maximum output from this generation and achieve company set targets.

Organisations must apply reverse mentoring strategies to facilitate knowledge-sharing between millennials and the older generation of employees. This approach will stimulate cross-training between the generations and help build relations between employees of different generations. It is imperative for the leadership of organisations to understand the preferred leadership styles of the millennial generation as well as involving them in decision-making that affects the execution of their tasks.

Millennials prefer that their roles and responsibilities are clearly defined without any ambiguity; this helps them to excel in achieving their set targets and brings out the best in them. With clear goals in place, it becomes easier for managers to manage this generation of employees against agreed outcomes. In addition to meaningful jobs, this generation loves corporate social responsibility as a form of contributing positively to the communities within which they work and they are more likely to stay with an organisation that promotes social responsibility.

Millennials prefer career growth that comes with added responsibilities and a good remuneration that complements their added responsibilities. Manufacturing companies need to find a way of addressing the attractiveness of the sector to millennials without sacrificing their key targets; by incorporating the Internet of Things, technology and innovation, the sector can address some of the identified dislikes about the sector by millennials. The industry is perceived to offer job

security and with millennials considering job security as very important, the sector can use this to attract this generation.

Repetitive work seems to be a problem for millennials as they want autonomy and creativity in their day-to-day jobs. Manufacturing companies produce products that have a repetitive element in the manufacturing process; however, through different departments they can apply the multiskilling of this generation to keep them engaged and not feel like they are doing repetitive work. This will help the employer to build a more effective, productive and innovative manufacturing pipeline and have back-up cover for its respective departments while empowering its employees with vital skills.

A full partnership between the manufacturing sector, educational institutions and the government is required to alleviate the skills shortages in the industry and, as such, to make manufacturing competitive in South Africa, contributing positively to employment and GDP growth. Most manufacturing companies operating in the country are multinationals with proven track records from their countries of origin. Subsequently, a partnership between South African companies and these companies to share strategies on recruiting and retaining millennials can be beneficial to both the manufacturing industry in South Africa and the collaborating multinational companies.

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