

# Innovations

## Work-Life Interface and Performance of Health Workers in Federal Government Hospitals in North Central Nigeria

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### Abstract

*Managing work-life interface is critical to improving the performance of healthcare workers. Effective management of work-life interface helps healthcare workers to maintain a healthy work-life balance, reduce stress and burnout, and ultimately improve job performance. Despite the benefits of managing work-life interface, there are still persistent issues relative to job performance in the federal government hospitals in Nigeria. The study therefore examined the nexus between work-life interface and the performance of healthcare workers in federal government hospitals. The specific objectives of the study were to determine the effect of inter-role conflict on productivity; and ascertain the effect of role ambiguity on emotional stability. The study used the survey research design. The sample size of the study was 298. The study used the simple random sampling technique to select the sample size. The study employed face validity. The study instrument's reliability was determined using the Cronbach alpha test. The study employed ordinal logistic regression to test research hypotheses. Findings revealed that inter-role conflict has no significant negative effect on the productivity, and role ambiguity has a significant negative effect on emotional stability. The study concluded that managing work-life interface can play a pivot role in influencing the performance of healthcare workers, as it shapes the behavioral patterns of workers. It was recommended that federal government hospitals focus on enhancing role clarity and communication to further support staff effectiveness, and establish a well-defined role to lessen the negative effects of role ambiguity on the emotional stability.*

**Keywords:** Work-Life Interface, Performance, Inter-Role Conflict, Productivity, Role Ambiguity, Emotional Stability.

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**Introduction:** Work-life interface refers the interaction and relationship between an individual's professional work and personal life. It entails all aspects of how an individual's personal and professional lives interact, affect one another, and affect their overall satisfaction and well-being. Boamah, Hamadi, Havaei, Smith and Webb (2022) state that an effective balance between work and personal life can enhance job satisfaction and decrease stress levels, which in turn can result in a higher rate of employee retention. Employees who perceive that their employer places importance on their personal life are inclined to remain employed with the organisation. Apraku, Bondinuba, Eyiah and Sadique (2020) posit that a healthy work-life interface increases employee productivity by reducing burnout and increasing motivation. Employees who have time for personal activities and are not overworked are more likely to be productive and engaged in their work. Althammer, Reis, Beek, Beck and Michel (2021) and Drnovšek, Slavec and Aleksić (2023) contend that a good work-life interface improves employee well-being by reducing stress and promoting a healthy work-life balance. This can lead to improved physical and mental health, better relationships, and greater overall satisfaction with life. Also, organisations that prioritize work-life interface and support their employees' personal lives have a better reputation and are more attractive to potential employees.

In the context of federal government hospitals in the North Central Nigeria, work-life interface has the tendency of affecting healthcare workers' performance. The constructs of work-life interface (role conflict, work overload, long working hour, role ambiguity and role incompatibility) can affect the ability of healthcare workers to focus and perform well at work. Healthcare workers may experience role conflict by trying to balance the demands of their jobs and family roles, and this can cause tension in either sides. Onuorah and Ugochukwu (2020) posit that role conflict and workload pressure can affect employee productivity. Employees may experience multiple role conflicts when they have conflicting responsibilities or expectations from different sources, including their job, family, or community. This can lead to stress, burnout, and reduced work performance. Studies (Muis, Nai'em, Arsin, Darwis, Thamrin, & Hans, 2021; Safrizal et al., 2020) have shown that these conflicts can have an adverse effect on an employee's job performance. Lu and Cooper (2022) submit that there is evidence to suggest that working long hours can have a negative indirect effect on job performance. This may also imply that working long hours, over time, can lead to change in attitude to work due to various factors such as fatigue, stress, burnout, and decreased job satisfaction. Working long hours may seem beneficial in the short-term, but there is tendency that it will have negative indirect consequences on attitude to work of healthcare workers in the North Central Nigeria. Ezigbo (2011) expresses that role ambiguity occurs when an employee is unsure about the specific tasks and responsibilities that are required of them in their

job, or when the extent of their duties is unclear. Saleem, Malik and Qureshi (2021) posit that COVID-19 pandemic's uncertain nature caused disruptions in the workplace, leading to role overload, ambiguity, and conflicts. These factors, in turn, contributed to increased healthcare workers' stress levels and decreased job performance. Role incompatibility occurs when an employee's job demands or expectations do not align with their personal values or beliefs. This mismatch can have adverse effects on healthcare workers' moral satisfaction.

The measurement of performance was carried out in studies conducted by Guo and Ling (2019), Palenzuela et al. (2019) and Bhardwaj and Kalia (2021) using variables such as task performance and contextual performance. Contextual performance of healthcare workers is viewed as the non-technical skills and behaviors that are essential for effective healthcare delivery, but are not directly related to clinical tasks. These skills and behaviors include communication, teamwork, adaptability, and professionalism. Measuring contextual performance among healthcare workers can be challenging, as it is often assessed through self-report or observer ratings rather than objective measures. For the purpose of this study, the measures of performance are job satisfaction, attitude to work, employee moral satisfaction and emotional stability (Khan & Ramachandran, 2012). In healthcare, task performance may include skills such as administering medications, performing surgical procedures, or accurately documenting patient information. Effective task performance is essential for providing high-quality patient care and ensuring patient safety. Various assessment tools and frameworks have been developed to help measure and improve task performance, such as objective structured clinical examinations (OSCEs) and competency-based assessments. However, this study measures task performance with productivity. Although many previous studies have investigated work-life balance, none (to the best of the author's knowledge) has investigated it on all these variables, especially in federal government hospitals in the North Central Nigeria. It is within this context that this study finds it relevant (Khan & Ramachandran, 2012).

### **Objectives of the Study**

The main objective of the study was to examine the effect of work-life interface on the performance of healthcare workers in federal government hospitals in the North Central Nigeria. The specific objectives of the study are:

- i. Determine the effect of inter-role conflict on productivity; and
- ii. Ascertain the effect of role ambiguity on emotional stability.

### **Research Hypotheses**

The study will draw hypotheses that:

**H<sub>1</sub>:** Inter-role conflict has effect on productivity.

**H<sub>2</sub>:** Role ambiguity has effect on emotional stability.

### **Review of Related Literature**

Work-Life Interface (WLI) has been recognized as a phenomenon in the global space. Tamunomiebi and Oyibo (2020) posit that there is no unanimous agreement regarding the precise definition of work-life interface, as multiple authors have presented diverse interpretations and understandings of the concept. This implies that the concept is subject to individual and contextual variations. Johari, Tan, and Zulkarnain (2018) express that work-life interface is founded on the belief that work life and personal life complement each other, contributing to overall well-being and fulfillment in one's life. This perspective suggests that achieving a balance or integration between work and personal life contributes to overall well-being and fulfillment in an individual's life. The contemporary understanding of work-life Interface has emerged through progressive research in this domain (Borgia et al., 2022), aiming to adapt to changing socio-economic factors and advancements in the workplace that can result into employees well-being and fulfilled life (Bertolini & Musumeci, 2022).

Sharma and Tiwari (2023) express that the work-life interface involves the interaction and relationship between an individual's work life and personal life. It involves the ways in which work and personal life domains influence and impact each other. The concept recognizes that individuals have multiple roles and responsibilities, both in their professional and personal spheres, and the interplay between these domains can have significant effects on their well-being, satisfaction, and overall quality of life. The work-life interface encompasses various aspects, such as work-life balance, work-life integration, work-family conflict, and work-life enrichment (Althammer et al., 2021; Bansal & Agarwal, 2020). In another way, Beigi et al. (2018) define Work-Life Interface as the interaction and integration between an employee's work and personal life domains, encompassing the interplay of roles, responsibilities, and activities across both spheres. The definition emphasizes how dynamically connected work and personal lives are. It emphasizes how closely related and mutually influencing work and personal life are. The term "interaction" refers to the points at which the domains of work and personal life meet and have an impact on one another. The concept of "integration" implies that work and personal life can coexist and be harmoniously blended rather than being entirely separate. This can entail finding ways to combine personal interests and priorities into one's work life or aligning personal values with job goals.

Based on the definitions above, inter-role conflict, and role ambiguity are considerable constructs in the context of the work-life interface. Constructs are concepts or variables that can be used to represent specific phenomena or

dimensions of interest in research. Inter-role conflict refers to a situation in which employees' experiences conflicting demands and expectations between multiple roles or positions they hold, like work, family, and personal life. Uddin (2021) posits that these conflicts arise when the requirements and responsibilities of one role interfere with the performance or fulfillment of another role, leading to stress and difficulty in balancing various life domains. Role ambiguity refers to the uncertainty or lack of clarity that employees experience regarding their job responsibilities, expectations, and the boundaries of their roles within an organization.

Employee performance is a critical aspect of organisational success, and it has been the subject of extensive research across various fields. It can be defined as the behavioral responses that showcase the employee's acquired knowledge and training, and it involves the results of their mental and psychological abilities (Diamantidis & Chatzoglou, 2018; Faiza & Nazir, 2015). This definition highlights that it refers to the way an employee behaves and responds in the workplace. It is not solely determined by their skills or knowledge but is also influenced by the training they have received. When an employee performs well, it is an indication that they have effectively applied the knowledge and skills they have acquired through training (Chen, 2019; Park & Park, 2020). Moreover, the definition emphasizes that employee performance also takes into account the mental and psychological capabilities of the employee, indicating that factors like motivation, moral satisfaction, emotional stability, problem-solving abilities, and decision-making skills play a role in shaping their overall performance.

### **Inter-Role Conflict and Productivity**

Inter-role conflict, involving conflicting demands across professional, familial, social, and personal roles, has become a key issue in healthcare workers' productivity. This conflict impacts individuals' ability to maintain optimal performance and mental well-being (Deressa et al., 2020). As work-life boundaries blur, the effects of inter-role conflict extend beyond inconvenience, influencing both individual workers and their organizations. Productivity is intricately linked to the challenge of balancing diverse roles (Xu, 2019). The conflict arises from divergent expectations between these roles, requiring individuals to navigate a complex landscape of decisions and trade-offs (Brusch, 2019).

Failure to balance roles can lead to stress, burnout, and reduced motivation, ultimately diminishing productivity (Bamberger et al., 2019). Organizations face widespread consequences as inter-role conflict negatively affects workplace culture, morale, and team dynamics, resulting in decreased job satisfaction and collaboration (Ismail, 2018). Recognizing this, many organizations are adopting strategies such as flexible work arrangements and well-being initiatives to help

employees manage these challenges. By supporting individuals' ability to harmonize their roles, organizations foster both productivity and a thriving workforce (Su et al., 2022).

### **Role Ambiguity and Emotional Stability**

Role ambiguity, marked by unclear job responsibilities and performance expectations, significantly affects healthcare workers' emotional stability, often interfering with their personal lives. Uncertainty in roles leads to stress, anxiety, and feelings of inadequacy, which can erode emotional well-being. Workers experiencing role ambiguity face heightened self-doubt and a lack of control over their environment, which contributes to emotional instability both at work and in personal life (Khan et al., 2020; Esterwood & Saeed, 2020). This stress disrupts the balance between work and personal life, negatively impacting relationships and leisure activities (Mañas et al., 2018).

Prolonged role ambiguity often results in emotional exhaustion, job dissatisfaction, and burnout, reducing healthcare workers' effectiveness and emotional resilience (Unguren & Arslan, 2021). These negative emotional outcomes can harm overall psychological health and organizational productivity. However, hospitals that address role ambiguity through clear communication, role clarification, and performance expectations can foster emotional stability and improve morale (Peasley et al., 2020). By providing emotional and instrumental support, organizations can help workers manage their roles confidently, promoting well-being and reducing the emotional toll of ambiguity.

### **Methodology**

This study employed a survey research design to collect data through a structured questionnaire distributed to a sample of healthcare workers. The primary goal was to gather numerical data to examine the linear relationship between work-life interface (WLI) and healthcare worker performance in federal government hospitals. The research focused on North Central Nigeria, covering the states of Benue, Kogi, Nasarawa, and Niger. Each state has a federal hospital with varying numbers of healthcare workers, making it a relevant area to study the effect of WLI on their performance. The population consisted of 1,326 healthcare workers from four federal hospitals in North Central Nigeria, including doctors, nurses, and technicians. The sample size was calculated using a precise statistical method, and the data were analyzed with specialized software. The sample size was determined using Sallant and Dillman's (1997) sampling approach, ensuring statistical power

and precision.

The formula is shown below:

$$N_s = \frac{N_p (p)(1 - p)}{(N_p - 1) \left(\frac{B}{C}\right)^2 + (p)(1 - p)}$$

Where:

Ns= completed sample size required

Np= Sample population

P= proportion expected to answer in a certain way (50% or 0.5 is most conservative)

B= acceptable level of sampling error (0.05 = ±5%; 0.03 = ± 3%)

C= Z statistic associated with the confidence interval (1.645=90% confidence level; 1.960=95% confidence level; 2.576=99% confidence level)

$$= \frac{1326 (0.5)(1 - 0.5)}{(1326 - 1) \left(\frac{0.05}{1.960}\right)^2 + (0.5)(1 - 0.5)}$$

Where:

Ns= 297.8646208541890 (Approx. 298)

Np= **1326**

P= 50% or 0.5

B= 0.05 or +5%

C= 1.960 Or 95%

Thus, the sample size of the study is 298.

To select the sample size for the study, the researcher used the simple random sampling technique. This involved selecting participants entirely by chance, ensuring that each potential candidate had an equal opportunity to be included in the study. The study employed face validity to evaluate the instrument's validity. The study tested the collected data for internal consistency using the Cronbach alpha coefficient to ensure the reliability of the research instrument.

**Table 1 Reliability Statistics of Inter-Role Conflict**

Cronbach's Alpha	N of Items
.830	5

Source: SPSS 20.0

**Table 2 Reliability Statistics of Role Ambiguity**

Cronbach's Alpha	N of Items
.787	5

Source: SPSS 20.0

**Table 3 Reliability Statistics of Role Incompatibility**

Cronbach's Alpha	N of Items
.811	5

Source: SPSS 20.0

**Table 4 Reliability Statistics of Productivity**

Cronbach's Alpha	N of Items
.734	5

Source: SPSS 20.0

**Table 5 Reliability Statistics of Emotional Stability**

Cronbach's Alpha	N of Items
.761	6

Source: SPSS 20.0

**Table 6 Reliability Statistics of Moral Satisfaction**

Cronbach's Alpha	N of Items
.812	5

Source: SPSS 20.0

The study employed both descriptive and inferential statistics. Hypothesis testing was conducted through ordinal logistic regression using IBM 25.0. Based on the analysis results, meaningful inferences were drawn. The level of significance for the study is 5%, for a two-tailed test. The decision rule was that we do not reject the null hypothesis if the critical/t-value ( $\pm 1.96$ ) is greater than the calculated value, otherwise, we reject the null hypothesis. That is, using the *t*-test (*t*-statistic), we say that a variable is statistically significant if  $t^*$  (*t*-calculated) is greater than the tabulated value of  $\pm 1.96$  under 95% (or 5%) confidence levels and it is statistically insignificant if the  $t^*$  is less than the tabulated value of  $\pm 1.96$  under 95% (or 5%) confidence levels.

**Analyses and Results**

The return rate of the questionnaires distributed is 99% and this value is very high. Thus, analysis was based on the returned questionnaires.



**Table 7 Gender of respondents**

Categories	Responses	Frequency	Percent
Gender	Male	113	38.3
	Female	182	61.7
Age Distribution	20—30	100	33.9
	31—40	124	42.0
	41—50	46	15.6
	51 years and above	25	8.5
Marital Status	Single	106	35.9
	Married	178	60.3
	Divorced	10	3.4
	Widow	1	.3
Work Experience	Below 5 Year	8	2.7
	6-11 Years	34	11.5
	12-17 Years	75	25.4
	18-23 Years	94	31.9
	24-29 Years	65	22.0
	30-35 Years	19	6.4

**Source:** Field Survey, 2024.

The table 7 shows that 113 respondents (38.3%) identified as male; while 182 respondents (61.7%) identified as female. This result may imply that work-life interface concerns have been more associated with female employees due to societal expectations around childcare and housework.

Table 7 shows that 100 respondents (33.9%) were within the age group of 20 to 30, 124 respondents (42.0%) were within the age group of 31 to 40, 46 respondents (15.6%) were within the age group of 41 to 50, and 25 respondents (8.5%) were within the age of 51 years and above. This distribution shows that majority of respondents fall within the age range of 31-40 years.

Table 7 indicates that 106 respondents (35.9%) were single, 178 respondents (60.3%) were in a marital relationship, 10 respondents (3.4%) were divorced, and 1 respondent stated being a widow. This breakdown reveals that the most common marital status among respondents is being married, followed by those who are single. Divorced individuals represent a smaller percentage, with widows being the smallest category.

**Test of Hypotheses**

**H<sub>0</sub>:** Inter-role conflict has no effect on productivity.

**H<sub>1</sub>:** Inter-role conflict has effect on productivity.

**Table 8 Case Processing Summary on Inter-role Conflict and Productivity**

		<b>N</b>	<b>Marginal Percentage</b>
PDY	Strongly Disagree	21	7.1%
	Disagree	59	20.0%
	Neutral	89	30.2%
	Agree	92	31.2%
	Strongly Agree	34	11.5%
IRC	Strongly Disagree	13	4.4%
	Disagree	27	9.2%
	Neutral	71	24.1%
	Agree	86	29.2%
	Strongly Agree	98	33.2%
Valid		295	100.0%
Missing		0	
Total		295	

**Source:** SPSS Version 22.0

IRC= Inter-role conflict; PDY= Productivity.

**Table 8b Model Fitting Information**

<b>Model</b>	<b>-2 Log Likelihood</b>	<b>Chi-Square</b>	<b>Df</b>	<b>Sig.</b>
Intercept Only	81.697			
Final	75.085	6.612	4	.058

Link function: Logit.

**Table 8c Goodness-of-Fit**

	<b>Chi-Square</b>	<b>Df</b>	<b>Sig.</b>
Pearson	6.578	12	.884
Deviance	7.594	12	.816

Link function: Logit.

**Table 8D Pseudo R-Square**

Cox and Snell	.776
Nagelkerke	.877
McFadden	.939

Link function: Logit.

**Table 8E Parameter Estimates**

		Estimate	Std. Error	Wald	Df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[PDY = 1.00]	-2.741	.276	98.769	1	.000	-3.281	-2.200
	[PDY = 2.00]	-1.144	.201	32.315	1	.000	-1.538	-.749
	[PDY = 3.00]	.165	.189	.759	1	.384	-.206	.535
	[PDY = 4.00]	1.930	.233	68.605	1	.000	1.473	2.386
Location	[IRC=1.00]	-.037	.530	.005	1	.945	-1.076	1.003
	[IRC=2.00]	-.502	.391	1.651	1	.199	-1.268	.264
	[IRC=3.00]	-.516	.281	3.369	1	.066	-1.066	.035
	[IRC=4.00]	.121	.266	.208	1	.649	-.400	.642
	[IRC=5.00]	0 <sup>a</sup>	.	.	0	.	.	.
Link function: Logit.								
a. This parameter is set to zero because it is redundant.								

Table 8a provides a case processing summary for the ordered logit regression model examining the effect of Inter-role Conflict (IRC) on Productivity (PDY). For productivity, the majority of respondents are in the "Neutral" and "Agree" categories, comprising 30.2% and 31.2% of the sample, respectively. For inter-role conflict, the majority of respondents fall in the "Agree" and "Strongly Agree" categories, comprising 29.2% and 33.2% of the sample.

The -2 Log Likelihood value in Table 8b is a measure of how well the model fits the data. For the model with only the intercept, the -2 Log Likelihood is 81.697, and for the final model with predictor included, the -2 Log Likelihood is 75.085. The decrease in the -2 Log Likelihood from 81.697 to 75.085 indicates that the model fits the data better than the intercept-only model. The Chi-Square value of 6.612 represents the difference in -2 Log Likelihood between the intercept-only model and the final model. The significance value (p-value) is 0.048. The p-value of 0.058 is greater than the common alpha level of 0.05, suggesting that the improvement in fit provided by the predictor is statistically insignificant. However, the improvement in fit (p = 0.058) indicates that inter-role conflict contributes insignificantly to the model.

The Cox and Snell R-Square value is 0.776, indicating that approximately 77.6% of the variance in productivity can be explained by inter-role conflict included in the model. The Nagelkerke R-Square value is 0.877, and this value adjusts the Cox and Snell R-Square to cover the full range from 0 to 1, providing a more interpretable measure. The value of 0.877 suggests that the model explains approximately 87.7%

of the variance in productivity. The McFadden R-Square value is 0.939, and the value of 0.939 indicates that the model explains about 93.9% of the variance in productivity. However, we would consider the Pseudo R-Square value (McFadden = 0.939) suggest a substantial relationship between inter-role conflict and productivity.

Table 8e shows the parameter estimates for the ordered logit regression model, including the threshold estimates for the levels of productivity and the location parameters for the levels of inter-role conflict. Threshold estimates represent the cut-off points on the latent variable (underlying continuum of productivity) that correspond to the observed ordinal categories of productivity. The significant thresholds (with p-values < 0.05) indicate meaningful cut-off points between the categories, except for the third threshold ([productivity3 = 3.00]), which is not significant (p = 0.384). Location Parameter (Inter-role Conflict) estimate represents the effect of different levels of inter-role conflict on the log-odds of being in a higher category of productivity. In terms of individual categories, the first level of inter-role conflict does not significantly affect the productivity of health workers ( $\beta = -0.037$ , Std. Error = 0.530, Wald = 0.005, p-value > 0.05), the second level of inter-role conflict does not significantly affect the productivity of health workers ( $\beta = -0.502$ , Std. Error = 0.391, Wald = 1.651, p-value > 0.05), the third level of inter-role conflict does not significantly affect the productivity of health workers ( $\beta = -0.516$ , Std. Error = 0.281, Wald = 3.369, p-value > 0.05), the fourth level of inter-role conflict does not significantly affect the productivity of health workers ( $\beta = 0.121$ , Std. Error = 0.266, Wald = 0.208, p-value > 0.05), and the fifth level of inter-role conflict is set to zero because it is the reference category. However, the estimates for inter-role conflict levels indicate how a unit change in the inter-role conflict level affects the log-odds of being in a higher category of productivity. None of the location parameters for inter-role conflict levels are statistically significant (p-values > 0.05), meaning that changes in inter-role conflict do not have a statistically significant effect on the odds of being in higher productivity categories.

### **Decision**

The direction of the estimates suggests that higher levels of inter-role conflict generally tend to decrease the odds of higher productivity, except for the highest level of conflict (4.00), which shows a slight positive effect (though not significant). Thus, we reject the alternative hypothesis and accept the null hypothesis that inter-role conflict has no significant negative effect on productivity of health workers in the North Central Nigeria.

**Hypothesis Two**

**H<sub>0</sub>:** Role ambiguity has no effect on emotional stability.

**H<sub>1</sub>:** Role ambiguity has effect on emotional stability.

**Table 9a Case Processing Summary on Role Ambiguity and Emotional Stability**

		<b>N</b>	<b>Marginal Percentage</b>
EMS	Strongly Disagree	33	11.2%
	Disagree	56	19.0%
	Neutral	50	16.9%
	Agree	95	32.2%
	Strongly Agree	61	20.7%
RAY	Strongly Disagree	32	10.8%
	Disagree	72	24.4%
	Neutral	97	32.9%
	Agree	71	24.1%
	Strongly Agree	23	7.8%
Valid		295	100.0%
Missing		0	
<b>Total</b>		<b>295</b>	

**Source:** SPSS Version 22.0

RAY= Role Ambiguity; EMS= Emotional Stability

**Table 9b Model Fitting Information**

<b>Model</b>	<b>-2 Log Likelihood</b>	<b>Chi-Square</b>	<b>Df</b>	<b>Sig.</b>
Intercept Only	93.315			
Final	88.372	4.943	4	.003

Link function: Logit.

**Table 9c Goodness-of-Fit**

	<b>Chi-Square</b>	<b>Df</b>	<b>Sig.</b>
Pearson	14.476	12	.271
Deviance	15.011	12	.241

Link function: Logit.

**Table 9D Pseudo R-Square**

Cox and Snell	.517
Nagelkerke	.517
McFadden	.605

Link function: Logit.

**Table 9E Parameter Estimates**

		Estimate	Std. Error	Wald	Df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[EMS = 1.00]	-2.018	.401	25.321	1	.000	-2.804	-1.232
	[EMS = 2.00]	-.777	.378	4.227	1	.040	-1.518	-.036
	[EMS = 3.00]	-.049	.375	.017	1	.896	-.784	.686
	[EMS = 4.00]	1.428	.386	13.703	1	.000	.672	2.184
Location	[RAY=1.00]	-.719	.487	5.060	1	.036	-1.073	.834
	[RAY=2.00]	-.730	.427	4.005	1	.045	-.866	.806
	[RAY=3.00]	-.678	.413	4.035	1	.051	-.887	.732
	[RAY=4.00]	.476	.429	1.234	1	.267	-.364	1.317
	[RAY=5.00]	0 <sup>a</sup>	.	.	0	.	.	.

Link function: Logit.

a. This parameter is set to zero because it is redundant.

Table 9 shows the case processing summary for the ordered logit regression model examining the effect of Role Ambiguity (RAY) on Emotional Stability (EMS). For emotional stability, the majority of respondents are in the "Agree" category (32.2%), followed by "Strongly Agree" (20.7%) and "Disagree" (19.0%), and for role ambiguity, the majority of respondents are in the "Neutral" category (32.9%), followed by "Disagree" (24.4%) and "Agree" (24.1%).

Table 9b shows the model fitting information for the ordered logit regression model. The table helps assess the fit of the model by comparing the model with only the intercept to the final model that includes the predictor. For the model with only the intercept, the -2 Log Likelihood is 93.315, and for the final model with predictor included, the -2 Log Likelihood is 88.372. The decrease in the -2 Log Likelihood from 93.315 to 88.372 suggests that the model fits the data better than the intercept-only model. The Chi-Square value of 4.943 represents the difference in -2 Log Likelihood between the intercept-only model and the final model. The significance value (p-value) is 0.003, and this value indicates whether the improvement in model fit (as measured by the Chi-Square statistic) is statistically significant. The p-value of 0.003

is less than the common alpha level of 0.05, suggesting that the improvement in fit provided by the predictor is statistically significant.

Table 9d shows the Pseudo R-Square values for the ordered logit regression model. The Cox and Snell R-Square value is 0.517, indicating that approximately 51.7% of the variance in the emotional stability can be explained by role ambiguity in the model. The Nagelkerke R-Square value is also 0.517, and this value adjusts the Cox and Snell R-Square to cover the full range from 0 to 1, providing a more interpretable measure. The value of 0.517 suggests that the model explains approximately 51.7% of the variance in emotional stability, indicating a moderate to strong fit. The McFadden R-Square value is 0.605, and the value of 0.605 indicates that the model explains about 60.5% of the variance in the dependent variable, which is considered a strong fit. These values reveals that the model explains a substantial proportion of the variance in emotional stability based on role ambiguity, with McFadden's R-Square indicating a particularly strong fit. This aligns with the earlier result that the model fit improvement was statistically significant. However, we would consider the Pseudo R-Square value (McFadden = 0.605) suggest a substantial relationship between role ambiguity and emotional stability.

Table 9e shows the parameter estimates for the ordered logit regression model, including the threshold estimates for the levels of emotional stability and the location parameters for the levels of role ambiguity. The threshold estimates are the points on the logit (log-odds) scale that separate the adjacent levels of the ordinal dependent variable (emotional stability). All thresholds except for [EMS = 3.00] are statistically significant ( $p < 0.05$ ), indicating meaningful cut-off points between the categories. The Location Parameters (Role Ambiguity) estimate represents the effect of different levels of role ambiguity on the log-odds of being in a higher category of emotional stability. In terms of individual categories, the first level of role ambiguity significantly affect emotional stability ( $\beta = -0.719$ , Std. Error = 0.487, Wald = 5.060, p-value = 0.036), the second level of role ambiguity significantly affect emotional stability ( $\beta = -0.730$ , Std. Error = 0.427, Wald = 4.005, p-value = 0.045), the third level of role ambiguity significantly affect emotional stability ( $\beta = -0.678$ , Std. Error = 0.413, Wald = 4.035, p-value = 0.051), the fourth level of role ambiguity does not significantly affect emotional stability ( $\beta = 0.476$ , Std. Error = 0.429, Wald = 1.234, p-value = 0.267), and the fifth level of role ambiguity is set to zero because it is the reference category. The estimates for role ambiguity levels indicate how a unit change in the role ambiguity level affects the log-odds of being in a higher category of emotional stability. Majorly at different level (apart from the fourth level), the results show statistically significant negative coefficients ( $p < 0.05$ ), indicating that

higher levels of role ambiguity decrease the odds of higher emotional stability categories.

### **Decision**

Since the location parameters indicate that role ambiguity significantly influences emotional stability, with higher levels of role ambiguity generally associated with lower emotional stability, we reject the null hypothesis and accept the alternative hypothesis that role ambiguity has a significant negative effect on emotional stability of health workers in the North Central Nigeria.

### **Discussion of Findings**

***Hypothesis One: Inter-role conflict has effect on productivity.***

Finding showed that inter-role conflict has no significant negative effect on the productivity of health workers. This implies that despite experiencing inter-role conflict, health workers in federal government hospitals in North Central Nigeria do not exhibit a significant decrease in productivity. This finding may also imply that health workers in this region manage these conflicts in a way that does not substantially impair their productivity at work. This contrasts with the study of Nguyen (2021) that submitted that inter-role conflict significantly impacts productivity. For instance, Bowen, van der Westhuizen and Meyer (2020) found that inter-role conflict typically results in job dissatisfaction and reduced work performance. Daovisan, Phukrongpet, Wannachot, Rattanasuteerakul, Mamom and Khamnu (2023) also found that there is a relationship between inter-role conflict and emotional disturbance in the workplace. However, this present study established clarity in the nature of the relationship between inter-role conflict and productivity at work. The importance of this finding lies in its potential to challenge and refine the understanding of the relationship between inter-role conflict and productivity. This can inform tailored interventions and policies that support health workers in managing inter-role conflict without compromising productivity. This finding can influence managerial practices and policies in healthcare settings. Administrators and policymakers might focus on identifying and strengthening the factors that help health workers manage inter-role conflict effectively. Understanding that inter-role conflict does not necessarily lead to reduced productivity can help managers to focus on enhancing existing support systems rather than solely attempting to eliminate inter-role conflicts.

***Hypothesis Two: Role ambiguity has effect on emotional stability.***

Finding showed that role ambiguity has a significant negative effect on emotional stability of health workers. This implies that unclear or poorly defined job roles (role ambiguity) significantly undermine the emotional stability of health workers in North



Central Nigeria. When health workers are uncertain about their job responsibilities, it can lead to increased emotional exhaustion. This is supported by other studies in the field of occupational psychology, construction management. For example, Wu, Hu, and Zheng (2019) found that lack of clarity in roles has a detrimental and significant effect on work-related exhaustion. Dormann (2020) identified role ambiguity as a major source of job stress, leading to negative psychological outcomes. Similarly, Alblihed and Alzghaibi (2022) identified that role ambiguity has a positive effect on burnout. Zhang et al. (2023) established a finding showing the context in which work alienation positively affected role ambiguity and emotional exhaustiveness. Ahmad et al. (2021) showed that role ambiguity is associated with higher levels of anxiety and depression among employees. In the healthcare sector, a study by Cengiz, Yoder, and Danesh (2021) confirmed that role ambiguity significantly contributes to emotional exhaustion and burnout among nurses. The finding of Bulana (2022) revealed that when employees experience higher levels of role ambiguity, it tends to trigger emotional exhaustion, subsequently leading to reduced job satisfaction. The finding of this present study is crucial as it highlights the need for clear job descriptions and structured roles within healthcare institutions. By understanding the negative effect of role ambiguity on emotional stability, healthcare administrators and policymakers can take proactive steps to reduce ambiguity and provide better support for health workers.

## **Conclusion**

Managing work-life interface can play a pivot role in influencing the performance of healthcare workers, as it shapes the behavioral patterns of workers, namely inter-role conflict, role ambiguity, role incompatibility, work overload, and person-role conflict. While inter-role conflict was determined not to have a significant effect on the productivity of healthcare workers, this study highlights the complexity of the work-life dynamic and presents that other factors can be more influential in determining output. Role ambiguity emerges as a critical aspect of work-life interface affecting the emotional stability of healthcare workers. When roles are unclear, workers experience increased stress and uncertainty, which can undermine their overall performance and well-being.

## **Recommendations**

The study recommends that:

- i. Federal government hospitals need to focus on enhancing role clarity and communication to further support staff effectiveness. They need to implement training programmes that emphasize conflict resolution and role negotiation; this can empower workers to navigate potential conflicts more effectively. Additionally, assuring that healthcare workers stay focused on providing

high-quality patient care can help lessen any lingering effects caused by inter-role conflict through the development of a collaborative work environment.

- ii. Managers of Federal government hospitals need to establish a well-defined role, and offer continuous and open communication about job requirements in order to lessen the negative effects of role ambiguity on the emotional stability of health workers. Regular feedback sessions and opportunities for professional development can help clarify roles and lessen uncertainty.

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