

JOB MOTIVATION AND ROLE CONFLICT AS PREDICTORS OF EMPLOYEES MENTAL WELLNESS: EVIDENCE FROM UNIVERSITY LECTURERS

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Abstract

This study investigated the influence of job motivation and role conflict on the mental wellness of employees in Uyo metropolis. A total of 91 employees, including one hundred and two (102) males and eighty-nine (89) females, participated in the study. The ages of the participants ranged from 21 to 60 years, with a mean age of 40.41 years. A purposive sampling technique was used to select participants. Three scales were used to gather data for the study: the Motivation at Work Scale by Gagné et al. (2010), the Role Conflict and Ambiguity Scale by Rizzo et al. (1970), and the Mental Wellness Scale by Ryff (1989). The study adopted a cross-sectional survey design, and Two-way Analysis of Variance was used for statistical analysis. The study revealed significant findings. The first hypothesis, which stated that employees with high job motivation would have higher mental wellness than employees with low job motivation ($F(1,187) = 120.887, P < 0.01$), was accepted. The second hypothesis, which stated that employees with high role conflict would have lower mental wellness than employees with low role conflict ($F(1,187) = 55.812, P < 0.01$), was also accepted. The third hypothesis, which stated that there would be a joint influence between job motivation and role conflict on the mental wellness of employees ($F(1,187) = 23.957, P < 0.01$), was likewise accepted. The findings of this study are discussed in relation to past theoretical and empirical literature. Conclusions were drawn, and implications and recommendations were advanced based on the study findings.

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INTRODUCTION

Mental wellness has progressed rapidly since the emergence the field over 5 decades ago. Recent surveys show that psychologists and other social scientists have taken huge steps in their understanding of the factors influencing mental/subjective wellness (Schmutte and Ryff, 2014). Employee mental wellness is a multi-dimensional construct that has been conceptualized in various ways by scholars. On the other hand, Warr (2015) operationalized mental wellness along three dimensions: satisfaction-dissatisfaction, enthusiasm-depression, and comfort-anxiety. According to Diener and Suh (2016), mental wellness may appear in the form of thoughts or affect. This is consistent with Ryff and colleagues' model of mental wellness, which encompasses six dimensions: self-acceptance, personal growth, purpose in life, positive relationships with others, environment mastery, and autonomy (Ryff, 2013).

In considering mental wellness, a distinction is often made between hedonic (positive emotions) and eudemonic (positive functioning) well-being (Guest, 2017). Hedonic wellness is typically represented by life/job satisfaction and is driven by the need for rewards/pleasure and the avoidance of negative experiences, as found in the work of Ryan and Deci (2018). Eudemonic wellness provides the opportunity for self-expression and is derived from the assessment that one's life situation is meaningful, as found in the work of Ryff and Keyes (2012). Scholars have found mental wellness to relate to some outcomes. For example, Cartwright and Cooper (2008) argued that people with higher levels of mental wellness at work are healthier, have happier lives, and live longer. In their field of study, Wright and Cropanzano (2000) demonstrated positive relationship between mental wellness and job performance. Similar findings were reported by Robertson, Birch, and Cooper (2012), in which mental wellness was found to have incremental value over and above that of positive job and work attitudes in predicting self-reported levels of performance.

The antecedents of mental wellness have also been examined by scholars, some of which include: transformational leadership (Arnold, 2017); authentic leadership and attachment insecurity (Rahimnia and Sharifirad, 2015); perceived organizational support (Panaccio and Vandenberghe, 2009); meaningful work and perspective taking (Arnold and Walsh, 2015); employee perception of HR practices (Baluch, 2017); emotional intelligence (Carmeli, Yitzhak-Halevy, and Weisberg, 2009); and mental wellness (Heffernan and Dundon, 2016). Ryff (2013) defines it as a representation of wellness, conceived as progressions of continued growth across the life course. Schmutte and Ryff (2014) defined it as a general feeling of happiness. Similarly, Panaccio and Vandenberghe (2009) conceptualized mental wellness as being characterized by the presence of positive effects, the absence of negative effects and the joint presence of job and life satisfaction.

Recent arguments suggest that given changes in working conditions, such as the influx of information technology, financial unsettlement, and economic, political, and global upheavals, organizations must consider employee mental wellness in order to improve their performance (Guest, 2017). Therefore, employers have focused on implementing practices that can foster employee mental wellness. These practices, mainly within the remit of HR management, often pose paradoxical challenges to the organization because of the contradictions between those that positively influence mental wellness and those that focus on increasing organizational performance at the expense of employee wellness (Arnold, 2017).

Furthermore, mental wellness has been related to both work and personal life outcomes. In other words, although correlational, the inference from this research suggests that an individual's level of mental wellness contributes to desired outcomes at work and in life (Guest, 2017). Worrall and Cooper (2012) recently reported that a low level of work-related wellness among employees is estimated to cost about 5–10% of Gross National

Product per annum. However, the quality of working life as a theoretical construct remains relatively unexplored and unexplained organizational psychology research literature.

A recent publication by the National Institute of Clinical Excellence (NICE, 2007) emphasizes the core role of assessment and understanding how working environments pose risks for mental wellness through of control and excessive demand. The emphasis placed by NICE on assessing and monitoring employees' mental wellness stems from the recognition that these processes are the key first steps in identifying strategies for improving the quality of working life and addressing workplace risks.

Over the years, many studies have been conducted to understand the dynamics of mental wellness. However, the variables of interest in this study are role conflict and motivation.

The term "role conflict" (RC) refers to an inter-role issue emerging from work-related demands (Oscharoff, 2011). It is recognized as a source of chronic stress and has been shown to significantly affect job satisfaction, mental wellness, burnout, and somatic complaints (Glazer & Beehr, 2005). Role conflict is generally understood as the simultaneous presence of two or more role expectations or demands such that the fulfillment of one makes it more difficult to fulfill the other (Katz & Kahn, 2018). This condition often results from a lack of clarity regarding performance evaluations, advancement opportunities, scope of responsibilities, and superiors' expectations of an individual in a hierarchical position (Katz & Kahn, 2018). One adverse outcome of role conflict is a decline in job satisfaction, defined for this study as an individual's perception of their current status in a given role, shaped by how they interpret the required tasks and expectations (Montgomery, 2011).

Rizzo et al. (2020) defined role conflict along dimensions of congruence–incongruence or compatibility–incompatibility among role requirements. These aspects are assessed against standards or conditions that influence role performance. Their role conflict scale, based on the framework by Kahn et al. (2018), includes dimensions such as person-role conflict, inter-role conflict, inter-sender conflict and intra-sender conflict. In their study, Rizzo et al. (2020) also explored role overload as a specific form of role conflict. Latack (2012) highlighted that role conflict can stem from a mismatch between the time and organizational resources available to an individual and the expectations of their role set. Similarly, Wincent et al. (2008) treated role conflict as a significant role stressor. Boles, Wood, and Johnson (2003) added that role conflict represents a stressful condition arising from inconsistent expectations and the inability to reconcile them.

Katz and Kahn (2018) remarked that role conflict emerges from simultaneous role demands that are difficult to fulfill simultaneously. Fisher (2001) emphasized the inevitability of failing to meet an expectation under such circumstances. King and King (1990), as well as Lee (2010), described these demands as pressures placed upon a position. Montgomery (2011) identified specific role conflict scenarios, including: (i) divergent evaluation criteria from multiple role assigners, (ii) the perception that proficiency with new technologies will affect performance assessments, and (iii) conflicting demands from multiple supervisors. These situations often reflect ineffective interdependencies, ultimately impairing employee performance and mental wellness.

Tarrant and Sabo (2010) outlined that role conflict may arise when: (i) individuals take on new roles requiring unfamiliar skills, such as engaging in decision-making while maintaining a distinct professional identity, (ii) they are expected to handle evolving technologies, techniques, or regulations, or (iii) they lack the training necessary to adapt to these changes. Rizzo, House, and Lirtzman (2017) proposed that role conflict can be operationalized in terms of congruence/incongruence or compatibility/incompatibility between: (i) an executive's values and expected role behavior, (ii) available time, resources, or abilities versus role expectations, (iii) the multiple roles an individual must fulfill, and (iv) the variety of organizational inputs influencing role expectations.

Kahn and Byosiére (1992) proposed that both job characteristics and personal attributes may either buffer or intensify the impact of work stressors, thereby affecting mental wellness. Supporting this, Fisher and Gitelson (2006) and Jackson and Schuler (2008) found that although role conflict significantly affects employee mental wellness, much variability in outcomes remains unexplained. These findings highlight point to the need for future studies to explore variables that may moderate the role of the conflict–mental wellness relationship.

Latack (2014) observed that a large body of empirical research links role conflict with a range of negative outcomes, such as job dissatisfaction, poor mental wellness, distrust, anxiety, tension, turnover, absenteeism, and physiological symptoms like high blood pressure. Role stressors such as role conflict have been found to reduce organizational commitment (Agarwal, 2016), job satisfaction (Abdel-Halim, 2017), and performance (Jackson & Schuler, 2017). Additionally, Kemery et al. (2016) concluded that both role conflict and role ambiguity have direct effects on employees' mental wellness and physical health.

In their model, Kemery et al. (2008) demonstrated that role conflict and ambiguity directly influence job-related tension, job satisfaction, and the intention to leave an organization. These variables also have indirect effects. Beehr et al. (2017) noted that most research on role conflict has focused on mental wellness outcomes. Danna and Griffin (2009) emphasized that employee mental wellness in the workplace is a crucial area that deserves continued attention, further noting that the broader occupational well-being literature largely centers on this dimension.

Another variable relevant to this study is job motivation. According to Beer, Spector, Lawrence, Mills, and Watson (2011), understanding employee motivation is essential for meeting workplace expectations. Motivation, whether internal or external, propels individuals to achieve goals. In organizational contexts, motivation fosters commitment and improves performance. Intrinsic motivation refers to actions driven by internal satisfaction, whereas extrinsic motivation is prompted by external rewards (Kreitner & Kinicki, 2008). Baron (2013) argued argues that job motivation and mental wellness are closely linked and positively correlated. This relationship is bi-directional, as mental wellness can also influence job motivation when accompanied by rewards (Robert, 2005). This suggests that motivational strategies, especially those incorporating meaningful rewards, can enhance employee both productivity and mental wellness among employees.

To attain peak performance, organizations must harness employee potential through effective motivation strategies (Burke & Cooper, 2007). However, Burke and Cooper (2008) observed that many organizations still fall short. Recent organizational performance initiatives have emphasized positive organizational behavior and emotions, such as optimism, engagement, and trust (Cameron & Dutton, 2012).

Low job motivation is a significant issue across organizational levels and has become one of the most pressing workplace concerns of the 21st century (Matteson & Ivancevich, 2007). These authors estimate that low job motivation contributes to half of all absenteeism, 40% of employee turnover, and 5% of lost productivity, primarily because of primarily due to preventable occupational stress, which undermines mental wellness.

Research into sources of job motivation, particularly the effects of intrinsic versus extrinsic goals, has revealed that individuals driven by extrinsic goals tend to report lower levels of satisfaction and mental wellness (Deci & Ryan, 2013). Burke (2007) found that various types of workaholics are driven by different fears and beliefs about their work and social environments. Considering the above, this study investigate sseeks to investigate the influence of role conflict and job motivation on employees' mental wellness.

Data from different countries around the world indicate that mental wellness problems are the main cause of several employees dropping out of work (Thippeswamy, 2018). In the Netherlands, approximately 58% of work-related disabilities are related to mental wellness (Houtman et al., 2019). Mental wellness problems have an impact on employers and businesses directly through increased absenteeism, negative impact on productivity

and profits, and increased costs to deal with the issue (Thippeswamy, 2018). It is increasingly recognized that the mental health of employees is a crucial determinant of their overall health and that poor mental health and stressors at the workplace can be contributory factors to a range of physical illnesses like hypertension, diabetes, and cardiovascular conditions, amongst others. In addition, poor mental health can also lead to burnout among employees, seriously affecting their ability to contribute meaningfully in both their personal and professional lives (WHO, 2015).

On the other hand, role conflict impacts employees and employers of an organization in diverse ways. It can lead to decreased productivity, lower morale, and increased stress levels (Fisher, 2003). It can also lead to absenteeism, turnover, and legal issues. According to the survey respondents, 26% of employees and 20% of employers claim that role conflict at work is a common occurrence (Glazer et al., 2005). Such reports are alarming and require immediate solutions. It is pertinent to understand that motivation plays a crucial role in the experience of optimum mental wellness. Lack of job motivation leads to several counterproductive behaviors at work, which in turn lead to low productivity, high levels of stress, inability to overcome challenges at work, apathy, and poor customer service (Suzanne, 2018).

Building on the above, numerous attempts have been made to understand the association between job motivation, role conflict, and mental wellness. Still, no investigations have been made so far that are specifically directed at the civil service sector. When it comes to the context of Nigeria, literature seems even more limited on the subject. Therefore, this investigation's purpose is the empirical explanation of the association between job motivation and role conflict on mental wellness of employees. This study contributes to the existing literature by providing information about the causal relationship between job motivation and role conflict on mental wellness of employees. Meanwhile, very few studies have been conducted in the area in Nigeria, specifically Akwa Ibom State. Given the importance of employees' wellbeing in Nigeria and how employees perform in various organizations, it is pertinent that studies be conducted in Akwa Ibom, Nigeria. This study aimed to fill this gap by providing indigenous literature on the influence of job motivation and role conflict on mental wellness among employees in Uyo, Nigeria.

This study has broad and specific objectives. The broad aim of this study is to examine the influence of job motivation and role conflict on mental wellness of employees. However, the study has the following specific objectives.

- i. To investigate the influence of job motivation on mental wellness of employees.
- ii. To investigate the influence of role conflict on mental wellness of employees.
- iii. To investigate the joint influence of job motivation and role conflict on mental wellness of employees.

To empirically explore this, three hypotheses were formulated:

1. Employees with high job motivation will have high mental wellness than employees with low job motivation.
2. Employees with high role conflict experience lower mental wellness than employees with low role conflict.
3. A joint influence between job motivation and role conflict on employees' mental wellness

Theoretical Framework

This study adopted a three-fold theoretical framework to understand the key variables of the present study: the **six-factor model of psychological well-being, two-factor theory of motivation, and role theory. The and Role theory** the evaluations of these theories were made in order to clearly identify and appraise the strengths and weaknesses of each theory.

Carol Ryff's Six-Factor Model of Psychological Well-Being offers a comprehensive framework for understanding optimal human functioning. Rather than equating well-being solely with happiness or positive emotions, Ryff views it as a multidimensional state that reflects an individual's ability to navigate life's challenges and make the most of their opportunities. The model outlines six essential components that contribute to mental wellness: autonomy, environmental mastery, personal growth, positive relationships with others, purpose in life, and self-acceptance. Autonomy involves the ability to make independent choices and resist social pressure, enabling individuals to govern their lives according to their values. Environmental mastery reflects the capacity to manage everyday affairs effectively, adapt to changing circumstances, and create environments that meet personal needs. Personal growth is characterized by continuous efforts to develop one's talents and potential, showing resilience despite adversity, and a commitment to lifelong learning. Positive relationships with others emphasize the importance of meaningful, trusting, and empathetic connections that allow for both giving and receiving love and support. Purpose in life gives individuals a sense of direction and encourages them to set goals, build dreams and find meaning in their past, present and future experiences. Finally, self-acceptance involves holding a balanced and compassionate view of oneself, acknowledging both strengths and limitations without undue self-criticism. In 1989, Ryff developed a psychological wellbeing assessment scale based on these six dimensions. This scale also connects psychological well-being to physical health indicators, such as cortisol and cytokine levels, cardiovascular functioning, and sleep quality, highlighting the deep interconnection between mental and physical wellness.

In 1957, Frederick Herzberg extended Maslow's work on motivation and developed a specific content theory known as the Two-Factor Theory of Work Motivation. Based on interviews with 203 engineers and accountants, Herzberg sought to identify the factors that made individuals feel very good or bad about their work. From this research, he concluded that job satisfaction and dissatisfaction arise from two distinct sets of factors: hygiene factors and motivational factors.

Hygiene factors refer to elements of the work environment that are essential for preventing dissatisfaction but do not necessarily motivate employees in the long term. These are extrinsic to the work itself and include aspects such as pay, company policies, fringe benefits, working conditions, status, interpersonal relations, and job security. For instance, appropriate salary structures, fair policies, and safe working environments are fundamental expectations; their absence leads to dissatisfaction, but their presence does not inherently create motivation. Herzberg regarded these factors as maintenance factors that stabilize employee attitudes without promoting superior performance.

In contrast, motivational factors are intrinsic to the nature of the job and lead to positive job satisfaction and motivation. These include recognition, a sense of achievement, growth and advancement opportunities, responsibility and the meaningfulness of the work. According to Herzberg, these factors encourage individuals to perform better and find deeper fulfillment in their roles. Employees are more likely to be engaged and productive when their work is challenging, purposeful, and allows for personal growth.

Herzberg's theory suggests that although hygiene factors must be adequately addressed to avoid dissatisfaction, true motivation stems from the presence of intrinsic motivators. However, this theory has faced criticism. Opsahl and Dunnette (1966), for example, challenged the research methods used, arguing that the methodology did not adequately link satisfaction with performance. Critics have also pointed out that the results may have been influenced by the specific questioning techniques employed, the limited and specialized sample, and the lack of evidence showing that motivational factors directly enhance productivity.

Despite these criticisms, Herzberg's Two-Factor Theory remains influential in understanding workplace motivation, emphasizing that improving job content is key to fostering employee satisfaction and performance.

Role theory serves as a foundational framework for examining role conflict, emphasizing that roles emerge from normative expectations and are linked to specific social positions within organizational settings. According to Matta et al. (2015), role theory posits that individuals' behaviors are shaped by how their roles are defined and evolve. However, when the responsibilities and expectations associated with a role are not clearly outlined, individuals may experience role ambiguity or conflict. Uncertainty can lead to dissatisfaction, indecisiveness, anxiety, and confusion, all of which negatively impact performance (Matta et al., 2015).

Furthermore, role theory suggests that individuals are more likely to perform effectively when they understand what they expect. Goal-oriented leaders play a key role in this regard by using their authority to provide direction and support, thereby reducing the likelihood of role conflict and safeguarding employees' psychological wellbeing.

For the current researcher, this theory highlights the challenges of managing multiple roles within an organization, suggesting that such complexity can lead to internal crises and diminished psychological wellbeing. Despite these challenges, role theory remains a valuable lens through which to understand the causes and consequences of role conflict and to identify strategies for resolution. These attributes provide a suitable theoretical foundation for this study.

Empirical Review

Previous studies have successfully explored the constructs relevant to this research, particularly the relationships between job motivation, role conflict, and mental wellness. Many researchers have provided empirical evidence supporting significant correlations between job motivation, both intrinsic and extrinsic and mental wellness. For instance, Suzanne (2018) found a positive significant relationship between nurses' motivation and mental wellness, suggesting that factors like autonomy, purpose, and good interpersonal relationships contribute to enhanced motivation and mental health. Similarly, the findings of the Global Health Workforce Alliance (2018) and Gagné et al. (2010) support the positive influence of workplace conditions and motivation on nurses' mental wellness and job performance.

Badalona and Olumuyiwa (2015) and Deci et al. (2009) further reinforced these findings in broader healthcare and educational contexts, respectively, demonstrating that both intrinsic and extrinsic motivational factors can predict mental wellness outcomes. However, Niemiec et al. (2009) offered a more nuanced perspective, arguing that extrinsic goals such as materialism and fame may not sustain mental wellness, even if achieved.

In relation to role conflict, findings have been somewhat mixed. While Montgomery (2011) reported a positive relationship between role conflict and mental wellness, suggesting a potential adaptive response in some cases, other researchers such as Karadal et al. (2012), Noor (2016), and Granrose (2012) identified a negative correlation. These studies pointed to poor role clarity, managerial inefficiencies, and work-family conflicts as sources of distress, which undermine mental wellness. Noor's (2016) study notably emphasized the moderating and mediating influence of locus of control on the relationship between work-family conflict and mental wellness.

While existing research has adequately examined the individual effects of job motivation and role conflict on employees mental wellness, none have explored the interaction effect between these two independent variables. This presents a significant gap in the literature. To address this gap, the current study aims to examine how job motivation and role conflict jointly influence mental wellness among employees. The study's findings are expected to make a meaningful contribution to the growing body of literature by offering insights for both researchers and practitioners concerned with enhancing employee mental health and organizational productivity.

METHOD

Research design and area: this study employed a cross-sectional survey design. This design used structured questionnaires for data collection to assess the variables of interest and examine the extent to which the

independent variables job motivation and role conflict predict the dependent variable, psychological wellbeing, among employees. This study design was deemed appropriate because the participants shared key characteristics relevant to the study, despite differences in other demographic factors such as age and gender.

The research was conducted in Uyo, the capital of Akwa Ibom State, located in southern Nigeria. Uyo lies between latitudes 4°58'N and 5°04'N and longitudes 7°51'E and 8°01'E. The state serves as a central hub for palm oil collection and functions as a local trade center for agricultural products such as yams, cassava, and palm produce. The region is predominantly inhabited by Ibibio people.

The main study was carried out using lecturers at the University of Uyo, while the pilot study involved teachers at Cornelia Connelly College (CCC) in Akwa Ibom State. Established in 1943 in the former Calabar/Ogoja territory of Holy Child Jesus, CCC began as a preparatory school for girls. It is located in Afaha Oku, along CCC Road, off Ikpa Road. The school is bounded to the north by the University of Uyo, to the south and east by the Afaha Oku community, and to the west by the Uyo Ravine.

Participants

A total of 200 participants were initially recruited for the study, out of which 191 provided valid responses to the study instruments. The sample comprised 102 males (53.4%) and 89 females (46.6%), all of whom were lecturers at the University of Uyo in Akwa Ibom State. Participants' ages ranged from 21 to 60 years, with a mean age of 40.41 years. Eligibility for study inclusion required participants to be employed by the aforementioned institution.

The study employed a purposive sampling technique, a non-probability method in which participants were deliberately selected based on specific characteristics relevant to the research. This approach was adopted to ensure the inclusion of individuals whose insights and experiences aligned with the objectives of the study. Targeting the most likely respondents to provide rich, relevant information, the method enhanced the depth and quality of the findings.

Ethical considerations were observed throughout the research process. Permission was obtained from the university's management, and the purpose of the study was clearly communicated to all participants.

The choice of purposive sampling enabled the selection of participants capable of making offering substantial contributions to the research, thereby supporting meaningful statistical inferences about the broader population of interest.

Measures:

The data collection in this study involved the use of the following instruments:

Three instruments were used for data collection in this study. These included:

Ryff's Psychological well-being scale (Ryff, 1989)

This scale was developed by Ryff, (1989). Ryff's Psychological well-being scale includes 18 items(revised). The 18-item scale was measured on a 5-point Likert scale: Strongly Disagree, Disagree, Neutral, Agree, and Strongly agree. The scale has a high reliability coefficient of 0.92. After validation of this scale, a Cronbach's alpha coefficient of 0.97 was obtained.

The Motivation at Work Scale (Gagné, M *et al.* 2010)

This scale was developed by Gagné, M *et al.*, (2010). The Motivation at Work scale includes 12 items to assess the drive that causes people to do what they do at work. The 12 items scale with the following subscales: intrinsic motivation, extrinsic motivation, interjected motivation, and external regulation correspond to the six types of motivation postulated by self-determination theory (SDT) (i.e., intrinsic motivation, integrated, identified, introjected and external regulations, and motivation). The 12-item scale was measured on a 5-point Likert scale: Strongly Disagree, Disagree, Neutral, Agree, and Strongly agree. The scale has a high reliability coefficient of 0.86. After validation of this scale, a Cronbach's alpha coefficient of 0.96 was obtained.

Role Conflict and Ambiguity scale (Rizzo, House, and Lirtzman, 1970)

This scale was developed by Rizzo, House, and Lirtzman, (1970). The Role Conflict and Ambiguity scale includes 12 items to detect incompatible roles defined by supervisors or other members of an organization. The scale has the following subscales: intra-role, inter-role, and intersender conflict, as well as ambiguity due to lack of role predictability, role clarity, and role certainty. Only role conflict questionnaires were used in this study.

The 12-item scale was measured on a 5-point Likert scale: Strongly Disagree, Disagree, Neutral, Agree, and Strongly agree. The scale has a high reliability coefficient of 0.87. After validation of this scale, a Cronbach's alpha coefficient of 0.96 was obtained.

Procedures and ethical considerations

The main study was conducted at the University of Uyo in which two hundred (200) copies of the study questionnaire were distributed to the participants. The participants were asked to read the instrument carefully before filling in the questionnaire so that they could have a concrete understanding of the items. The participants were not coerced to take part in the study, but they volunteered to participate after being approached by the researcher, who assured them of the utmost confidentiality of the information provided. The data collection process took three weeks in order to get the questionnaires. The questionnaires were retrieved from the participants so that the properly filled ones were scored and analyzed. A total of 191 properly filled-out questionnaires were returned for collation and analysis.

Ethical considerations were paramount, guided by principles such as justice, respect for persons, beneficence, confidentiality, and the non-invasion of privacy, as outlined in the Belmont Report.

Statistics

The data gathered from the Motivation at Work Scale, Role Conflict and Ambiguity Scale, and Psychological Wellbeing Scale were analyzed using a 2×2 Analysis of Variance (ANOVA). This statistical technique is well-suited for examining the effects of two independent variables on a single dependent variable. The F-test was used to assess the significance of the results. As Bevens (2022) noted, a two-way ANOVA is appropriate for evaluating how the mean of a continuous outcome variable is influenced by two independent categorical variables, each with two levels. This approach was particularly fitting for the current study, which aimed to explore the impact of job motivation and role conflict on employees' psychological wellbeing. All hypotheses were tested using IBM SPSS Statistics version 23.

Results

Table 1: The demographic features of participants are presented.

Variables	N	Percentage	Cumulative Percentage
Gender			
Male	102	53.4	53.4
Female	89	46.6	100.0
Total	191	100.0	
Marital Status			
Single	62	32.5	32.5
Married	118	61.8	94.2
Divorced	11	5.8	100.0
Total	191	100.0	
Educational Qualification			
SSCE	11	5.8	5.8
NCE	18	9.4	15.2
HND	45	23.6	38.7
B.SC	68	35.6	74.3
M.SC	29	15.2	89.5
PHD	20	10.5	100.0
Total	191	100.0	
Years of Service			
1-3 years	51	26.7	26.7
4-6 years	60	31.4	58.1
7-9 years	25	13.1	71.2
10years and above	55	28.8	100.0

Total	191	100.0
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Age

30 years	34	23.3	23.3
31-40 years	67	45.9	69.2
41-50 years	22	15.0	84.2
51-60 years	23	15.8	100.0
Total	146	100.0	

Table 1: Descriptive statistics

Results in table 1 display the demographic features of the 191 participants, including gender, marital status, educational qualification, years of service, and age.

The frequency distribution in Table 1 shows that 102 (53.4%) of the participants were male and 89 (46.6%) were female. In terms of educational qualification, 11 (5.8%) participants were SSCE holders, 18 (9.4%) participants were NCE holders, 45 (23.6%) participants were HND holders, 68 (35.6%) participants were B.SC holders, 29 (15.2%) participants were M.SC holders, and the remaining 20 (10.5%) participants were P. HD holders. Furthermore, 62 (32.5%) participants were single, 118 (61.8%) participants were married and 11 (5.8%) participants were divorced. The table also shows the age of the participants as follows; 27 (14.1%) participants were younger than 30 years, 90 (47.1%) participants were between 31-40 years, 42 (22.0%) participants were between 41-50 years and the remaining 32 (16.8%) participants were 51-60 years. Lastly, in terms of year of service, 51 (26.7%) participants served between 1-3 years, 60 (31.4%) participants served between 4-6 years, 25 (13.1%) participants served between 7-9 years and 55 (28.8%) participants served from 10 years and above.

Table 2: Table of mean (x) indicating the influence of job motivation and role conflict**Mental wellness of employees****Job motivation**

Conflict	Role	HIGH	LOW	SUM N X: This function returns SD
		HIGH	LOW	
	HIGH	N = 71.	N = 19	N = 90.
		X = 49.99	X = 47.05 ms1	49.36
		SD = 8.71	SD = 3.06	7.94
	LOW	N = 25	N = 76	101
		X = 43.04 ms1	X = 28.96, and	32.45
		SD = 6.96	SD = 4.40	7.96
	SUM N	N = 96.	N = 95.	191
	X	48.17	32.58	40.41
	SD	8.80	8.38	11.60

Result in table 2 shows that participants who reported high job motivation had a mean score of 48.17 (SD=8.80) while their counterparts who reported low job motivation had a mean score of 32.58 (SD=8.38) on psychological wellbeing. Furthermore, participants who were high on role conflict had a mean score of 49.36 (SD= 7.94), while their counterparts who were low on role conflict had a mean score of 47.05 (SD= 3.06) on psychological wellbeing. On a combination of variables, participants who were high on both job motivation and role conflict had a mean score of 49.99 (SD=8.71) while their counterparts who were high on job motivation and low on role conflict had a mean score of 43.04 (SD=6.96) on psychological wellbeing. Participants who were low on job motivation and high on role conflict had a mean score of 47.05 (SD=3.06) while their counterparts who were low on both job motivation and role conflict had a mean score of 28.96 (SD =4.40) on psychological wellbeing.

The overall mean score of the participants on psychological wellbeing was 40.41 (SD = 11.60).

Table 3: A 2 x 2 ANOVA Summary Table showing the influence of job motivation and role conflict on mental wellness of employees

Source	Dependent Variable: Mental wellness				
	Type III. Sum of squares	Df	Mean Square	F	Sig.
Corrected Model	17484.171 ^a	3	5828.239	134.723	0.00
Intercept	238368.728	1	238368.728	5551.036	0.00
Job motivation(A)	5229.679	1	5229.679	120.887	0.00*
Role conflict (B)	2414.485	1	2414.485	55.812	0.00*
Job motivation*Role conflict (A*B)	1036.401	1	1036.401	23.957	0.00*
Error	8089.775	187	43.261		
Total	337608.000	191			
Corrected Total	25574.492	190			

R Squared = .684 (Adjusted R Squared = 0.679)

Computed with alpha = .01

Table 3 shows the results of a 2 × 2 ANOVA testing for independent and joint interaction effects of the variables in this study.

The first result indicates that job motivation has a significant influence on mental wellness, $F(1,187) = 120.887$, $P < (0.01)$. This result supports the first hypothesis, which states that employees with high job motivation have higher mental wellness than employees with low job motivation.

The second result indicated that role conflict had a significant influence on mental wellness, $F(1,187) = 55.812$, $P > (0.01)$. This result supports the second hypothesis, which states that employees with high role conflict experience lower mental wellness than employees with low role conflict.

Table 3 also indicates a significant joint influence of job motivation and role conflict on the mental wellness of employees, $F(1,187) = 23.957$, $P > (0.01)$. This finding supports the third hypothesis, which indicated that job motivation and role conflict jointly have a significant influence on the mental wellness of employees.

Discussion

This present study aimed at exploring the influence of job motivation and role conflict on the mental wellness of employees. The first finding of the study indicated that job motivation has a significant influence on mental wellness, $F(1,187) = 120.887$, $P < (0.01)$. This result indicates that employees who are well motivated in their jobs will maintain high levels of mental wellness, which, in turn, will help them perform better in the organization than their counterparts who are not motivated. This finding confirms the first hypothesis of the study, which stated that employees with high job motivation have higher mental wellness than employees with low mental wellness.

The first finding of this study is consistent with the findings of a study conducted by Suzanne (2018), which investigated the relationship between motivation and mental wellness. The study results revealed a significant positive correlation between both intrinsic and extrinsic motivation of nurses and most domains of their mental wellness. The findings of the present study are also consistent with the study conducted by Toode, Routasalo, & Suominen (2011), who reported that extrinsic motivation has a positive effect on job satisfaction, commitment, wellness, and health. Another study by Babalola and Olumuyiwa (2015), which examined motivation and mental wellness among mental health clinicians, also found that the majority of medical doctors reported positive mental wellness because of their high pay (extrinsic motivation), while a minority experienced mental distress, possibly due to low perceived pay. The results of that study are also in line with the first finding of this study.

The second finding of the present study revealed that role conflict has a significant influence on mental wellness, $F(1,187) = 55.812$, $P > (0.01)$. The results indicate that employees who experience role conflict in their job are more likely to have low mental wellness, which can impact their daily functioning. This result supports the second hypothesis, which states that employees with high role conflict experience lower mental wellness than employees with low role conflict. This research finding is consistent with the findings of a study conducted by Montgomery (2011), which provided evidence of a negative correlation between role conflict and mental wellness. A study by Karadal, Ay, and Cuhadar (2012), which investigated the relationship between role conflict and mental wellness, also confirmed a negative correlation between the two variables. Similarly, Granrose (2012), in his study on the impact of role conflict on employees' mental wellness, found that role conflict has a negative correlation with employees' mental wellness. This result is also in line with the second finding of the present study. Unfortunately, no study results counter the existing negative correlation between the two variables.

The third finding of the present study indicates that job motivation and role conflict jointly have a significant influence on the mental wellness of employees, $F(1,187) = 23.957$, $P > (0.01)$. This result shows that the combination of job motivation and role conflict significantly impacts the mental wellness of employees in an organization. This means that highly motivated employees with low role conflict exhibit higher mental wellness than their counterparts with low motivation and high role conflict. However, since this study is novel, further studies should be conducted to ascertain the interaction between job motivation and role conflict on mental wellness.

Conclusion and Recommendations

This study examined the influence of job motivation and role conflict on employees' mental wellness using a cross-sectional survey of 191 participants. The analysis, conducted through a two-way ANOVA, confirmed all three hypotheses. Employees with high job motivation reported significantly higher mental wellness, indicating that motivation plays a key role in enhancing mental and emotional health in the workplace ($F(1, 187) = 120.887, p < .01$). In contrast, employees experiencing high levels of role conflict showed significantly lower mental wellness, suggesting that conflicting responsibilities can negatively impact an individual's psychological state ($F(1, 187) = 55.812, p < .01$). Furthermore, a significant interaction effect was observed between job motivation and role conflict, $F(1, 187) = 23.957, p < .01$, revealing that the highest levels of mental wellness are seen in employees who are both highly motivated and experience minimal role conflict.

These findings agree with the existing literature and emphasize the importance of fostering motivation while minimizing role conflict in organizational settings. The results indicate the need for employers, policymakers, and organizational leaders to recognize the value of employee wellness as a driving force for productivity and growth. Job motivation has proven to be a crucial factor in sustaining employee morale and performance, whereas role conflict undermines psychological stability and work satisfaction.

Based on these findings, several practical steps are recommended. First, employers should implement effective reinforcement and motivation policies to ensure that employees are consistently engaged and appreciated. Second, organizations should consider increasing their workforce to reduce the burden of excessive job roles on individual employees. Third, human resource departments should take job specificity seriously by clearly defining the roles and responsibilities of each employee, thereby reducing role ambiguity and its negative consequences. Lastly, organizations should regularly offer training and programs aimed at improving mental wellness, helping employees develop coping strategies, and maintain mental health while at work.

In conclusion, job motivation and role conflict significantly influence mental wellness. Organizations that prioritize motivation and reduce conflicting job demands are more likely to foster a healthy, productive workforce.

REFERENCES

- Adler, S. and Weiss, H. M. (1988). Recent developments in the study of personality and organizational behavior. In C. L. Cooper and I. Robertson (Eds.), *International review of industrial and organizational psychology* (pp. 307- 330). New York: Wiley.
- Agarwal, S. (2016). Stress at work: A managerial perspective. Glenview, IL: Scott Foreman.
- Jamal, M., & Mitchell, V. E. (1980). Work, nonwork, and mental health: A model and a test. *Industrial Relations*, 19, 88-93.
- Aiken V. D (2012). Employee attitudes and employee performance. *Psychological Bulletin*, 52, 396-424.
- Argyle, M. (1987). The experience of happiness. (London: Methuen.
- Berkman, P. L. (1971a). Life stress and psychological well-being: A replication of Langer's analysis in a midtown Manhattan study. *Journal of Health and Social Behavior*, 12, 35-45.
- Arnold W. O. and Walsh S. (2015). Human resources management and employee attitudes. G. R. Ferris, S. D. Rosen, and D. T. Barnum (Eds.), *Handbook of human resource management* (pp. 574- 596). Oxford, England: Blackwell; 2008.

- Baron, P.L. (2013) Measurement of mental health in a general population survey. *American Journal of Epidemiology*, 94, 105-111.
- Beehr, E, Bradburn, N. M., & Caplovitz, D. (2017). Reports on happiness. Chicago: Aldine.
- Beer G., Spector O., Lawrence J., Mills N & Watson R. (2011). Individual demographic differences and job satisfaction. *Journal of Occupational Behavior*, 8, 139-155.
- Blum, M. L., & Naylor, J. C. (1968). *Industrial psychology: Theoretical and social foundations*. New York: Harper & Row.
- Boles, S., Wood, O. and Johnson, W. (2003). Effects of dysfunctional thought processes on subjective well-being and job satisfaction. *Journal of Applied Psychology*, 78, 475-490.
- Borinelli, L. M. (2006). Estrutura conceitual básica da controladoria: Sistematização à luz da teoria e da práxis. (Doctoral Dissertation) School of Economics, Business and Accounting, University of São Paulo, São Paulo, SP, Brazil. Retrieved from <http://www.teses.usp.br/teses/disponiveis/12/12136/tde-19032007-151637/pt-br.php>
- Brayfield, A. H., & Crockett, W. H. (1955). Employee attitudes and employee performance. *Psychological Bulletin*, 52, 396-424.
- Brief, A. P. (1998). Attitudes in and around organizations. Thousand Oaks, CA: Sage.
- Brief, A. P., & Roberson, L. (1989). Job attitude organization: An exploratory study. *Journal of Applied Social Psychology*, 19, 717-727.
- Buelens, D. and Poelmans, A. (2004). Individual demographic differences and job satisfaction. *Journal of Occupational Behavior*, 8, 139-155.
- Burke S. R. & Cooper, E. (2007). Stress at work: A managerial perspective. Glenview, IL: Scott Foresman.
- Jamal, M., & Mitchell, V. E.(1980). Work, nonwork, and mental health: A model and a test. *Industrial Relations*, 19, 88-93.
- Burke S R. (2007). Stress at work: A managerial perspective. Glenview, IL: Scott Foreman. Jamal M and Mitchell, V.E (1980). Work, nonwork, and mental health: A model and a test. *Industrial Relations*, 19, 88-93.
- Cameron, E. Q., & Dutton, G. (2012). Organizational citizenship behavior." The good soldier syndrome. Lexington, MA: Lexington Press.
- Cameron, J., & Pierce, W. D. (2002). Rewards and intrinsic motivation: Resolving the controversy. Westport, CT: Praeger.
- Caram, B. (2012). Profissão de contador vive bom momento no mercado. [Blog radar do emprego]. Retrieved from <http://blogs.estadao.com.br/radar-doemprego/profissao-de-contador-vive-bom-momento/>

- Chin, W. W. (1998). The partial least squares approach for structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-336). Mahwah, NJ: Lawrence Erlbaum Associates, Publisher.
- China, A. R. (2013). The conquest of happiness. New York: Liveright. Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology*, 39, 1161-1178.
- Cleveland, J. N., and Murphy, K. R. (1992). Analyzing performance appraisal as goal-directed behavior. *Journal of Applied Psychology*, 77(3), 251-261.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Danna D. & Griffin, E. E (2009). *Job satisfaction: How do people feel about their jobs and how do they affect their performance*. New York: Lexington.
- Deci, E. L., and Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (2013). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., and Ryan, R. M. (1991). Motivation and education: A self-determination perspective. *Educational Psychologist*, 26(3&4): 325-346.
- Deeprise, (2014). Job involvement and satisfaction related to mental health and personal time devoted to work. *Journal of Applied Psychology*, 60, 521-523.
- Devellis, R. F. (2003). *Scale development: Theory and applications*. (2nd ed.). Thousand Oaks: Sage Publications.
- Diener, E. (1994). Assessing subjective wellbeing Progress and opportunities. *Social Indicators Research*, 31, 103-157.
- Diener, E. (2010). Subjective well-being. *Psychological Bulletin*, 95, 542-575.
- Diener, E., & Larsen, R. J. (2013). The experience of emotional well-being. In M. Lewis and J. M. Haviland (Eds.), *Handbook of emotions* (pp. 404-415). New York: Guilford Press.
- Diener, E., Suh, E. M., Lucas, R. E., and Smith, H. L. (1985). Subjective well-being: 3decades of progress. *Psychological Bulletin*, 125, 276—302.

- Faul, F., Erdfelder, E., Elang, A., & Buchner, A. G. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. 2007 Behavior Research Method, 39(2), 175-191. doi: 10.3758/BF03193146
- Fichter, C. (2011). A study of role conflict, role ambiguity, job satisfaction, and burnout among financial advisors. *The Journal of the American Academy of Business*, 16(2), Cambridge. Retrieved from <http://www.jaabc.com/jaabcv16n2preview.html>
- Fisher, R. T. (2001). Role stress, the type: A behavior pattern, and external auditor job satisfaction and performance. *Behavioral Research in Accounting*, 13(1), 143-170. doi: <http://dx.doi.org/10.2308/bria.2001.13.1.143>
- Frezatti, F., Rocha, W., Nascimento, A. R., & Junqueira, E. (2009). Controle gerencial: Uma abordagem da contabilidade gerencial no contexto econômico, comportamental e sociológico. São Paulo: Atlas.
- Gagné B., House, R. J., & Rizzo, J. R. (1972). Role conflict and ambiguity as critical variables in a model of organizational behavior. *Organizational Behavior and Human Behavior Performance*, 7(3), 467-505. Doi: 10.1016/0030-5073(72)90030-X
- Glazer J., & Beehr M. (2005). The role of personality in organizational life: Issues and evidence. *Journal of Management*, 18, 185-210. Holmes, D. (1991). *Abnormal psychology*. New York: Harper.
- Global Health Workforce Alliance (2018). Stress at work: A managerial perspective. Glenview, IL: Scott Foresman. Jamal, M., & Mitchell, V. E (1980). Work, nonwork, and mental health: A model and a test. *Industrial Relations*, 19, 88-93.
- Gregson, T., & Wendell, J. (1994). Role conflict, role ambiguity, job satisfaction, and the moderating effect of job-related self-esteem: A latent variable anal. *Journal of Applied Business Research*, 10(2), 106-113
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through work design: Test of a theory. *Organizational Behavior and Human Performance*, 16(2), 250-279.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). A primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Thousand Oaks: Sage Publications.
- Hernandes, A. (2011). Oestresse profissional contábil. Retrieved from <http://www.andersonhernandes.com.br/2011/07/02/o-estresse-e-o-profissional-contabi/>
- Herzberg, D. S. (1957). Two factor theory. *Journal of Applied Psychology*, 78, 475-490.
- Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). The motivation to work. New York: John Wiley & Sons, 1989.
- House, R. J., & Rizzo, J. R. (1972). Role conflict and ambiguity as critical variables in a model of organizational behavior. *Organizational Behavior and Human Performance*, 7(3), 467- 505. doi: 10.1016/0030-5073(72)90030-X

- Houtman Q. & Hernandez, A. (2019). O estresse e o profissional contábil. Retrieved from <http://www.andersonhernandes.com.br/2011/07/02/o-estresse-e-o-profissional-contabi/>
- Iaffaldano, M. T., & Muchinsky, E. M. (1985). Job satisfaction and job performance: A meta-analysis. *Psychological Bulletin*, 97, 251-273.
- Ivancevich, J. W., & Matteson, M. T. (1980). Stress at work: A managerial perspective. Glenview, IL: Scott Foresman. Jamal, M., & Mitchell, V. E (1980). Work, nonwork, and mental health: A model and a test. *Industrial Relations*, 19, 88-93.
- Jablonski, S. F., Keating, P. J., & Heian, H. B. (1993). Business advocate or corporate policeman: Assessing your role as a financial executive. Financial Executives' Research Foundation.
- Jackson, S. E., and Randall, S. S. (1985). A meta-analysis and conceptual critique of research on role ambiguity and conflict in work setting. *Organizational Behavior and Human Decision Processes*, 36(1), 16-78. doi: 10.1016/0749-5978(85)90020-2
- Judge, T. A., and Locke, E. A. (1993). Effects of dysfunctional thought processes on subjective well-being and job satisfaction. *Journal of Applied Psychology*, 78, 475-490.
- Judge, T. A., Hanisch, K. A., & Drankowski, R. D. (1995). Human resources management and employee attitudes. G. R. Ferris, S. D. Rosen, and D. T. Barnum (Eds.), *Handbook of human resource management* (pp. 574- 596). Oxford, England: Blackwell; 2008
- Judge, T. A., Thoresen, C. J., Bono, J. E., and Patton, G. K. (1998). The job satisfaction-job performance relationship: 1939-1998. Paper presented at the annual meeting of the Academy of Management, San Diego, CA.
- Kahn S. & Byosiére F. (1992). Modelagem de equações estruturais com utilização do smartpls. REMark, Revista Brasileira de Marketing, 13(2), 4-71, 2015.
- Karadal, H., Ay, U., & Cuhadar, M. T. (2008). The effect of role conflict and role ambiguity on job satisfaction and organizational commitment: A study in the public and private sector. *The Journal of the American Academy of Business*, 13(2), 1-15, Cambridge. Retrieved from <http://www.jaabc.com/jaabcv13n2preview.html>
- Katz S., & Kahn R. (1970). Employee attitudes and employee performance. *Psychological Bulletin*, 52, 396-424.
- Kelly G. (2010) Controle gerencial: Uma abordagem da contabilidade gerencial no contexto econômico, comportamental e sociológico. São Paulo: Atlas. D. Katz and R. L. Kahn (1970). Psicologia social das organizações (2nd ed.). São Paulo: Atlas.
- Kemery N. & Kornhauser, A. (2016). Mental health and industrial workers: A Detroit study. New York: Wiley.

- Keyes S. and Lopaz R. (2002). Employee attitudes and employee performance. *Psychological Bulletin*, 52, 396-424.
- King, L. A., & King, D. W. (1990). Role conflict and role ambiguity: A critical assessment of construct validity. *Psychological Butellin*, 107(1), 48-64. Retrieved from <http://psycnet.apa.org/index.cfm?fa=buy.optionToBuy&id=1990-13467-001>
- Kornhauser, A., and Sharp, A. (1932). Employee attitudes: Suggestions from a study in a factory. *Personnel Journal* 10, 393-401.
- Larsen, R. J., & Diener, E. (1992). Promises and problems with the circumplex model of emotion. *Review of Personality and Social Psychology*, 13, 25-59.
- Latack, Q (2012). Measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology*, 63, 193-210.
- Lee, T. P. (2010). Role conflict as a mediator of the relationship between Total Quality Management Practices and Role Ambiguity. (Doctoral Thesis) – Faculty of Management, Multimedia University Malaysia, Malaysia. Retrieved from <http://shdl.mmu.edu.my/1792/>
- Locke, E. A. (1976). The nature and ces of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (1st ed., pp. 1297-1349). Chicago: Rand McNally, 1989.
- Maas, V. S., and Matejka, M. (2009). Balancing the dual responsibilities of business unit controllers: Field and survey evidence. *The Accounting Review*, 84(4), 1233-1253. doi:10.2308/accr.2009.84.4.1233
- Martin, T. N. (•984). Role stress and inability to leave as predictors of mental health. *Human Relations*, 37, 969-983. Myers, D. G. (1992). *The Pursuit of happiness*. New York: William Morrow.
- Maslow .A (1954). Hierarchy of needs theory. *Handbook of industrial and organizational psychology* (1st ed., pp. 1297-1349). Chicago: Rand McNally, 1989.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396
- Matta E Myers, D. G., & Diener, E. (2015). Role theory. *Psychological Science*, 6, 10-19.
- Matteson D. & Ivancevich, N (2007). Effect on managerial performance: A test of the sadder-but-wiser vs. happier and-smarter hypotheses. *Administrative Science Quarterly*, 38, 304-331.
- Michael C. (2009). Role conflict, ambiguity, and job satisfaction in nurse executives. *Nursing Administration Quarterly*, 34(1), 72-82. doi: 10.1097/NAQ.0b013e3181c95eb5
- Monnot, M. J. (2008). Role stress, hierarchy, and subjective well-being. (Doctoral Thesis) – Central Michigan University, Michigan

- Montgomery, R (2011). Growth coping, work satisfaction, and turnover: A longitudinal study. *Journal of Business and Psychology*, 6, 133-145.
- Nakagawa, M. (1994). ABC: Custeio baseado em atividades. São Paulo: Atlas.
- Noor, B (2016). The job satisfaction-job performance relationship: 1939-1998. Paper presented at the annual meeting of the Academy of Management, San Diego, CA.
- Organ, D. W. (1988). Organizational citizenship behavior." The good soldier syndrome. Lexington, MA: Lexington Press.
- Oscharoff, A (2011). Happiness, pleasure, and judgment: The contextual theory and its applications. Mahwah, NJ: Erlbaum.
- Park G. & Peterson C. W. (2006). *Handbook of organizational measurement*. Marshfield, MA: Pitman. J. C. Quick, J. D. Nelson D. L. Harrell Jr. (1997). Preventive stress management in organizations. American Psychological Association: Washington, DC, 2005.
- Peterson C. W. & Seligman E (2004). work satisfaction and turnover: A longitudinal study. SSRN Electronic Journal. *Journal of Business and Psychology*, 6, 133-145.
- Petty, M. M., McGee, G. W., and Cavender, J. W. (1984). A meta-analysis of the relationship between individual job satisfaction and individual performance. *Academy of Management Review*, 9, 712-72 I.
- Ringle, C. M., Silva, D., & Bido, D. S. (2014). Modelagem de equações estruturais com utilização do smartpls. REMark, Revista Brasileira de Marketing, 13(2), 4-71, 2015
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (2017). Role conflict and ambiguity in complex organizations. *Administrative Science Quartely*, 15(2), 150-163. Retrieved from <http://connection.ebscohost.com/c/articles/3980478/role-conflict-ambiguity-complex> organizations
- Robert A.(2005). Affect grid: A single-item scale of pleasure and arousal. *Journal of Personality and Social Psychology*, 57, 493-502.
- Ruack, J. K. (1999, February 12). Redefining the good life: A new focus in the social sciences. *Chronicle of Higher Education*, A 13-A 15.
- Russell, B. (1930). The conquest of happiness. New York: Liveright. Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology*, 39, 1161-1178.
- Ryan D. and Deci S. (2001). The controller role in management. *Organizational Dinamyc*, 2,31-48.Retrievedfrom:<http://www.sciencedirect.com/science/article/pii/S0090261683900049> /part/first-page-pdf
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.

- Ryff C. and Keyes D. (2012). *Management and the worker*. Cambridge, MA: Harvard University Press.
- Ryff, C. A (1989). The six-factor model of psychological well-being. *Journal of Occupational Psychology*, 63, 193-210.
- Schmutte B. & Ryff, and (2014). *Scale development: Theory and applications*. (2nd ed.). Thousand Oaks: Sage Publications.
- Scot F (2015). The controller's function in top-level management. *Journal of Accountancy*, 98(1), 66-71.
- Seligman (2002). Paths to mental health: Exploratory study of husbands and wives in dual-career families. *Journal of Occupational Psychology*, 58, 129-137.
- Seligman D. & Csikszentmihalyi, F. (2000). Paths to mental health: Exploratory study of husbands and wives in dual-career families. *Journal of Occupational Psychology*, 58, 129-137.
- Sheldon J & King L. M (2001). *Controladoria: Conceitos e aplicações*. São Paulo: Futura.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences*. Thousand Oaks, CA: Sage.
- Springer and Hauser (2006). The utility of happiness. *Social Indicators Research*, 20, 333-354. Vroom, V. H. (1964). *Work and motivation*. New York: Wiley.
- Staw, B. M. (1986). Organizational psychology and the pursuit of happy/productive worker. *California Management Review*, 28, 40-53.
- Staw, B. M., & Barsade, S. G. (1993). Effect on managerial performance: A test of the sadder-but-wiser vs. happier-and-smarter hypotheses. *Administrative Science Quarterly*, 38, 304-331.
- Steven, V. (2011). Role stress, the type: A behavior pattern, and external auditor job satisfaction and performance. *Behavioral Research in Accounting*, 13(1), 143-170. doi: <http://dx.doi.org/10.2308/bria.2001.13.1.143>
- Suzanne G. H. (2018). Intrinsic and extrinsic motivation of nurses and their most psychological wellbeing domains. *Social Indicators Research*, 20, 333-354. Vroom, V. H. (1964). *Work and motivation*. New York: Wiley.
- Tannenbaum, R. and Yukl, G. (1992). Training and development in work organizations. *Annual Review of Psychology*, 43(1), 399-441.
- Tarrant, T., & Sabo, C. E. (2010). Role conflict, ambiguity, and job satisfaction in nurse executives. *Nursing Administration Quarterly*, 34(1), 72-82. doi: 10.1097/NAQ.0b013e3181c95eb5
- Teixeira, O. C. (2003). *Contribuição ao estudo das funções e responsabilidades do controller nas organizações*. (Master Dissertation) – School of Economics, Business and Accounting – University of

São Paulo, São Paulo, SP, Brazil. Retrieved from <http://www.teses.usp.br/teses/disponiveis/3/3137/tde-30062004-141334/pt-br.php>

Vroom, V. H. (1964). *Work and motivation*. New York: John Wiley & Sons.

Wahba F. A. and Bridwell O. (1979). *Work, unemployment and mental health*. New York: Oxford University Press.

Warr, P. (1990). Measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology*, 63, 193-210.

Weiss, H. M., & Cropanzano, R. (1996). An affective event-based approach job satisfaction. In B. M. Staw & L. L. Cummings (Eds.). *Research in organizational behavior* (Vol. 18, pp. 1-74). Greenwich, CT: JAI Press.

Welsch, G. A. (1954). The controller's function in top-level management. *Journal of Accountancy*, 98(1), 66-71.

Wincent, T. A., & Bonett, D. G. (2008). Growth coping, work satisfaction, and turnover: A longitudinal study. *Journal of Business and Psychology*, 6, 133-145.

World Health Organization (WHO). (2021). Role stress, the type: A behavior pattern, and external auditor job satisfaction and performance. *Behavioral Research in Accounting*, 13(1), 143-170. doi: <http://dx.doi.org/10.2308/bria.2001.13.1.143>