



Research Article

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Effects of the Covid-19 Pandemic on Academics' Work-Life Balance, Psychological Well-Being, Turnover Intention and Productivity

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Abstract

Achieving a good work-life balance leads to being an employer of choice as well as attracting the best employees. The same can be said of academia, where having a well-balanced work-life balance can contribute to attracting, developing, and retaining suitably qualified academics. In this study, the aim is to examine the effects of the COVID-19 pandemic on academics' work-life balance, psychological well-being, and productivity. The contribution of this study is towards establishing strategies that can be adopted to mitigate the effects of the COVID-19 pandemic on work-life balance, psychological wellbeing, and academic productivity. A quantitative approach was adopted, and the target population consisted of academics from a selected university of technology in KwaZulu-Natal, South Africa. This study employed the structural equation modelling (SEM) technique, and the data was analysed using AMOS 27 statistical software. The results obtained revealed that the majority of academics still work longer hours than is normally expected. Academics were found to have less time to spend with their families and loved ones than is considered typical in the literature for achieving a healthy work-life balance. There is evidence to show that poor psychological well-being of academics strengthens or moderates the effects of work-life balance on academic productivity, with $\beta = -0.2327$ ($p < 0.100$). Furthermore, the findings revealed that academics felt they did not have control over the reduction of their stress levels caused by the heavy workloads placed on them.

Keywords: Covid-19 pandemic; Academic staff, Productivity, Psychological Well-being, Turnover Intention; Work-life Balance

1. Introduction

Healthy work-life balance has become increasingly important in recent years, both in communities and in academic settings. Actually, studies have shown that it considerably boosts worker productivity, which in turn affects the success of institutions (Semlali & Hassi, 2016; Bataineh, 2019).

As a result, many researchers are now interested in conducting research on how employees in various industries manage their professional and personal lives. Employees' working-life challenges include constantly juggling the demands of their personal and professional lives (Bell, Rajendran, & Theiler, 2012). According to Mustapha and Ghee (2013), a lack of balance between work and life often results in academics becoming vulnerable to stress and a resultant alienation from the university. Mwangi et al. (2017) confirmed that academic work can become extremely stressful, with academics often having to allocate all the time available, beyond their normal duties, to publishing their research, participating in conferences, and covering additional teaching duties in order for the university to achieve its objectives.

Due to the traditional workplace's shift into online teaching and learning during the COVID-19 pandemic, academics have been under a lot of stress (Shoab et al., 2022). Additionally, it has been noted that job instability brought on by the economic crisis during the COVID-19 pandemic could be a stressor that had a negative impact on academics' wellbeing and productivity (Pacheco et al.; Wilson et al., 2020; Zhou et al., 2020; Giorgi et al., 2020). Researchers have established that increasing the accountability of academic staff, increasing pressure to publish research articles, spiralling workloads, frequent restructuring, and additional external scrutiny all contribute to increasing stress related to academic work (Bell et al., 2012). Academics are often urged to spare time for planning their daily work in advance (at home) and are also forced to take work home to plan for the next day's tasks or even to complete the previous day's unfinished work. In addition, changes that have occurred in the working environment as a result of the COVID-19 pandemic include changes in the patterns and demands of work and the increasing pace at which technological innovations have progressed, all of which place extra demands on academics (Pienaar and Bester, 2020). An abrupt and quick transition from conventional teaching and learning to online learning was brought on by the COVID-19 pandemic epidemic, which changed the environment and raised the amount of uncertainty (Minello, Martucci, & Manzo 2021). Universities in South Africa used internet platforms more for communications than for teaching and learning before the outbreak (Ugwuanyi, Okeke, and Shawe, 2021). The effects of the COVID-19 epidemic have changed how academics share technical tools and equipment that have been relocated from the main office to houses. Academics nevertheless encounter difficulties despite the availability of these technical tools since the battle for normalcy is still in flux. According to Ugwuanyi et al. (2021), academics with poor mental health have a detrimental impact on teaching and learning and are less productive. According to research by Van Niekerk and Van Gent (2021), the risk to academics' mental health and well-being increased in South African universities during the COVID-19 lockdown. Academics' workloads increased, and teaching and learning were negatively impacted by the remote work strategy employed for COVID-19 (Walker et al., 2021). Therefore, the objective of this study is to examine the effects of the COVID-19 pandemic on academics' work-life balance, psychological well-being, turnover intentions, and productivity.

2. Literature Review

There is a plethora of studies that have been done on the subject of work-life balance and psychological well-being in relation to the productivity and turnover intentions of academics. However, there is a paucity of research in the context of a pandemic, particularly within the South African context. Furthermore, less is known about the effects of the COVID-19 pandemic on academics' work-life balance, psychological well-being, turnover intentions, and productivity within universities of technology in South Africa.

2.1 Overview of work-life balance and psychological well-being of academic staff in the South African context

Other than the COVID-19 pandemic, other factors have also had an impact on academics, working conditions, and economic instability. It is evident that the consequences of the pandemic have

caused fear, poor psychological well-being, and more economic instability (Cavallo & Forman, 2020). The shift from the traditional workplace to working online has created several psychological challenges among academic staff that affect their productivity and work-life balance (Gigauri, 2020; Anderson, 2020). Sahni (2020) noted that the poor psychological well-being of academics during COVID-19 was an occupational issue, and its negative effect on productivity has made it necessary to manage psychological well-being for sustainable performance. In addition, Jyoti and Bhau (2017) stated that management of psychological well-being is important for consistent productivity, and line managers can assist staff to cope with psychological well-being during uncertain situations. The supportive behaviours of managers assist subordinates to manage their challenges and address ambiguous situations (Abbasi, 2018).

Academic staff in higher education institutions have reportedly been experiencing increasing conflicts between personal life and work as they try to pursue the quality of life they desire while, at the same time, fulfilling their work-related obligations (Eby et al., 2005). Balancing work and life successfully is one of the chief challenges facing academics today and has been for the past two decades (Halpern, 2005; Franco et al., 2021; Bataineh, 2019). The ability of academics to balance their professional and personal lives can increase the sustainability of undergraduate and graduate programmes, which can have both short- and long-term effects on education quality (Devi & Lalu, 2018; Beer et al., 2015; Sahni, 2020). In the South African context, these findings from the literature reaffirm that academics generally operate under immense pressure, which destabilises their work-life balance. Furthermore, the struggle caused by the outbreak of the COVID-19 epidemic and its threats to human life have had detrimental consequences in practically all universities (Charoensukmongkol & Puyod, 2021). To continue offering education during lockdowns, online learning and other flexible means of learning have been welcomed and adapted into new formats of instruction (Toquero, 2020). However, because the majority of academics were not fully equipped for this online teaching style, this online deployment caused additional issues for them (Javier, 2020). This has had significant, detrimental effects on the academic productivity of universities and their faculty members, who have taken on excessive workloads related to online training in order to keep up with technology, necessitating more time to practise and more effort to be put forth in class preparation (Park et al., 2020). The findings of studies indicate that work-life balance influences the success of the institution insofar as it improves the productivity of academics, as evident partly in the successful graduation of students. The fact that pass rates in South Africa have remained unsatisfactory throughout recent decades could be considered an indication of a weakness, partly attributable to the workloads of academic staff.

The literature search has revealed that studies that have been conducted so far that are focused specifically on the effects of work-life balance, psychological well-being, and turn-over intentions on academics and their productivity in the current South African context during the COVID-19 pandemic are limited. The COVID-19 outbreak has posed major challenges in most universities in the country and has led to changes in where and how people work, leading to work-life conflict to a greater extent than most academics have ever experienced before. Unequivocally, this knowledge gap has to be filled, and this is relevant to other universities within South Africa that will gain insights into suggested strategies for improving the nature of instruction by harmonising work and life for academics.

2.2 Importance of psychological well-being of academic staff

Due to the shift from the traditional workplace to online teaching and learning during the pandemic, academic staff have encountered high levels of stress (Shoab et al., 2022). Furthermore, employment insecurity owing to the economic crisis during the COVID-19 pandemic has been observed as a potential stressor that adversely affected the well-being and productivity of academics (Wilson et al., 2020; Pacheco et al., 2020; Zhou et al., 2020; Giorgi et al., 2020). The productivity of academics in administration, research, and teaching can also be impacted by their health (Franco et al., 2021; Fazal

et al., 2019; Ugwuanyi et al., 2022). This can have an impact on the general standard of higher education. Additionally, improved psychological well-being of academic staff will assist a university in attracting well-qualified, top academics (Van Niekerk and Van Gent, 2021).

According to Rodríguez-Rey, Garrido-Hernansaiz, and Collado (2020), in Spain, the COVID-19 pandemic caused about 37% of the academic staff to exhibit psychological distress (symptoms of traumatic stress), with the estimated effects on women and young people who work in academia being consistently greater. The UK population was mainly resilient in the early phases of the COVID-19 pandemic, according to Shevlin *et al.* (2020). The psychological distress, financial loss brought on by the pandemic, having a pre-existing medical condition, and providing care for children at home were all connected to COVID-19. According to Shevlin *et al.* (2020), as the impact of the pandemic spreads, more surveys are necessary, and governmental responses should include steps to safeguard mental health, a crucial aspect of physical and mental welfare.

The COVID-19 pandemic increased the chance of viral infection-related death as well as the severe psychological strain on the rest of the world (Xiao, 2020). Academic performance and student mental health were expected to be affected by the ongoing pandemic, strict isolation regulations, and delays in beginning schools, colleges, and universities around the world. According to Mustapha and Ghee (2013), an imbalance between work and life often results in academic staff becoming vulnerable to stress and a resultant alienation from the university. Mwangi et al. (2017) confirmed that academic work has become extremely stressful, with staff often having to allocate all the time available, beyond their normal duties, to publishing their research, participating in conferences, and covering additional teaching duties in order for the university to achieve its goals. This has increased since academics were expected to be in consultation with their students via online platforms, which they had to control.

Positive psychological well-being of academic staff can assist in increasing a university's output and attaining higher levels in the national and international university rankings, which also attracts top students and academics to a university (Javier, 2020). Considered the most important asset in higher education institutions, academics play a key role in achieving university objectives, and their performance affects the process of learning and the results achieved by the students (Gooding, 2018). The main objective of higher education institutions (HEIs) is to develop competent graduates, whose success enables these men and women to occupy a niche in the provision of university education (de Blume & Candela, 2018; Bataineh, 2019).

2.3 Work-life balance challenges facing academics

As mentioned already, the COVID-19 outbreak presented major challenges in academia as more teaching and administration interventions had to be adopted while migrating to online learning systems. These were implemented by several institutions in order to proceed with their academic programmes while also complying with government regulations (Franco et al., 2021). Furthermore, the work-life balance of academics has been heavily affected as the number of responsibilities has increased as a result of increasing numbers of retirements and the loss of experienced academics since the COVID-19 pandemic (Bhumika, 2020). Owing to the conflict generated between professional and family environments, some academics, when planning their careers, withdraw from academic life soon after completing their degrees in order to enter other professions (Cabay et al., 2018). These sentiments are echoed by previous studies such as Selesho and Naile (2014), who emphasise that many higher education institutions are worried about retaining well-qualified staff. This is due to the fact that there is a clear link between academic staff turnover and academic education's quality, consistency, and success (Selesho & Naile, 2014).

Zilli and Trunk-Sirca (2009) contend that as university management places a greater emphasis on efficiency, academic power has shifted away from academics, leading to a fundamental conflict of principles. According to Houston, Meyer, and Paewai (2016), academic work is frequently perceived as being individualised, self-managed, and intrinsically driven. Kenny and Fluck (2014) intimate that

academics face competing tensions as a result of growing workload demands and pressure to create noteworthy research results. This could prove to be considerably counterproductive for many people as well as, in the end, for the institution. Zilli and Trunk-Sirca (2009) state that management of academic workloads focuses on allocating work to faculty members and compensating them accordingly. It has always been difficult to manage the workload of faculty members. Kenny (2018) also argued that there is a degree of managerial hesitancy toward quantifying what academics do. Kenny (2018) argues further that this finally places in question the extent of goodwill that can be expected from academic workers, as an investigation would provide evidence of many academics carrying well above what might be considered to be fair and reasonable workloads.

3. Theoretical framework

The desire to study work-life balance stems from perspectives that emphasise the conflicting roles between work and life responsibilities (Potgieter & Barnard, 2010). The perspectives being explored border on work-life balance, work-life conflict, work-life interaction, work-life integration, and psychological well-being (Mostert & Oosthuizen, 2010; Wood et al., 2021). Overwork has often been identified as being primarily responsible for the rise of problems stemming from work-life imbalances (Roberts, 2007; cited in Wood et al., 2021). This has contributed to the widely held belief that work-life conflict arises when forces that are incompatible with one another converge on responsibilities in work and family. According to Eby et al. (2005), studies on work-life conflict began with a one-dimensional conceptualization of the construct and are particularly concerned with married women who are employed, couples who are in dual careers, and single-parent homes (Potgieter and Barnard, 2010; Wood et al., 2021).

Theoretically, the “spill-over” concept is perceived as one involving two contradictory types: positive or negative. “Positive spill-over” refers to a situation where satisfaction and achievement experienced in one domain can lead to satisfaction and achievement in another (Wood et al., 2021). On the other hand, “negative spill-over” refers to a scenario where problems and despair experienced in one domain are transferred to another domain (Wood et al., 2021). The earliest perspectives on work-life balance focused on the negative impact that work had on family life (Greenhaus, Collins, & Shaw, 2003; Rost & Mostert, 2007). Generally, the focus was more on the effects of the spillover from work to family than on the reverse dichotomy, that is, from family to work (Frone, Russell, & Cooper, 1997; Fu & Shaffer, 2001).

The consequences of the COVID-19 pandemic raised concerns regarding work-life balance and its consequences as lockdown restrictions forced academic staff to shift from face-to-face to virtual teaching and learning, working from home. Azevedo et al. (2020) added that work-life imbalance leads to poor psychological well-being, low productivity, and high turnover intentions. The adoption of spill-over theory for this study confirms that the experiences of work and life affect the personal experiences of academic staff members, a development that also affects their academic productivity and psychological well-being. The theory is based on the most popular view of the relationship between work-related activities and family life (Knott, Posen, & Wu, 2009). In relation to work-life balance, this can be observed through supportive supervisors or colleagues, which could alleviate work-family spillovers (Garcia-Cabrera et al., 2018). Additionally, work-to-family spillover can benefit from flexible, employee-focused scheduling. Therefore, policies that prioritise academic employees, allow for flexibility in the workplace, and support families can improve the active transfer of knowledge from the home to the workplace and contribute to achieving a healthy work-life balance (Shouman, Vidal-Sué, & Alarcón Alarcón, 2022).

4. Methodology

A quantitative method was used to obtain reliable data, collected by means of structured questionnaires consisting of closed questions. The quantitative approach was employed because it

placed a premium on the objectivity and reliability of the findings and encouraged replication (Saunders, Lewis, & Thornhill, 2016). Creswell and Creswell (2018) describe the quantitative research approach as helpful for depicting patterns and clarifying the relationship among factors found in the literature. The data were collected from junior lecturers, senior lecturers, and professors across three faculties of a selected university. The quantitative method assisted in obtaining the intended information and made statistical comparisons of different situations possible. The target population for this quantitative survey consisted of 175 full-time academics at the selected University of Technology in KwaZulu-Natal. A census sampling method was employed for the study because the population size was very small and every member of the population had an equal chance of being selected. The method also produced results that are representative of the whole population (McCombes, 2019). Table 1 shows the population and sample size.

Table 1: Population and sample size

Designation	Population size	Sample size
Junior Lecturer	41	41
Lecturer	103	103
Senior Lecturer	27	27
Associate Professor	2	2
Assistant Professor	2	2
Total	175	175

Structural Equation Modelling (SEM) techniques were employed in the study to establish the predictive power and reliability of the developed model. The data were then analysed using Analysis of Moment Structures (AMOS) 27 statistical software. Exploratory factor analysis was performed to check the reliability and validity of the tool used to collect the data and ensure that the data were suitable for analysis. Confirmatory factor analysis was used to assess the strength and relationship of the measured variables, and model goodness of fit was presented. Exploratory factor analysis (EFA) was utilised to evaluate the validity and reliability of the accepted constructs. Evaluation of the data's suitability for factor analysis, number determinations for factor extraction, factor retention and rotation, and factor interpretation are all processes in the EFA process. The survey instrument's discriminate and convergent validity, as well as its reliability (Cronbach's alpha and composite), were all evaluated as part of the analysis. Cronbach's alpha was used to test the measurement's reliability. Table 2 shows that no item is lower than the acceptable value of the 0.7 indicator of composite reliability (Mulang, 2022). As a result, the first requirement of convergent validity for these dimensions was satisfied. Table 2 shows that the lowest item value for the Work-Life Balance (WLB) model was 0.717 (B9) and the highest item value was 0.905 (B7). The assessment of the model shows the recommended value of ≥ 0.7 demonstrating that the item indicator is an accurate reflection of the factor, which is an excellent reliability indication.

Table 2: Reliability and validity statistics

	AVE	CR	Alpha
WLB	0.600	0.899	0.775
SDA	0.617	0.918	0.785
TOI	0.806	0.806	0.714
ACP	0.853	0.853	0.771

Composite reliability was also employed for its higher estimate of true reliability, as stated by Naicker (2019). Naicker (2019) intimates that composite reliability is the best way since it may result in larger estimations of more accurate reliability due to Cronbach's alpha overestimating or underestimating

scale reliability. When values range from 0 to 1, composite reliability evaluates the indicators' reliability. Composite reliability for all the factors shows no value below 0.70. Table 2 shows that the value for "psychological well-being of academics (SDA)" is 0.918, which is the highest amongst all the factors. The value for work-life balance (WLB) is 0.899; the value for academic productivity (ACP) is 0.853; and the lowest value amongst all the factors is turnover intention (TOI), which is 0.806.

Convergent validity is assessed by the average variance extracted (AVE). The AVE should be above 0.5, thereby accounting for more than 50% of the variances observed. The values are between 0 and 1 (Fornell and Larcker, 1981; Bagozzi and Yi, 1988, as cited in Naicker, 2019). The results show that the values varied from 0.600 to 0.853. Psychological well-being of academics (SDA) has the highest value of 0.806, while work-life balance (WLB) has a value of 0.600, and academic productivity (ACP) has a value of 0.853. The recorded AVE findings reveal values higher than the recommended 0.5 limit. The findings demonstrate that validity converges successfully, demonstrating the measurement model's efficacy, reliability, and validity. As a result, it was determined that all of the measurement model's elements had sufficient reliability and convergent validity.

5. Results

This section provides a detailed analysis of the results through the interpretation of the data obtained from the questionnaire that was administered to the participants. Descriptive statistics were employed to examine and analyse the data obtained in this study.

5.1 Demographic profile of participants

Table 3 shows the frequency and percentage distribution of demographic profiles. The results show that most of the participants were female. 63.7% of the academics were married, 30.4% were single, and 5.9% chose not to specify (other); 77.5% of the academics indicated that they lived with their dependents. The gender, marital status, and dependents were understood to be important aspects of the study, as these also impact work-life balance according to the literature. For instance, Rosser (2004), cited in Dorasamy and Letooane (2015), indicated that female academics tend to be less satisfied with certain aspects of their work-life balance than males. This is caused by the fact that a female academic generally has more to do at home to take care of her family than a male academic. Most female academics completed work and domestic duties at home, especially during COVID-19, which also contributed to conflict between their duties. During the COVID-19 pandemic, internet teaching and other flexible learning modalities were adapted and modified into new instructional formats to continue to provide education despite the lockdown (Toquero, 2020).

Table 3 shows further that 75% of participants have either a Master's Degree or a PhD, which confirms that most academics in the institution hold suitable qualifications for working in academia. A further 9.8% have honours degrees, 10.8% have BTech degrees, and 3.9% have "other." These results show that, while most of the participants do meet the minimum requirements for lecturing, many must still pursue their studies further to obtain Master's or Doctoral degrees, and this has implications for work-life balance. These results confirm that academics are undertaking work for their personal upliftment and may also experience conflict in work-life balance (Eby et al., 2005). Therefore, many academics currently experience heavy workloads while they are also pursuing their studies, as required by the university to meet the qualifications currently required in academia.

Regarding the positions occupied, the largest group of academics (63.7%) were classified as lecturers, followed by senior lecturers (19.6%) and junior lecturers (14.7%), with associate and assistant professors (1.0%) each being the smallest group.

Table 3: Demographic profile of participants

Variable	Category	Frequency (F)	Percentage (%)
Gender	Female	64	62.7
	Male	38	37.3
Marital Status	Single	31	30.4
	Married	65	63.7
	Other	6	5.9
Living with Dependants	Yes	79	77.5
	No	23	22.5
Highest Qualification	PhD	13	12.7
	Master's Degree	64	62.7
	Honours Degree	10	9.8
	BTech	11	10.8
	Other	4	3.9
Professional Position	Assistant Professor	1	1.0
	Associate Professor	1	1.0
	Senior Lecturer	20	19.6
	Lecturer	65	63.7
	Junior Lecturer	15	14.7
Years Employed	01 – 10	38	37.3
	11 – 20	39	38.2
	21 – 30	25	24.5
Hours Worked per Week	05 – 25	11	10.8
	26 – 45	57	55.9
	46 – 85	34	33.3

5.2 Results from the model

Each one of the constructs is measured by various numbers of valid items. For instance, initially, Work-Life Balance had 10 items, but only six of them (B2, B5, B6, B7, B8, and B9) were found to be valid in the context of the University of Technology. In the context of the University of Technology, the remaining four components were not convergent toward the work-life balance construct. The factor loading of each build item reveals the measurement contribution of that item. Any factor greater than 0.5 is considered acceptable, whereas any factor lower than 0.5 denotes low factor loading. As can be seen in the measurement model (Figure 1), the item (B2) measures work-life balance at 72%, the item (B5) measures work-life balance at 68%, the item (B6) measures work-life balance at 76%, the item (B7) measures work-life balance at 87%, the item (B8) measures work-life balance at 85%, and the item (B9) measures work-life balance at 77%. Since there is always a margin of error when evaluating abstract concepts, items are always accompanied by the error word (e) (Mabaso 2017). Therefore, in the case of work-life balance, e8 is the error term of the item (B2), e9 is the error term of the item (B5), e10 is the error term of the item (B6), e11 is the error term of the item (B7), e12 is the error term of the item (B8), and e13 is the error term of the item (B9). The correlation coefficients between the constructs are shown by the coefficients of single arrowheads. For instance, the relationship between academic productivity and work-life balance has a correlation value of -.25, which indicates that as one of these two variables' standard deviations rises, the other one will as well; the standard deviation of the other variable decreases by 25%. The results obtained from the developed model show that work-life balance has an influence on academic productivity. Stress, anxiety, and depression at work and turnover intentions strengthen the negative effects of work-life imbalance on academic productivity. Each one of the constructs is measured by various numbers of valid items. For instance, initially, Work-Life Balance had 10 items, but only six of them (B2, B5, B6, B7, B8, and B9) were found to be valid in the context of the University of Technology. In the context

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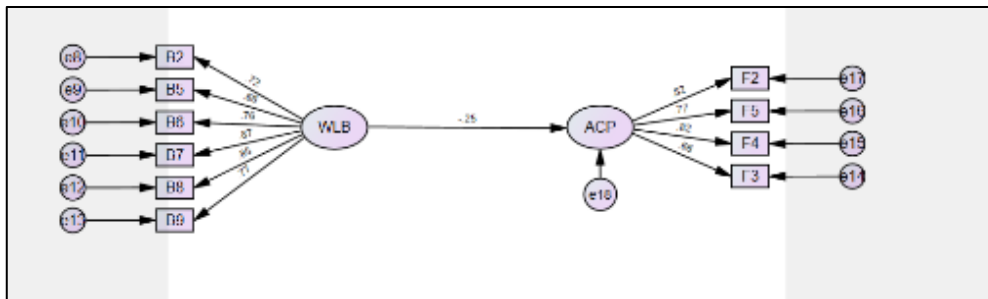


Figure 1: Developed measurement model

The developed structural model, as depicted in Figure 1, consists of two constructs, namely:

- Work-Life Balance (WLB)
- Academic Productivity (ACP)

Work-life imbalance influences academic productivity with evidence: $\beta = -0.238^*$ (P -value < 0.05). Work-life balance has an influence on academic productivity, with results indicating that work-life balance influences academic productivity. Working long hours and having an increased workload were among the effects that contributed to the academic being stressed and having other illnesses related to their work. This is consistent with the theory that work-life balance reduces academic productivity. According to Park et al. (2020), juggling work demands and personal commitments poses difficulties for academics. Researchers have shown that striking a balance between work and personal life is critical among academics for optimum performance (Charoensukmongkol & Puyod, 2021; Toquero, 2020; Javier, 2020).

5.3 Moderating effects

The moderating effects' Z-scores are displayed in Figure 2 which consists of seven constructs, namely:

- Work-Life Balance (WLB)
- Psychological Well-Being of Academics (SDA)

- Turn-Over Intentions (TIO)
- Stress, Depression and Anxiety; Work-Life Balance (SDAWLB)
- Turn-Over Intentions; Work-Life Balance (TIOWLB)
- Turn-Over Intentions; Work-Life Balance; Psychological Well-Being of Academics (TIOWLBSDA)
- Academic Productivity (ACP)

The Z-score statistic is highly helpful since it allows for the comparison of two scores from several normal distributions and the measurement of the likelihood that a score will fall within one (Joseph and Olugbara 2018). To do this, points from a normal distribution are transformed into Z-scores in a typical normal distribution (Joseph and Olugbara, 2018). The Z-scores that produce negative values indicate that the raw data were less than the mean. Positive values indicate that the score is higher than the average. Psychological well-being of academics and turnover intentions strengthen the negative effects on work-life balance and, thus, the productivity of academics. There is no evidence to support that either turn-over intentions or both the psychological well-being of academics and turn-over intentions strengthen the effects of work-life balance on the productivity of academics, as the relationships were not significant. However, there is evidence to show that poor psychological well-being of academics strengthens or moderates the effects of work-life balance on the productivity of academics with $\beta = -0.232$ ($p < 0.100$). Furthermore, the findings revealed that academics felt they did not have control over the reduction of their stress levels caused by the heavy workloads placed on them. They find it difficult to relax, and they do not have much time with their families. The academics also revealed that the research requirement does not complement what they do daily at work. This was supported by their responses and the results of the study. Occupational stress is regarded as stress at work in an institutional context. It negatively affects the attitude and behaviour of academics if they cannot control stress at work.

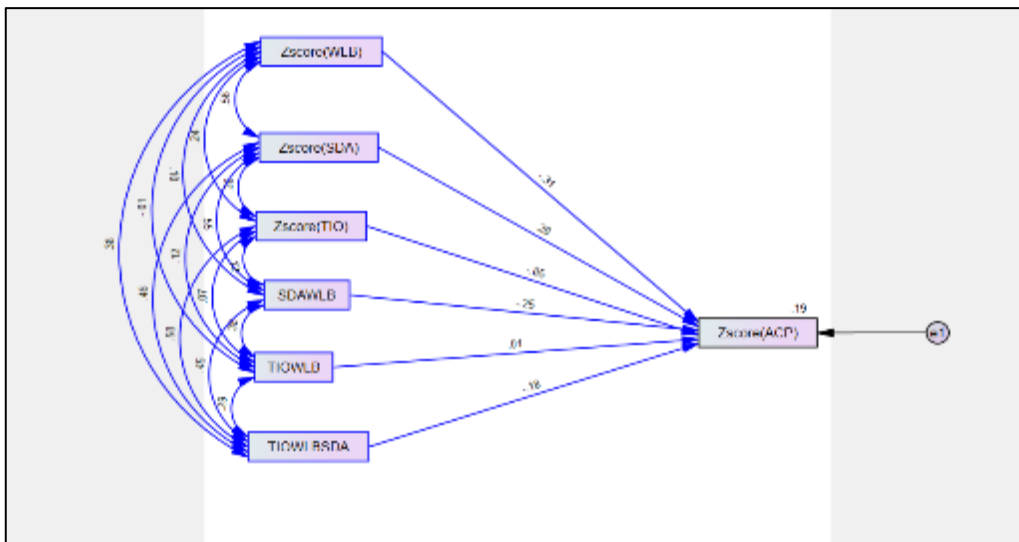


Figure 2: Moderating effects

6. Discussion

Academic staff have experienced high levels of stress during the pandemic because of the transformation of the traditional workplace into teaching and learning online (Shoab et al., 2022).

Furthermore, employment insecurity as a result of the economic crisis during the COVID-19 pandemic has been observed as a potential stressor that adversely affected the well-being and productivity of academics (Wilson et al. 2020; Pacheco et al. 2020; Zhou et al. 2020; Giorgi et al. 2020). From this study, it was possible to identify work-life challenges that are currently facing academic staff at the selected university of technology. It was evident that working long hours, excessive workloads, limited time to socialise, working late at night or weekends, and work stress, as noted in the literature, are major challenges affecting the work-life balance of academics at the selected university. In order to improve work-life balance, management should, according to Dhanya and Kinslin (2016), implement flexible schedules, facilities for commuting to work, and initiatives to cultivate academics whose work schedules are flexible to achieve better work-life balance, which results in their attaining higher levels of job satisfaction, satisfaction with home activity, and limited incidences of role-related conflict (Priya 2018; Kar et al. 2019; Mayya et al. 2021). Moreover, it was found that stress at work, anxiety, depression, and turnover intentions increased the negative effects of work-life balance on the productivity of academic staff. This finding was supported by numerous studies in which it was found that poor psychological well-being was one of the most common consequences of work-life imbalance, which ultimately resulted in compromised academic productivity and a higher frequency of absenteeism and turn-over intentions (Layous et al., 2011; Seligman, 2018).

The structural model suggested that work-life balance influences academic productivity and that stress at work, anxiety, depression, and turnover intentions strengthen the negative effects of work-life balance on academic productivity. The structural model developed (Figure 1) provides a useful tool for predicting the effects of work-life balance, psychological well-being, and turn-over intentions on the productivity of academics at the selected University of Technology in KZN during the COVID-19 pandemic in the South African context. This study contributes methodologically by using SEM, which is a comprehensive and appropriate approach to determining the causality and strength of relationships between the constructs in the proposed model. The questionnaire survey, developed from existing literature, demonstrated reasonable reliability and, therefore, can be adopted in future studies to validate the results of the current study or be applied in another context. The results of this study add to the sparse body of research on work-life balance, psychological health, turnover intentions, and academic output, with particular reference to a university of technology in the contemporary South African environment.

7. Conclusion

Based on the research, it can be said that all academic staff members will not function at their highest potential without work-life balance and psychological well-being. A well-balanced work-life balance and positive psychological well-being have a positive impact on the productivity of academic staff. Having the best academics will attract the highest-quality students to the university and, subsequently, help to source the best academics to join the university. In turn, this favourable reputation will influence public perceptions and assist in sourcing more funding from sponsors. The findings of the study confirmed that poor work-life balance and psychological well-being during COVID-19 influenced academic productivity negatively. Poor psychological well-being at work strengthens the negative relationship between work-life balance and academic productivity. Furthermore, the results of earlier studies that supported the current study's conclusions were used to confirm them. Last but not least, although the results of the current study cannot be generalised to other institutions of higher learning because it was only carried out at one chosen university of technology in KwaZulu-Natal, they will be relevant to other institutions whose COVID-19 epidemic conditions are equivalent.

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