



# Relationship between Supportive Supervision and Empathic Behavior among Public Healthcare Professionals: The Mediating Role of Occupational Self-Efficacy

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## ABSTRACT

**Purpose:** The study explored the relationship between supportive supervision and empathic behavior and the indirect effect of occupational self-efficacy (OSE) among healthcare professionals in public hospitals in Delta State, Nigeria.

**Design/Methodology:** The study is a quantitative cross-sectional survey, and the correlational design was adopted. Through convenience and systematic sampling, data were obtained from 127 healthcare professionals (doctors and nurses) from public hospitals. The sample consisted of 127 healthcare professionals with a mean age of 33.91 (SD, 5.64). Regression analysis via Model 4 of Hayes' PROCESS Macro was used to analyze the direct and indirect effect model with the help of the IBM-SPSS version 23.

**Findings:** The study's findings indicated that supportive supervision and OSE positively and significantly predicted empathic behavior among healthcare professionals. The results further indicated that OSE mediated the relationship between supportive supervision and empathic behavior.

**Practical Implications:** Based on the research findings, it is recommended that public healthcare administrators and managers should ensure that employees who handle direct patient care in public hospitals receive enough training in enhancing their skills, professional development and provided with enough supportive supervision in the workplace to foster empathic concern for their patients.

**Originality/Value:** The research findings enhance and add new knowledge to the empathic behavior literature by investigating supportive supervision and OSE as predictors and checking for the mediating role of OSE.

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## Introduction

The importance of healthcare professionals in all nations around the world cannot be overemphasized. The healthcare sector remains one of the most important sectors in every nation's economy because it concerns itself with the general well-being (both physical and psychological) of the populace. Annually, revenues are allocated to ensure that individuals access public-owned medical institutions and get good medical care from healthcare practitioners. A healthy population tends to live longer and is equally more productive. Attaining a sustainable healthcare system remains significant to nation-building. The effectiveness of healthcare delivery is mainly dependent on the service process and the healthcare practitioner-patient interaction (Elayyan et al., 2018). The importance of the healthcare practitioner-patient relationship cannot be overemphasized. This has been recognized throughout the history of medicine as a crucial factor in the treatment process (Davies, 2014). This relationship is built mainly on empathy which is a significant factor in ensuring and maintaining quality therapeutic communication between healthcare professionals and patients during the treatment process (Onuoha & Idemudia, 2019; Ward et al., 2009; Yu & Kurk, 2009). Because healthcare professionals are constantly in direct contact with their patients, empathic behavior becomes an important skill to develop. Empathy is associated with favorable outcomes for patients and healthcare professionals (Scott, 2011).

According to Davis (1983), empathy is the act of being concerned with the emotional well-being of another, being able to imagine oneself in the place of another individual, seeing things from their perspective, and being distressed in response to their troubles. The absence of empathic behavior among healthcare professionals could be detrimental to the individuals who need their services. A hostile workplace attitude marked by a lack of empathy and emotional competence among healthcare professionals has contributed to some of the challenges encountered in the healthcare sector such as, a deficiency in the quality of healthcare services which ultimately lead to patients being discouraged from seeking healthcare from public owned medical institutions freely. Many studies have reported a decline in empathic behavior among healthcare professionals (Nunes et al., 2010; Francis et al., 2013; Stratta et al., 2016). A report from public hospitals in the United Kingdom between 2005 and 2009 indicated shocking maltreatment cases, lack of empathy, extreme consequences of negligence, and poor communication in the healthcare sector (Dean, 2017). In recent reports, negative attitudes in poor communication, including lack of caring and empathic behaviors (emotional incompetence), have led to an increase in complaints against public healthcare professionals in Nigeria (Iro-Idoro & Ajibare, 2017). In a study conducted by Adebayo (2020), three critical problems patients experience with healthcare professionals were identified: a lack of empathic concern for patients, interpersonal communication, and lack of information disclosure. It becomes pertinent to investigate one of the identified problems (lack of empathy for patients).

Empirical effort in understanding empathic behavior among healthcare professionals is appreciable and has been primarily focused on the demanding nature of the job. A good number of studies have been focused on empathy and burnout (e.g., William et al., 2017; Bogiatzaki et al., 2019; Wilkinson et al., 2017; Ferri et al., 2015) and how empathy is related to other variables such as health workers quality of life and self-compassion (Duarte et al., 2016), motivation (Dor et al., 2019), patient safety and workers attachment (Leana et al., 2017). Also, the literature indicates that empathic behavior among healthcare professionals has been given considerable attention in the present research location (Nigeria). These include; comparative study of healthcare workers in public and private-owned hospitals (Oduanya et al., 2018), patient satisfaction and service quality; where empathy was considered as a factor in quality service delivery (Adepoju, et al., 2018), validation of the physician empathy scale (Osime et al., 2019), demographic factors and its consequences on empathic behavior (Onuoha & Idemudia, 2019), and job satisfaction and empathic behavior (Iyeke, 2020). These studies demonstrate the importance of empathy for the patient and on the treatment process. These studies are highly appreciable, but the current study was necessary because of two gaps in the literature.

First, the literature focuses on how patients perceive empathy and other caring behaviors that foster the treatment process and quality service delivery. The practice of empathic behavior in healthcare is mainly dependent on the individual healthcare professional and the work environment (Kerasidou & Horn, 2016, 2018). Hence, it is necessary to consider organizational and individual factors that may directly influence empathic behavior. To the best of the researchers' knowledge and the available literature reviewed before the commencement of this study, organizational and individual variables have not been given much attention. Consequently, supportive supervision is examined in this study as a possible antecedent of empathic behavior among healthcare professionals. The choice of supportive supervision is informed by the organizational support theory, which proposes that support for employees' social and emotional needs fosters positive workplace behavior such as increased job performance. This is made possible through a positive exchange relationship between the healthcare institutions and healthcare professionals (Blau, 1964; Eisenberger et al., 1986).

Second, to better understand the relationship between supportive supervision and empathic behavior, occupational self-efficacy (OSE) was utilized as a mediating variable. OSE is a mediating variable informed by self-efficacy theory (Bandura, 1977) based on an individual's belief in their capability to carry out specific tasks. Thus, individuals with high occupational self-efficacy have the confidence that they can carry out job tasks effectively and efficiently, which tends to influence workplace behaviors. Accordingly, to fill this research gaps, the main objectives of the study are: (1) to examine the direct relationship between supportive supervision and empathic behavior, (2) to examine the relationship between OSE and empathic behavior, and (3) to explore the mediating role of OSE on the relationship between supportive supervision and empathic behavior. Exploring these objectives will be of great value in expanding the literature on empathic behavior among healthcare professionals.

## **Literature Review and Development of Hypotheses**

### **Empathic Behavior**

The ability of healthcare professionals to show empathy and manage the care of their patients is crucial in the treatment process. Empathy is considered an essential attribute for healthcare professionals, and therefore, it needs to be encouraged within the health sector (Wilson et al., 2012). Empathy is a cognitive and emotional attribute that allows healthcare professionals to understand, embrace and discuss the inner experiences of their patients (Hojat et al., 2003). Halpern (2003) defined empathy as an individual capacity to feel his or herself into the inner life of another individual. In line with this, Davis (1983) described empathy as the act of being concerned with the emotional well-being of another person, being able to imagine oneself in the place of another, seeing things from their perspective, and being distressed in response to their troubles.

### **Supportive Supervision**

The importance of support in healthcare organizations cannot be overemphasized. Considering the nature of the job carried out by healthcare professionals, supportive supervision becomes an important variable that should be investigated. Several definitions of supportive supervision have been put forward. Supervision is the process of providing guidance, support, and feedback in the work environment (World Health Organization, 2018). According to Kilminster et al. (2007), supportive supervision is defined as the act of providing adequate guidance and feedback on personal, professional, and educational development in the workplace. Supportive supervision is the act of guiding, assisting, training, and motivating staff to increase and develop consistency in the workplace and increase performance and quality healthcare delivery (Garrison et al., 2004). In their definition, Deshpande et al. (2015) made emphasis on mentoring, solving problems together, and effective communication between supervisors and supervisees. Also, Marquez and Kean (2002) described supportive supervision as a process that promotes quality healthcare services at all healthcare system levels. As entails in healthcare, supportive supervision covers three main areas: administrative, educational, and general

support (Abiddin, 2008). The administrative component covers issues of policy and guidelines requirements. The educational aspect is focused on learning, mentoring, and professional development between supervisors and supervisees. In contrast, the general supportive component is concerned with ways through which the job stress of the supervisees can be reduced, motivating the employees, and developing a work environment that enhances performance (Avortri et al., 2019).

### **Occupational Self-Efficacy**

Self-efficacy is an individual disposition that is usually developed within a specific environment. According to Bandura (1997), self-efficacy refers to the individual's belief that they have what it takes to carry out a task. Self-efficacy has been applied to a vast area of human life, one of which is the workplace. Occupational self-efficacy (OSE) is linked to the work environment. Hence, an employee with high OSE believes that they can carry out tasks effectively and efficiently irrespective of the challenges at work. OSE is considered a predictor of favorable workplace behaviors (Prahara & Idriani, 2019; kappagoda, 2018).

### **Supportive Supervision and Empathic Behavior**

Literature on the possible relationship between supportive supervision and empathic behavior is in shortage. Therefore, the literature review is based on related empirical concepts that give support for this study. Empirically, there are pieces of evidence linking supportive supervision to positive workplace behaviors among healthcare professionals. Supportive supervision has been linked to increased workplace performance (e.g., Hill et al., 2014; Frimpong et al., 2011). Another investigation carried out by Madede et al. (2017) used supportive supervision as an intervention to investigate its impact on four workplace variables: work engagement, job satisfaction, intention to leave, and burnout. The study indicated that supportive supervision increases healthcare workers' performance and motivation. Supportive supervision has also been linked to quality healthcare services. The feeling of being supported increases the motivation to efficiently carry out the assigned task in the organization (Kok et al., 2018). For example, Snowdon et al. (2017) found that supportive supervision increases the quality of healthcare services among healthcare workers. Empathy is considered one of the dimensions of quality healthcare services (Adepoju et al., 2018). Supportive supervision is also associated with increased job satisfaction (Avortri et al., 2019; Qureshi et al., 2018).

On the other hand, job satisfaction is positively associated with empathic behavior (Iyeke, 2020; Mousavi et al., 2012). The proposed association is also supported by organizational support theory, which is that support for the social and emotional needs of employees promotes positive workplace behaviors (Blau, 1964; Eisenberger et al., 1986). Based on the above literature review, we hypothesize that:

*Hypothesis One (H<sub>1</sub>):* Supportive supervision will positively and significantly predict empathic behavior among public healthcare professionals.

### **Occupational Self-Efficacy and Empathic Behavior**

Self-efficacy is built within the framework of the social cognitive theory. Social cognitive theory gives support for the relationship between OSE and empathic behavior. OSE represents an individual's belief that they have what it takes to effectively carry out tasks in the organization (Bandura, 1977). The healthcare professional's belief in their capacity to carry out job tasks effectively is likely to influence how they react to patients' needs. Prior studies have shown that OSE is positively associated with some salient workplace behavior such as job satisfaction (Banerjee, 2016), work performance (Cetin & Askun, 2018), quality of work-life (Mensah & Lebbaeus, 2013), and work health behavior (Utami & Sandra, 2020). These studies practically indicate how occupational self-efficacy influences the individual and the organization. A survey by Rathi and Rastogi (2009) on the relationship between OSE and emotional intelligence found a more direct connection between OSE and empathy. Empathy was considered one of the dimensions of emotional intelligence, and they found a significant

positive relationship between OSE and empathy. Perez-fuentes et al. (2019) found that overall self-esteem was associated with empathy among nurses. Hence, employees with high OSE are likely to exhibit higher levels of empathic behavior. In congruence with the theoretical and empirical literature to support the proposed relationship, we hypothesize that:

*Hypothesis Two (H<sub>2</sub>):* OSE will positively and significantly predict empathic behavior among public healthcare professionals.

### The mediating role of Occupational Self-Efficacy

The literature indicates that OSE has been utilized as a mediator across various studies. For example, OSE has been found to mediate the relationship between professional development and organizational commitment and job satisfaction and organizational commitment (Mohammadzadeh et al., 2018). It has also been found to mediate the correlation between job insecurity and work-related learning (Van Hootegeem et al., 2021) and between emotional intelligence and clinical communication competence (Zhu et al., 2016). OSE as a mediator between supportive supervision and empathic behavior is based on the notion that OSE enhances the capacity of the individual to react more positively to events in the workplace (Bandura, 1977). Studies have shown that individuals high in OSE are more likely to deal with challenges and respond positively to the work environment (Prahara & Idriani, 2019; kappagoda, 2018). Based on the few empirical and theoretical literature reviewed, we hypothesize that OSE plays the role of a mediator in the relationship between supportive supervision and empathic behavior. The hypothesis is given below:

*Hypothesis Three (H<sub>3</sub>):* OSE will mediate the predictive relationship between public healthcare professionals' supportive supervision and empathic behavior.

The relationships among the variables of interest are presented in the conceptual framework below:

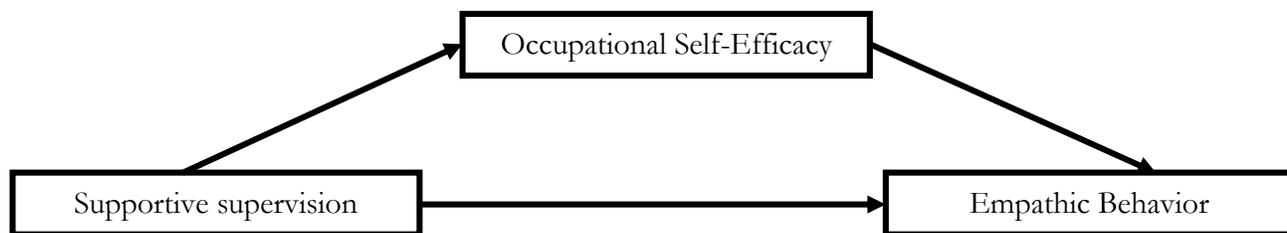


Figure 1. Conceptual framework depicting the relationship among the variables

## Methodology

### Sample and Procedure

The study sample comprises one hundred and twenty-seven (127) essential health care personnel involved in direct patient care in public hospitals in Delta State, Nigeria. Precisely, the sample consists of 48 medical doctors and 79 nurses. Further demographic analysis showed that 45 (35.4%) were male while 82 (64.6%) were female. Also, 74 (58.3%) were married, while 53 (41.7%) were single. The age range of the respondents was 26-59, with a mean age of 33.91 years (SD, 5.64). The formal education and professional training received by the research participants supported the use of report measures and led to the efficient response to the items in the questionnaire.

Healthcare professionals from government-owned hospitals in Delta State, Nigeria, were utilized for this study. Participants were selected from public-owned hospitals through the convenience and systematic sampling method using one (1) as the *nth* case. The participating hospitals in Delta State, Nigeria, were selected based on two criteria. First, based on reported poor communication and lack of caring or empathic behavior

among healthcare professionals in public hospitals. Second, public-owned hospitals in the state are perceived to have more demanding clinical cases that require a lot of empathic care from healthcare professionals. Hence, empathy is highly required to aid the treatment process. Considering the nature of the research, the researchers sought the permission of the participating public hospitals before administering the questionnaires. Essential medical personnel involved in direct patient care (doctors and nurses) were selected. One hundred and forty-one (141) standardized questionnaires were distributed within five weeks. One hundred and thirty-seven (137) questionnaires were retrieved. This accounted for a questionnaire return rate of 97.1%, which was broadly satisfactory. However, after the questionnaires had been sorted, 127 were used for analyzing the data. The sample size of 127 participants utilized for this study was satisfactory. It met the recommendation by Dewberry (2004), who stated that the sample size required for a medium effect size should be utilized when the expected effect size cannot be ascertained. The sample size has a 90% power of detecting correlation between each of the variables.

## **Measurement**

### ***Empathic Behavior***

The Jefferson scale of empathic behavior (healthcare workers version) was adopted. It is a 20-item scale measuring the degree to which healthcare workers show empathy towards their patients. The scale comprises three dimensions: compassionate patient care, perspective-taking, and standing in the patient's shoes. Sample items for the scale include: "to render better care, I try to think like my patient" and "attentiveness to my patients' personal experiences is relevant to the effectiveness of the treatment." The initial response was on a seven-point Likert scale, but this study utilizes the five-point Likert response (where 1= strongly disagree to 5= strongly agree) to help reduce ambiguous responses. Studies involving healthcare professionals have shown that the scale has good psychometric properties (Hojat et al., 2002; Hojat, 2016). Di Lillo et al. (2009) reported an internal consistency (Cronbach's alpha) of .87 and .85 for resident doctors and physicians, respectively.

### ***Supportive Supervision***

This was measured using the supportive supervision scale developed by McGilton (2010). This is a 15-item scale measuring the degree to which healthcare professionals perceive the support they get from their supervisors. A five-point Likert response ranging from strongly disagree to strongly agree was utilized for the scale. Sample items for the scale include: "my supervisor tries to meet my need" and "my supervisor recognizes my strength and areas of development." A test re-test reliability of .70 and Cronbach's alpha of .94 was reported for the scale (McGilton, 2010).

### ***Occupational Self-Efficacy***

The short version of the occupational self-efficacy scale developed by Rigotti et al. (2008) was adopted in this study. The scale measures healthcare professionals' self-efficacy on the job. It is a 6-item scale with a five-point Likert response ranging from strongly disagree to strongly agree. Sample items for the scale include: "I can remain calm when facing difficulties in my job because I can rely on my abilities" and "I feel prepared to meet most of the demands in my job." A Cronbach's alpha coefficient ranging from .85 to .90 was obtained for the scale using samples from five countries.

### ***Design and Statistical Tool***

This is a cross-sectional study, and a correlational research design was utilized. A two-step procedure was used in analyzing the empirical data collected from public healthcare professionals. First, reliability coefficient for the instruments used for collecting the data, descriptive statistics (which captures the mean, standard deviation, Skewness, and kurtosis), and correlation coefficients analysis for each pair of variables were

conducted. This is to ascertain if the data satisfy the normality assumption of parametric statistics and satisfies the structured mediational paths. Second, regression analysis via PROCESS Macro model 4 (Hayes, 2013) was used for testing the direct and indirect effects. The PROCESS Macro is widely utilized to test complex models involving mediating and moderating variables. A 5000 bias-corrected bootstrap sample was used to estimate the 95% confidence interval for each model. The indirect effect is significant if zero is not included in the 95% confidence interval. Specifically, model 4 was used for the mediation analysis to ascertain the direct and indirect effects. The empirical data were managed and analyzed with IBM SPSS version 23.

### ***Common Method Variance***

The study is cross-sectional and uses a survey instrument for the collection of data. Hence, it was essential to control for common method variance. In controlling for method variance in this study, the researchers made sure that the participants understood that all the information they provided was confidential and would only be used for the research, and their anonymity was guaranteed. Also, to prevent and reduce the level of socially desirable responses, the cover letter made the participants understand that giving their honest responses would reflect the true purpose of the research (Rodriguez-Ardura & Maseguer-Artola, 2020). The response scaling adopted (5-point Likert scale) was easy for the participants to understand and helped prevent potential response bias from the participants (Nwanzu & Babalola, 2021). Statistically, the correlation matrix technique was utilized to assess the impact of common method variance in the study. This approach assesses the impact of common method variance through latent variable correlations (Bagozzi et al., 1991; Tehseen et al., 2017). Based on this approach, common method variance is indicated when there is a large correlation among the key constructs in a study ( $r > .90$ ). Hence, correlation values less than .90 indicate the absence of common method variance.

### ***Control Variables***

The participant's gender and age were included as covariates, i.e., control variables in data analysis. There have been conflicting findings with regards to the impact of gender on empathic behavior among healthcare professionals. Previous studies outside the current research context (Nigeria) have indicated that gender and age differences influence healthcare professionals' empathic behavior (Kong et al., 2020; Talebian et al., 2021). Another study found that gender is not a significant factor in empathic behavior among healthcare professionals in Nigerian public hospitals (Onuoha & Idemudia, 2019). Hence, the researchers deemed it necessary to include these two demographic factors as control variables in this study.

## **Results**

### **Test for Reliability, Validity, Normality and Correlation Coefficients**

The scales adopted in this study were evaluated for validity and reliability. The scales adopted for this study were checked for reliability through Cronbach's alpha coefficients. The internal consistency of the scales as measured by Cronbach's alpha ranged from .76 to .90. Specifically, Cronbach's alpha values for supportive supervision, empathic behavior, and occupational self-efficacy were .87, .76, and .90, respectively. The observed values were broadly satisfactory as they were above .70 (Howitt & Cramer, 2017). For the validity, content validity was achieved by adopting a scale that has been consistently utilized in the literature, while the inter-item correlation values provide evidence for convergent validity (Mirjana et al., 2018). The observed correlation values were within the acceptable range (0.2 to 0.5), which was considered satisfactory (Field, 2018). Also, it was necessary to check for the normality of the data to determine its suitability for the current study. The skewness and Kurtosis test was utilized to check if the data collected were normally distributed. From the statistical analysis, the skewness and kurtosis values were within the normal range. The skewness and kurtosis

values were below two indicating that the data were normally distributed (Hancock & Mueller, 2010; Rashid et al., 2020).

Table 1: Descriptive statistics, Cronbach's alpha, and correlation coefficient of the variables

Variables	Mean	SD	Gender	Age	SS	EB	OSE
Gender	1.35	.48					
Age	33.91	5.64	-.17				
SS	3.88	.86	.08	-.05	(.87)		
EB	3.96	.81	.05	.07	.44**	(.76)	
OSE	4.01	.83	.08	-.07	.29**	.33**	(.90)

Note: \*\* $p < 0.01$ ; SD = Standard Deviation; SS= Supportive Supervision; EB = Empathic Behavior; OSE = Occupational Self-Efficacy; Cronbach's alpha for each scale is in parenthesis; Gender was coded as 1 = Male, 2 = Female; while age was entered in years.

The descriptive statistics representing the mean and standard deviation, the correlation coefficients values for all the variables in the study, and the Cronbach's alpha discussed earlier are shown in table 1. From the above table, it can be observed that the mean and standard deviation values were modest for the main variables. It can also be seen that the main variables are well correlated with each other. As indicated in table 1, supportive supervision was positively related with empathic behavior ( $r = .44, p < .01$ ), OSE positively correlated with empathic behavior ( $r = .33, p < .01$ ). Hence, all the variables in the study were significantly correlated, and the data were considered appropriate for further statistical analysis. As indicated in the table, age and gender had no significant association with any key study variables. The observed correlation values were below .80, indicating that multicollinearity was not an issue in the study. The correlation values were less than .90, indicating that common method variance was not an issue in the study (Bagozzi et al., 1991; Tehseen et al., 2017).

### Testing the Hypothesized Model

Hayes' PROCESS Macro was used to test the research hypotheses through Model 4 (mediational analysis). To ascertain the direct and indirect effect of the research model, 5000 bootstrapping was conducted. As discussed earlier, there are conflicting findings regarding the impact of gender and age on empathic behavior among healthcare professionals. Hence, the two demographic characteristics (participants' gender and age) were utilized as control variables (covariates) during data analysis. The two control variables were not statistically related to empathic behavior among healthcare professionals. When entered along with supportive supervision, gender ( $\beta = .09, t = .59, p > .05$ ), and age ( $\beta = -.01, t = -.54, p > .05$ ) showed no significant correlation with empathic behavior. These results indicated that gender and age have no significant influence on empathic behavior among healthcare professionals. The result for the mediation analysis is shown in table 2. The table indicates that after controlling for gender and age, supportive supervision positively and significantly predicted empathic behavior ( $\beta = .35, t = 4.57, p < .01$ ). Hence, the first hypothesis ( $H_1$ ) was accepted. In line with the second hypothesis ( $H_2$ ), the result showed that, after controlling for gender and age, OSE was a positive and significant predictor of empathic behavior ( $\beta = .23, t = 2.87, p < .01$ ). Hence, the second hypothesis ( $H_2$ ) was accepted. The direct effect analysis offers support for the mediational paths. The results showed that OSE, after controlling for gender and age, mediates the relationship between supportive supervision and empathic behavior ( $\beta = .07, LLCI = .01, ULCI = .17$ ). The interval for the lower limit confidence interval (LLCI) and upper limit confidence interval (ULCI) had no zero. The third hypothesis ( $H_3$ ) was accepted.

Table 2: Simple mediation analysis of the direct and indirect effect model

Direct Effect Model						
Variables	outcome = Empathic Behavior (Y)					
	<i>B</i>	<i>SE</i>	<i>T</i>	<i>P</i>	<i>LLCI</i>	<i>ULCI</i>
Supportive Supervision (X)	.36	.08	4.57	.01	.20	.51
Occupational Self-Efficacy (M)	.23	.07	2.87	.01	.07	.39
Indirect Effect of Supportive Supervision(X) on Empathic Behavior (Y)						
	<i>Effect</i>	<i>Boot standard error</i>			<i>LLCI</i>	<i>ULCI</i>
Occupational Self-Efficacy (M)	.07	.04			.01	.17

Note: LLCI = Lower Limit Confidence Interval; ULCI = Upper Limit Confidence Interval

## Discussion

This study examined the relationship between supportive Supervision and empathic behavior among healthcare professionals. The study also examined the mediating role of OSE on the relationship between supportive supervision and empathic behavior. Three hypotheses were tested, and the analysis conducted confirmed and supported the hypotheses developed for the study. Gender and age were utilized as control variables at all levels of the analysis conducted in the study. This is based on the recommendations from the literature. Gender and age, as indicated in the results, had no significant impact on the criterion variable (empathic behavior).

With regard to testing the hypothesized model developed for the study, the first hypothesis ( $H_1$ ), which stated that supportive supervision would positively and significantly predict empathic behavior among healthcare professionals, was accepted. Supportive supervision was a significant predictor of empathic behavior. This indicates that healthcare professionals who receive adequate support from their supervisors are more likely to display empathy for their patients at various stages of the treatment process. This result has empirical and theoretical support. Empirically, the result of the first hypothesis ( $H_1$ ) is in line with few studies linking supportive supervision and other related workplace behavior among healthcare professionals. For example, Madede et al. (2017) found that supportive supervision enhances workplace performance and motivation among workers in the healthcare sector, while Snowdon et al. (2017) linked supportive supervision to delivering quality healthcare service among health workers. A significant factor in providing quality healthcare is empathic behavior (Adepoju et al., 2018). Theoretically, the organizational support theory (OST) also offers support for the first hypothesis. The organizational support theory is based on the notion that support for employees' emotional, social, and psychological well-being promotes positive workplace behaviors (Blau, 1964; Eisenberger et al., 1986). Empathic behavior is regarded as positive workplace behavior in the healthcare sector.

Also, the second hypothesis ( $H_2$ ), which stated that OSE would positively and significantly predict empathic behavior among healthcare professionals, was supported. Hence, OSE is a significant predictor of empathic behavior. This is an indication that healthcare professionals' empathic behavior increases when their Self-efficacy on the job increases. This result is in unity with the previous empirical literature. Empirically, Rathi and Rastogi (2009) found that OSE was related to specific dimensions of emotional intelligence, and Empathic behavior was one of these dimensions. The study carried out by Perez-fuentes et al. (2019) also supported the second hypothesis. The researchers discovered that the overall self-efficacy of nurses was a significant predictor of empathic behavior.

The third hypothesis ( $H_3$ ), which stated that OSE would mediate the relationship between supportive supervision and empathic behavior, was also supported. Hence, OSE mediated the relationship between supportive supervision and empathic behavior among healthcare professionals. The result is in congruence with

studies that have utilized OSE as a mediating variable to study other workplace variables related to this study (Mohammadzadeh et al., 2018; Van Hootegem et al., 2021). More specifically, the study carried out by Zhu et al. (2016) provides more valid support for the third hypothesis. The researchers found that OSE mediated the relationship between the emotional intelligence and clinical communication competence of healthcare workers.

## **Theoretical Implications**

Theoretically, this study has contributed to the literature by investigating supportive supervision, empathic behavior, and OSE among healthcare professionals. First, in unity with the researcher's expectations, supportive supervision and OSE positively affect empathic behavior. Studies in the extant literature have provided support for the role of empathic behavior in the treatment process. Hence, it became necessary to study organizational and individual-related constructs that can influence healthcare professionals' empathic care for their patients. Studies investigating the antecedents of empathic behavior are in shortage. A few literature studies have focused on job satisfaction (Iyeke, 2020; Mousavi et al., 2012). Thus, this study has contributed to the extant literature by investigating other antecedents of empathic behavior in healthcare organizations. This will add to the literature on empathic behavior in Nigeria and other developing countries in the world. This will also help in the implementation of policies that can enhance empathic patient care among healthcare professionals.

Second, the findings that supportive supervision and OSE promote empathic behavior confirm the organizational support and self-efficacy theory. The study offers empirical evidence for future studies that intend to use these theories. Third, this study adopted gender and age as control variables based on previous studies linking gender and age to caring and empathic behavior. The findings indicated that gender and age had no significant impact on empathic behavior, and their gender and age do not influence healthcare professionals' disposition towards empathic patient care. Thus, gender and age are less distinguishing factors in empathic behavior among healthcare professionals in the current research location (Nigeria). This provides more empirical evidence to the literature on the impact of gender and age on empathy among healthcare professionals (Kong et al., 2020; Onuoha & Idemudia, 2019; Talebian et al., 2021). Lastly, the context where the scale on supportive supervision, empathic behavior, and occupational self-efficacy was developed differs from the current research location. Hence, through the reliability and validity analysis, psychometric evidence was found for the instruments used for collecting data. Thus, ensuring that these scales can be utilized in other studies conducted in the Nigerian context.

## **Managerial Implications**

Healthcare is a vital sector in every nation in the world. Public healthcare organizations are functional because of the unique set of individuals that work in them. Hence, understanding human dynamics and related organizational factors in healthcare organizations is vital to delivering quality healthcare services. Through standardized procedures, the study has been able to link supportive supervision and OSE to empathic behavior among employees who handle direct patient care (doctors and nurses) in public hospitals. These findings have implications for managerial practices in public healthcare organizations. Administrators of public hospitals should ensure that those who manage other staff in healthcare organizations should be trained to provide adequate social and emotional support, believe in the capacity of subordinates to carry out tasks effectively, and encourage them when difficult workplace situations related to managing patients' care arises. Also, studies have shown that OSE promotes empathy and quality healthcare delivery (Adepoju et al., 2018; Snowdon et al., 2017). The organization needs to understand that it is vital to help employees build their self-efficacy on the job through training that will help in enhancing their skills, professional development, and emotional management in the workplace.

## Conclusion

The following conclusions have been made based on the findings from this study. First, supportive supervision is a vital workplace variable that enhances empathic behavior among healthcare professionals. This can be seen through the observed positive and significant relationship between supportive supervision and empathic behavior. Hence, healthcare professionals who have a high degree of support from their supervisors are more likely to engage in empathic behavior towards patients. Also, the study concluded that OSE influences empathic behavior in a positive direction and mediates the relationship between supportive supervision and empathic behavior among healthcare professionals.

## Limitations and Recommendations

Although the present study has added to supportive supervision, empathic behavior, and occupational self-efficacy literature, the study is not without limitations. These limitations are discussed, and suggestions are given where necessary. The use of self-report measures in the data collection process is the first limitation of the study. Self-report measures are usually vulnerable to common method bias. Although specific steps were taken to help eliminate bias response, it is usually challenging to eliminate method bias in a survey study fully. The researchers recommend that statistical procedures such as the Herman single factor analysis and the measured latent marker variable approach should be used to control the severity of common method bias. Secondly, the study was cross-sectional, meaning that data were collected from healthcare organizations at one point in time. Establishing causal relationship is difficult in a cross-sectional study. Better approach can be utilized in future studies.

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