

# **Systematic Review**

## **ORGANIZATIONAL BEHAVIOR AND NURSING TURNOVER RESEARCH; WHAT WE KNOW, HOW WE KNOW IT AND WHAT WE ARE YET TO KNOW**

### **Abstract**

**Background:** The nursing workforce is a very important one as nurses form a vital component of healthcare delivery worldwide. The global nursing shortage is continuously wreaking havoc at all levels of the global health system with nursing turnover being a major cause of this shortage. Organizational behavior has been linked to nursing turnover.

**Objectives:** This study aimed at examining the key research issues, theoretical and conceptual approaches, methodologies, geographical distribution and key research trends and gaps related to organizational behavior and nursing turnover research.

**Methodology:** The study employed a systematic literature review approach. A total of five electronic databases were used to obtain literature. These included PubMed, Science Direct, Google Scholar, Wiley and Emerald. The literature search was conducted using the search string “organizational behavior” AND nurs\*\* AND “turnover intentions” OR “turnover behavior” OR turnover. Inclusion and exclusion criteria were further applied to screen the papers

**Findings:** Findings from the study revealed that the research issues commonly examined in organizational behavior and nursing turnover research are the organizational behavior variables which serve as predictors of nursing turnover. Most organizational behavior and nursing turnover papers are atheoretical in nature, employ a quantitative approach to data collection and analyses, are mostly conducted in Asia and Europe, and focus mostly on the micro level of analyses. From these findings, methodological, contextual, theoretical, issue gaps were identified, together with gaps in the level of analysis and publication outlets.

**Conclusion and Recommendations:** Organizational behavior and nursing turnover research is gradually gaining grounds globally, but a lot more needs to be done in filling the various gaps identified in this review, by way of future research.

**Keywords:** Nursing Turnover, Turnover Intentions, Turnover Behavior, Nursing Shortage, Systematic Literature Review

### **Introduction**

Nurses remain a vital component of every healthcare delivery system. The World Health Organization (WHO) reports that nurses and midwives form roughly 50% of the global sum of

healthcare professionals (WHO, 2020). The State of the World's Nursing (2020) report has projected that in the next decade, there will be a shortfall of 5.7 million nurses globally, unless measures are instituted to employ more nurses. An approximated 27.9 million nurses exist globally, with 4 million of them joining the workforce since 2013. However, a global shortfall of nurses still exists (Stringer, 2020). In Africa, for instance, the nurse-to-patient ratio is less than 10 nurses per 10,000 people (WHO, 2020). Nurses are the single largest group of healthcare professionals who are in closest proximity to the patient for prolonged periods of time, and are responsible for a wide array of patient care needs. Thus, a deficiency in nursing workforce is a matter which needs to be treated as urgent.

The global Nursing shortage is largely as a result of turnover among nurses (Gieter et al., 2011). Nursing turnover basically refers to nurses leaving their organizations. Turnover intention, also referred to as "intention to leave" is defined as the probability that an employee will exit a particular job within a certain timeframe (Chao et al., 2015). It is a psychological tendency which in turn predicts the actual turnover behavior (Chen et al., 2018). This goes to say that turnover intention is a covert mental activity, whereas turnover behavior is overt, and refers to the actual action of leaving the job.

In the healthcare literature, several dire effects of nursing turnover and its resulting nursing shortage have been reported. These effects include but are not limited to increased cost, loss of experienced nurses and poor patient health outcomes (Dewanto & Wardhani, 2018).

Contrary to general speculation, nursing turnover is not just as a result of maladjustment on the part of nurses (Yu & Lee, 2018). Within the nursing context, turnover intentions exist in two folds; an intention to leave the organization, which is termed as institutional turnover intention, and an intention to leave the profession as a whole, termed as professional turnover intention (Yürümezoglu et al, 2019)

Nursing turnover is a major organizational issue which has received significant attention over the last decade. A critical review of literature reveals nursing turnover intention rates of between 4% and 68% globally (Sabanciogullari & Dogan, 2015; Flinkman et al., 2010). Studies have further revealed that as of the year 2013, about 33% of nurses reported institutional turnover intentions, while 9% reported professional turnover intentions (Heinen et al., 2013)

The menace of nursing turnover is not only a problem among older practitioners. Studies have reported significant turnover intentions among new/graduate nurses over the past decade (Laschinger & Laschinger, 2012)(Yu & Lee, 2018). The cost of nursing turnover has been reported to between \$22,000 to over \$64,000 per nurse (Jones & Gates 2007). Thus, it is more costly to lose nurses than to retain them (Jones & Gates, 2007).

In the past, a number of authors have conducted systematic reviews on nursing turnover (Hayes et al., 2006, 2012), promoting retention of nurses (Nei et al., 2015), factors influencing intention to stay and retention of nurses (Brown et al., 2012). These reviews have examined existing literature on nursing turnover as a whole, its antecedents and means of mitigating turnover and in effect, retaining nurses. A further review of literature, however, reveals that organizational behavior variables have a significant impact on nursing turnover intentions as well as turnover behaviors. (Alhamwan et al., 2015; Iqbal et al., 2019), thus, it is important to examine

organizational behavior variables and their role in nurse turnover and retention. In the past, reviews such as Putra et al., (2020) have studied the role of some organizational behavior variables such as organizational commitment and job satisfaction on nursing turnover and retention. To the best of the author's knowledge, there is no systematic review which focuses on organizational behavior as a whole and its influence on nursing turnover. This systematic literature review, thus, attempts to fill this gap by examining (i) the theoretical and conceptual approaches which have been used to understand organizational behavior and nursing turnover research, (ii) the methodologies used in conducting studies concerning organizational behavior and nursing turnover, (iii) the geographical distribution of empirical studies on organizational behavior and nursing turnover research, (iv) themes realized from organizational behavior and nursing turnover research (v) levels of analyses in organizational behavior and nursing turnover research. An indebt understanding of these gaps will aid in developing further strategies to curb nursing turnover and in effect, the global nursing shortage, so as to mitigate the negative clinical and organizational effects of nursing turnover. This will be feasible through providing direction for future research into organizational behavior and nursing turnover. This systematic literature review provides an analysis of organizational behavior and nursing turnover research from 2002 to 2021. This is because to the best of the author's knowledge, the organizational behavior and nursing turnover research gained momentum from the year 2002 as evident in Kirschenbaum & Mano-negrin, (2002).

This paper is divided into four sections. The first section presents the introductory part of the study. The second section provides the methodology part, while the third section presents the findings of the systematic literature review. The fourth section presents the discussion of findings, directions for future research and originality of the paper.

## **Methodology**

This section presents the methodology adopted for the purposes of this study. Systematic literature reviews aim at purposefully identifying, critically selecting and appraising multiple research papers in a particular field of study, in order to provide an exhaustive bird's eye view of existing literature in order to answer a specific research question (Dewey & Drahota, 2016). These reviews pose a well formulated research question, locate and retrieve studies from the main databases of the field of enquiry, use predetermined criteria to justify the inclusion and exclusion of specific studies from the review, collect and analyze data retrieved, present and discuss findings (Enferm, 2007). Systematic literature reviews have the benefit of in identifying knowledge gaps in a particular subject area and indicate worthwhile directions of future research (Antonelli, 2020).

Thus, the systematic literature review approach was employed to synthesize existing literature on organizational behavior and turnover among nurses. The research questions which are addressed in this systematic literature review are as follows:

1. What are the research issues in organizational behavior and nursing turnover?
2. What are the theoretical and conceptual approaches used for understanding organizational behavior and nursing turnover research?

3. What are the methodologies used in carrying out organizational behavior and nursing turnover research?
4. What is the geographical distribution of organizational behavior and nursing turnover research?
5. What are the key research trends and gaps related to organizational behavior and nursing turnover research?

The study relied solely on electronic databases to obtain literature. A total of five (5) databases were used, namely PubMed, Science Direct, Google Scholar, Wiley and Emerald. These databases were searched comprehensively to obtain literature on organization behavior and nursing turnover. The literature search was conducted using the search string “organizational behavior” AND nurs\*\* AND “turnover intentions” OR “turnover behavior” OR turnover. This search string was used in all the databases which have been listed above. The criteria for the literature search included articles published between the years 2002 and 2021, articles published in English language and in peer reviewed journals, articles making use of primary data (either quantitative, qualitative or mixed methods) and articles whose full texts were available. The search also included articles which had organizational behavior variables and nurse turnover in the title. Organizational behavior variables include but are not limited to job satisfaction, organizational citizenship behavior, organizational commitment, leadership and workplace violence (Robbins et al., 2010). Articles which were published before 2002, in languages other than English and full text unavailable were excluded for the study. A detailed description of the inclusion and exclusion criteria adopted for this study are presented in Table 1 below. The literature search was restricted to original research papers published in peer reviewed journals and as such, conference papers, doctoral and masters theses, student papers and other reviews were excluded. An initial total of 27,286 papers were retrieved from the electronic databases, after which 21,225 were subsequently obtained after applying the inclusion and exclusion criteria.

**Table 1: inclusion and exclusion criteria**

<b>Criteria</b>	<b>Evaluation Criteria</b>
Inclusion	Articles should be published in peer-reviewed journals
Inclusion	Articles should be published in the English Language
Inclusion	Articles make use of primary data
Inclusion	Articles published between 2002 and 2021
Inclusion	Full text of articles available
Inclusion	Articles with OB variables and Nurse turnover in title
Exclusion	Articles with full text unavailable
Exclusion	Articles published before 2001
Exclusion	Articles which do not have OB and NTI in the title
Exclusion	Articles published in languages other than English

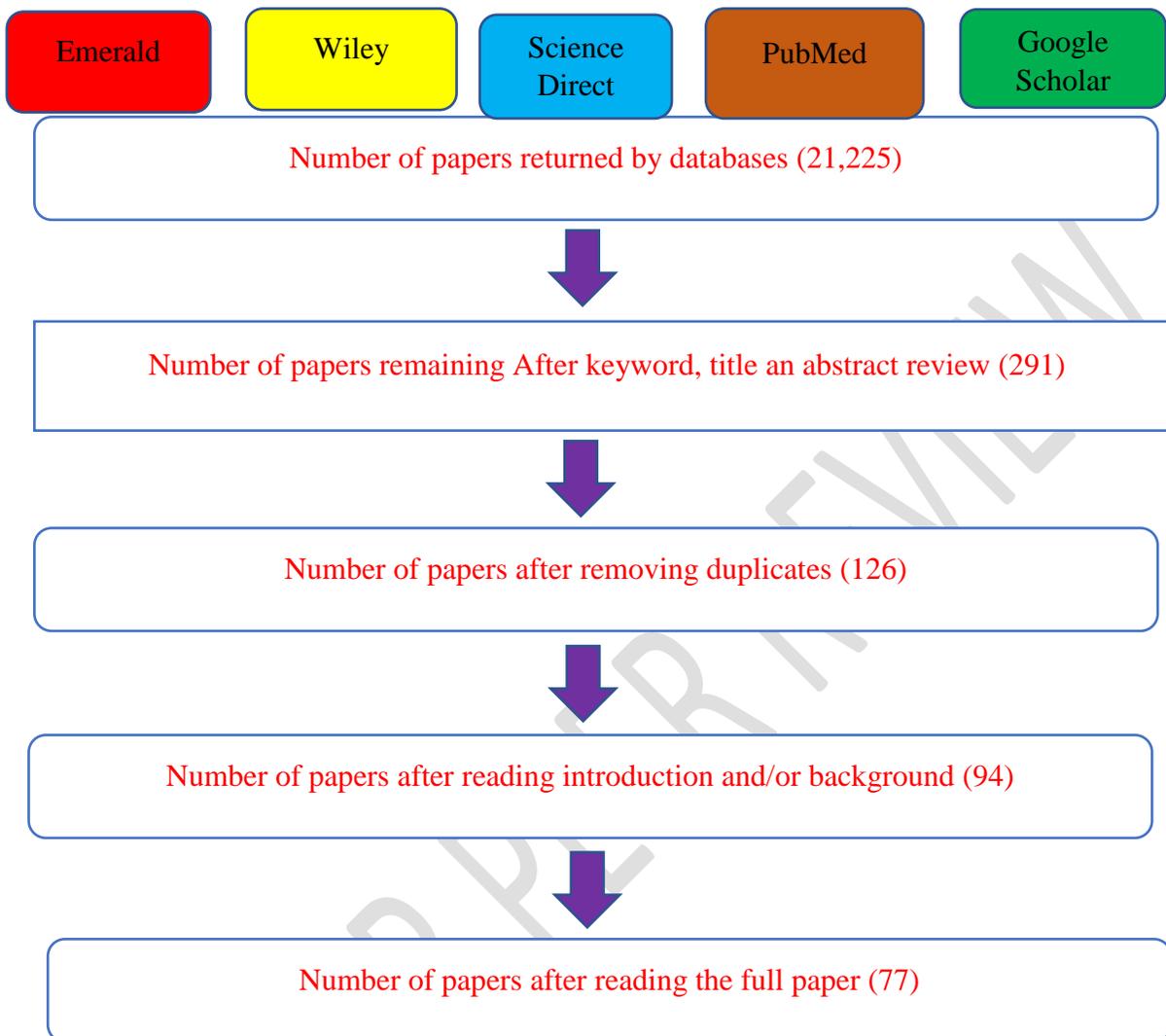
**Table 2: Search Results from Databases**

Journal database	Number of papers obtained from the database	Number of papers removed after screening with inclusion criteria	Number of papers remaining
Emerald	2032	1266	766
PubMed	190	54	136
Science Direct	2264	1134	1130
Wiley	6,400	1242	5158
Google Scholar	16,400	2365	14035
Total	27,286	6,061	21,225

### Screening of papers

A total of 21,225 papers were screened using a keyword, title and abstract search. This search reduced the number of papers to 291. Thereafter, a total of 165 duplicate papers were eliminated, which reduced the number of papers to 126. A subsequent reading of the background and introduction sections was done in order to identify only papers which were relevant to the topic of organizational behavior and nursing turnover. This phase reduced the paper count to 94 as papers which did not focus on organizational behavior and papers which examined turnover amongst professionals other than nurses were eliminated. At the end of this screening process, a total of 77 papers were observed to have qualified to be included in this systematic literature review. The methodological sequence of screening the papers used in this review is illustrated in Figure 1 below

**Figure 1: methodological sequence of screening the papers**



### **Analysis of data**

A total of 77 journal publications were used for this systematic literature review. These papers were further categorized into the publication journals, year of publication, theoretical or conceptual framework used, geographical focus, research methodology used, level of analysis and themes.

The papers used in this systematic literature review were classified into three general themes, namely Predictor, Mediator and Outcome themes. This classification is presented in Table 3 below. The predictor theme captured studies which focused on organizational behavior variables which served as predictors of nursing turnover. These included subthemes such as organizational

justice, leadership, job stress, job satisfaction, organizational commitment, professional commitment.

The mediator themes focused on studies which examined organizational behavior variables which served as mediators of nursing turnover. The subthemes under the mediator theme include organizational justice, supervisory feedback, appraisal fairness, psychological need satisfaction.

Lastly, the outcome theme captured articles which focused on organizational behavior variables which serve as outcomes or end results of nursing turnover. The subthemes under the outcome theme include career advancement, patient outcomes, productivity, emotional intelligence. It is important, however, to note, that some papers captured more than one theme.

The year of publication classification was done according to the specific period within which the articles were published between the years 2002; when organizational behavior as a determinant of nursing turnover research began taking center stage; and 2021.

With regards to the publication outlet, the papers are classified according to the respective journals which published these articles. These journals are peer reviewed and found on the databases employed for this study.

The theoretical approach classification was done based on the theory, conceptual framework or models used in the respective articles

With regards to the methodology used in organizational behavior and nursing turnover research, the papers were classified into quantitative qualitative and mixed methods studies. Quantitative studies were identified as those which collected and analyzed numerical data to answer specific research questions or test hypotheses. The qualitative studies were identified as those papers which made use of indebt interviews, focus group discussions and observations as data collection procedures, while mixed methods studies were identified as those papers which made use of a combination of numerical and qualitative studies.

Concerning the geographical focus, the papers were classified according to the specific continent on which the study was conducted. The papers were classified as being conducted in Asia, Europe, North America, South America, Africa, Australia and Cross-continental. The term “Cross-Continental” was used to describe studies which were conducted in more than one continent.

The level of analysis classification refers to the stage at which the study was conducted, its focus, and target sample. Level of analysis in research, according to Boateng, (2016), can be labelled as micro, meta, macro and meso levels. The micro level classification refers to studies which focused on individuals within the organization, meso level refers to organizations as a while, groups or teams, macro level studies focused on countries, while meta level refers to studies which were beyond country level (Barbour, 2017; Boateng 2016). A further level of analysis, which is the “general” level, refers studies which sought to provide information which is applicable at all levels (Senyo et al., 2018). These studies are not restricted to individuals, groups, organizations or countries.

**Table 3: Classification of organizational behavior and nursing turnover research themes**

<b>Themes</b>	<b>Subthemes</b>
Predictors	organizational justice, leadership, job stress, job satisfaction, organizational commitment, professional commitment
Mediators	organizational justice, supervisory feedback, appraisal fairness, psychological need satisfaction
Outcomes	career advancement, patient outcomes, productivity, emotional intelligence

### **Presentation of Findings**

Findings obtained from reviewing the 77 papers obtained are presented in this section. The findings are presented according to the following subheadings: journal of publication, year of publication, geographical distribution, research teams, level of analysis, methodology and theoretical approaches used.

### **Distribution by journal of Publication (Publication Outlets)**

Table 4 below illustrates the full list journals from which the papers were obtained, together with their respective number of articles. As was stated earlier, only peer reviewed journals were included in this study. A total of 37 journals were included in this study. The distribution of articles is as follows; American Journal of Infection Control (1 article), Applied Nursing Research (6 articles), Asian Nursing Research (2 articles), Asian social science (1 article), BMC Nursing (1 article), BMJ Open (1 article), Career Development International (3 articles), Collegian (1 article), European Journal of Training and Development (1 article), Hospital Topics (1 article), Intensive & Critical Care Nursing (1 article), International emergency nursing (1 article), International Journal Of Human Rights In Healthcare (2 articles), International Journal of Manpower (1 article), International journal of nursing sciences (4 articles), International Journal of Nursing Studies (3 articles), International Nursing Review (5 articles), Iran Red Crescent Med J (1 article), Japan journal of nursing science (3 articles), Journal of nursing management (1 article), Journal of advanced nursing (7 articles), Journal of clinical nursing (3 articles), Journal of Health Organization and Management (1 article), Journal of Management Development (1 article), Journal of nursing administration (1 article), Journal of Nursing Management (6 articles), Journal of Nursing Research (1 article), Journal of nursing scholarship (1 article), Journal of Pediatric nursing (1 article), Leadership in Health Services (4 articles), Mater SocioMed (1 article), Nursing Ethics (1 article), Nursing open (1 article), Nursing Outlook (3 articles), Personnel Review (2 articles), Research in nursing and health (1 article), Team Performance Management (1 article), Western Journal of Nursing Research (1 article). It is

important to note, however, that these were not the only papers on organizational behavior and nursing turnover research which were published in these journals. However, it is these papers which fit the inclusion criteria for this systematic review. As can be seen from Table 3, the Journal of Advanced Nursing had the highest number of articles (9.09%), followed by the Journal of Nursing Management and Applied nursing research which had 7.79% each. The remaining journals had less than 7% each.

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**Table 4: Distribution by Journal of Publication**

Journal	2002	2005	2007	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total	Percentage
American Journal of Infection Control															1		1	1.30%
Applied Nursing Research										1	1	1	1			2	6	7.79%
Asian Nursing Research													1		1		2	2.60%
Asian social science									1								1	1.30%
BMC Nursing													1				1	1.30%
BMJ Open													1				1	1.30%
Career Development International			1	1				1									3	3.90%
Collegian																1	1	1.30%
European Journal of Training and Development														1			1	1.30%

Hospital Topics													1				1	1.30%	
Intensive & Critical Care Nursing													1				1	1.30%	
International emergency nursing																	1	1.30%	
International Journal Of Human Rights In Healthcare												1	1				2	2.60%	
International Journal of Manpower																	1	1.30%	
International journal of nursing sciences									1				2				1	4	5.19%
International Journal of Nursing Studies						3												3	3.90%
International Nursing Review								2			1	1	1					5	6.49%
Iran Red Crescent Med J										1								1	1.30%
Japan									1				1	1				3	3.90%

journal of nursing science																		
Journal of nursing management											1					1		1.30%
Journal of advanced nursing						1	2		1		2		1			7		9.09%
Journal of clinical nursing										1			1	1		3		3.90%
Journal of Health Organization and Management								1								1		1.30%
Journal of Management Development		1														1		1.30%
Journal of nursing administration							1									1		1.30%
Journal of Nursing Management						1				1	1	1		1	1	6		7.79%
Journal of										1						1		1.30%

Nursing Research																		
Journal of nursing scholarship													1				1	1.30%
Journal of Pediatric nursing														1			1	1.30%
Leadership in Health Services			1	1			1								1		4	5.19%
Mater Sociomed										1							1	1.30%
Nursing Ethics										1							1	1.30%
Nursing open																1	1	1.30%
Nursing Outlook										1	1					1	3	3.90%
Personnel Review	1																2	2.60%
Research in nursing and health											1						1	1.30%
Team Performance Management					1												1	1.30%
Western Journal of Nursing Research															1		1	1.30%

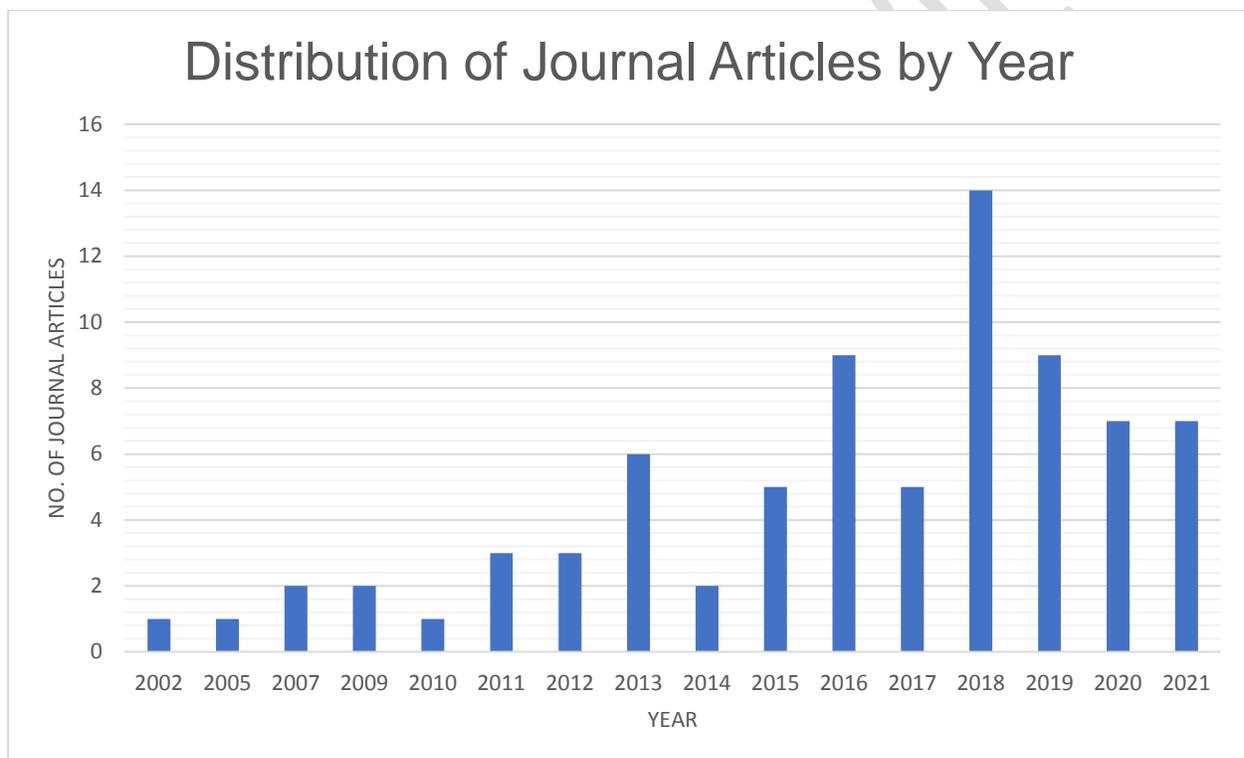
<b>Grand Total</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>5</b>	<b>9</b>	<b>5</b>	<b>14</b>	<b>9</b>	<b>7</b>	<b>7</b>	<b>77</b>	
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UNDER PEER REVIEW

## Distribution by Year of Publication

The distribution of journal articles by year of publication showed a fluctuation but growing trend of publications from the year 2002. This growing trend peaked in the year 2018 and saw a sharp decrease in 2019. The trend has since been on a decrease till the year 2021. The years 2002, 2005 and 2010 saw 1 article each, while 2007 and 2009 had 2 articles each. As can be seen from Figure 2, the first spike in publications was observed in the year 2013 where the article count shot up to 6 from 3 articles in 2012. Afterwards, there was a decline in publications in the year 2014 (2 articles), with the second spike in publications occurring in 2016 where 9 articles were recorded, followed by 2018 which recorded 14 articles.

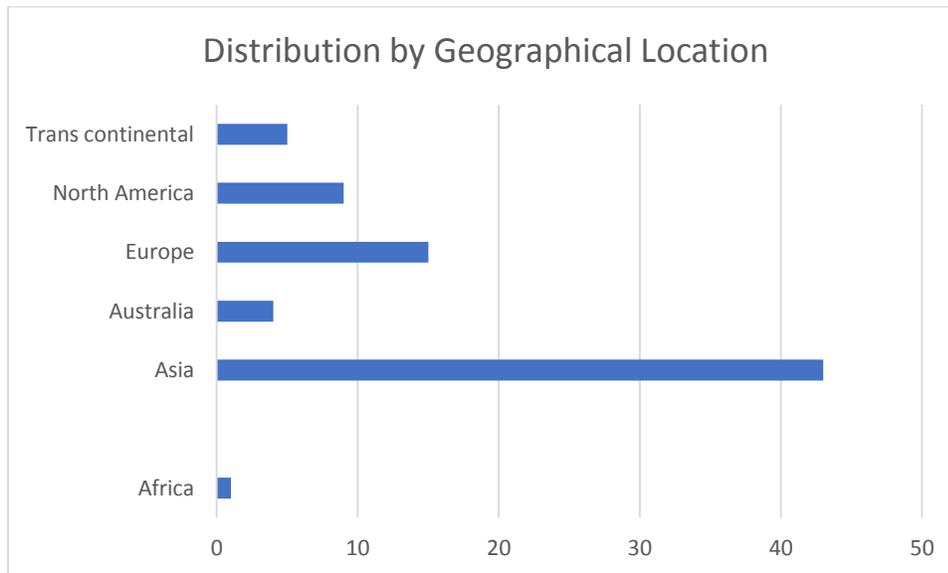
**Figure 2 Distribution of Journal Articles by Year of Publication**



## Distribution by Geographical Location

This section examines the geographical location, precisely, the specific continent on which the studies were conducted. The distribution of articles based on their geographical focus revealed a large chunk of the publications focused on Asia (43 articles) representing 55.8% of the papers. This was followed by Europe which had 15 articles (19.5%) and North America (9 papers, 11.7%). Papers which focused on more than one continent were classified as Trans Continental, and carried 6.5% of the articles (5 papers). Australia and Africa had the least number of papers indicating 5.2% (4 papers) and 1.3% (1 paper) respectively.

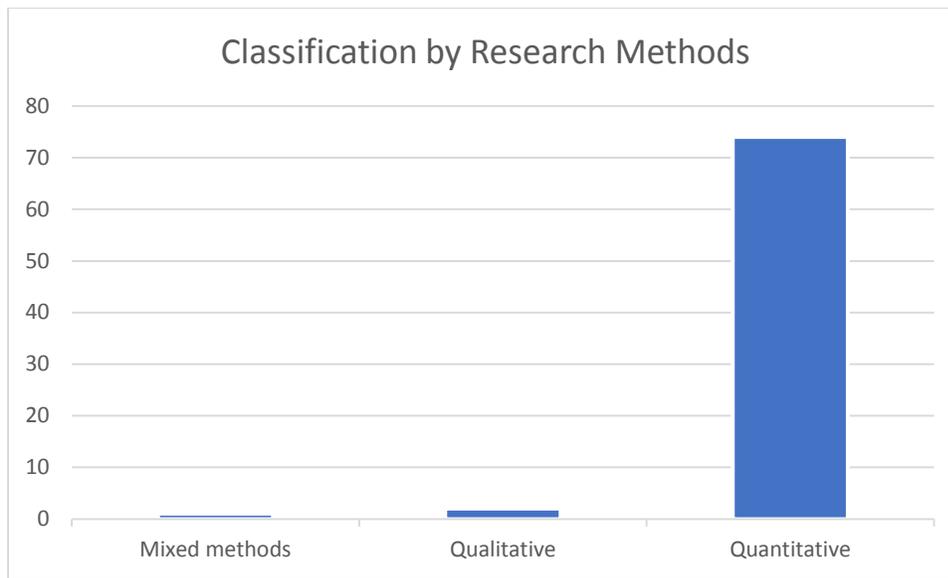
**Figure 3: Distribution of Articles by Geographical Location**



### **Distribution by Research Methodology**

With regards to the research methodology employed in the articles used in this systematic literature review, studies which employed the quantitative approach formed the majority (74%). Out of this number, 25 papers indicating 32.5% made use of Structural Equation Modelling. The remaining quantitative papers used regression analysis, ANOVA, T tests, Correlation matrixes and other non-parametric tests as statistical tools. This was followed by the Qualitative approach which had 2 papers and the Mixed Methods Approach which saw 1 paper. It is important to note that none of the articles employed the experimental approach. Also, 100% of the papers had an explicitly defined research methodology, thus, none of the papers was classified as “no methodology”. A pictorial representation of the distribution by research methodology is presented in Figure 4 below.

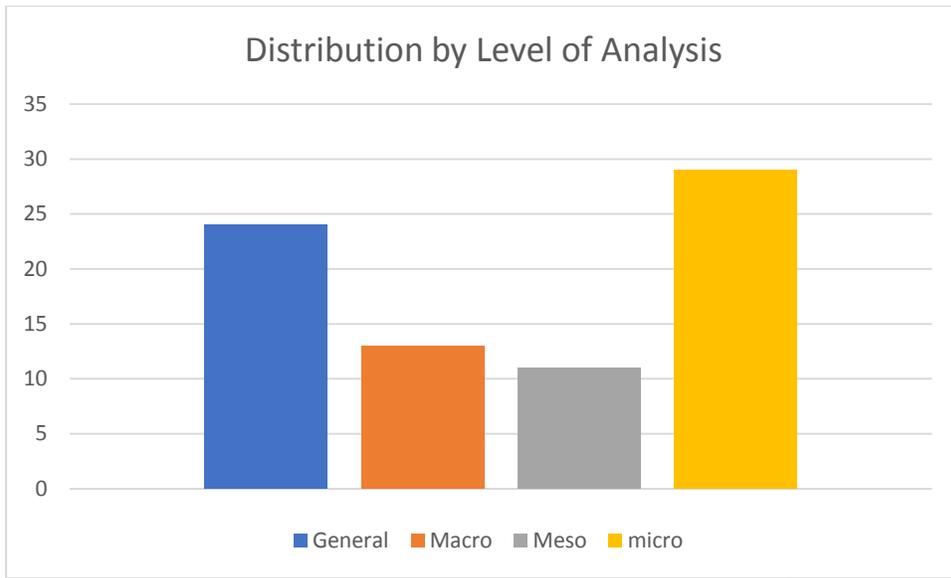
**Figure 4: Distribution of Articles by Research Methodology**



### **Level of Analysis**

Findings in this section present the level at which the issues in the papers used for this review were analyzed. These findings are presented in Figure 5. Results revealed that majority of the papers (29 papers, 37.7%) were analyzed at the micro level. The micro level of analysis indicated that the papers focused on individuals within the organization. This was followed by papers which were analyzed at a general level (24 papers, 31.2%). The general level indicates that these papers did not only focus on individual, organizational or countrywide levels of analysis (Senyo et al., 2018). These (general) papers cut across all these levels or focused on generating knowledge that can be applied across all levels with regards to organizational behavior and nursing turnover. The macro level of analysis, which focused on the country, had 16.9% (13 papers), and lastly, meso which focused on the organization had 14.3% (11 papers).

**Figure 5: Distribution of Articles by Level of Analysis**



### **Distribution by Theoretical Approach**

In this section, the categorization was done according to the theoretical and conceptual approaches which were employed by the papers used for this systematic literature review. This categorization is presented in Table 5. As can be seen from the table, majority of the papers were atheoretical (34 papers, 44.2%). That goes to say that no theory, model or framework was used to ground the study. This was followed by Conceptual Model which had 36.4% of the papers (28 articles). Papers which made use of conceptual models were solely quantitative in nature, and mostly made use of structural equation modelling. Authors of these papers reviewed literature, formulated hypotheses and derived conceptual models afterwards. The social exchange theory had 3.9%, Authentic Leadership Theory 2.6%. the Alexander Model, Blau's Social Exchange Theory, Conger and Kanungo's process model of empowerment, Culture-work model, leader-member exchange theory of voluntary turnover, Organizational theories, Psychological ownership theory, Rosabeth Moss Kanter's Structural Theory of Organizational Behavior (1977, 1993) and the Social Ecology Model [SEM], Social cognitive theory and Social identity theory had 1.3% each (1 article each).

**Table 5: Classification by Theoretical Approach**

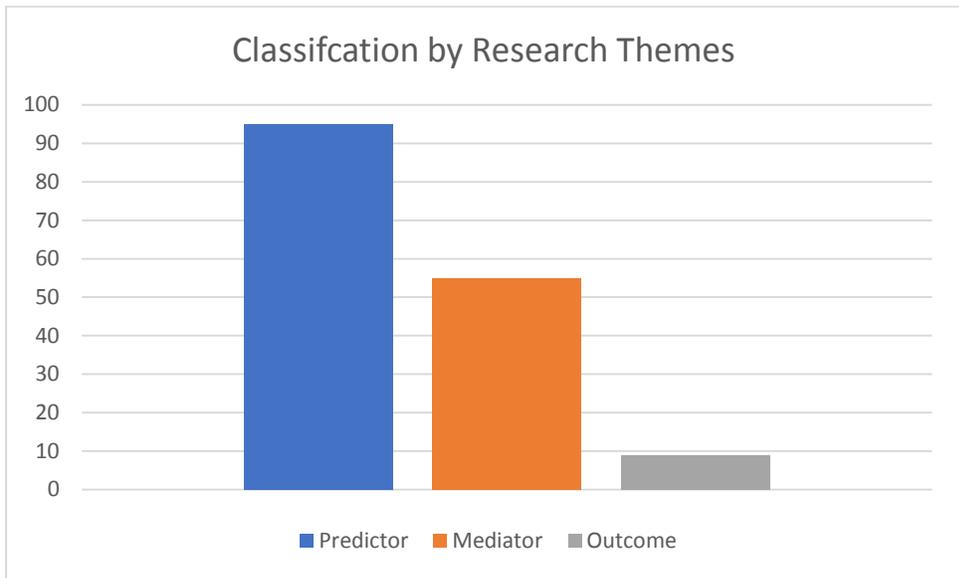
<b>Theoretical Approach</b>	<b>Number of Articles</b>	<b>Percentage</b>
Alexander model	1	1.3%
Atheoretical	34	44.2%
Authentic leadership theory	2	2.6%
Blau's social exchange theory	1	1.3%
Conceptual model	28	36.4%
Conger and Kanungo's process model of empowerment	1	1.3%
Culture-work model	1	1.3%
leader-member exchange theory of voluntary turnover	1	1.3%
Organizational theories	1	1.3%
Psychological ownership theory	1	1.3%
Rosabeth Moss Kanter's Structural Theory of Organizational Behavior (1977, 1993) and the Social Ecology Model [SEM]	1	1.3%
Social cognitive theory	1	1.3%
Social exchange theory	3	3.9%
Social identity theory	1	1.3%
Total	77	100%

**Classification by Research Themes**

With regards to the research themes on which the articles used in this review focused, a total of three themes were deduced, namely Predictors, mediators and outcomes. With the Predictor theme, the papers focused on the organizational behavior variables which served as predictors of nursing turnover (both turnover intentions and turnover behaviors). This category of papers were 95 in number. This was followed by papers which focused on organizational behavior variables

which served as mediators of nursing turnover. This category saw 55 articles, followed by the outcome theme which had 9 papers. The pout come theme focused on organizational behavior variables which serve as outcomes of nursing turnover intentions and behaviors. It is important to note, howvere, that there were some papers which had more than one them. The classification by research themes is presented in Figure 6.

**Figure 6: Classification by Research Themes**



**Mapping of Organizational Behavior and Nursing Turnover Research Themes by Geographical Distribution**

This section presents a mapping of the organizational behavior and nursing turnover research themes with the geographical distribution of the articles. The mapping is presented in Table 5 below. As can be seen from the table, studies which examined predictors only were mostly situated in Asia, followed by Europe, North America/Trans-continental and Australia. None of the studies in Africa examined predictors only. It is also important to note that the studies which examined predictors formed the majority of the papers. This is followed by studies which examined predictors and mediators, which were also densely conducted in Asia and least in Africa. Studies conducted in Africa included one study examining predictors and mediators and one study study examining predictors, mediators and outcomes. Further, studies examining mediators and out comes formed the least and had only one papers which is in the trans-continental category.

Table 5: Mapping of Organizational Behavior and Nursing Turnover Research Themes by Geographical Distribution

Geographical location	Studies examining predictors	Studies examining mediators	Studies examining outcomes	Studies examining predictors and mediators	Studies examining predictors and outcomes	Studies examining mediators and outcomes	Studies examining predictors, mediators and outcomes
Africa	-	-	-	19	-	-	15
Asia	69, 66, 57, 56, 47, 44, 42, 40, 35, 33, 25, 24, 23, 21, 10, 8, 7, 4, 2, 1	11, 34	77	71, 74, 73, 68, 55, 53, 49, 46, 45, 41, 36, 31, 30, 22, 20	32	-	12, 18, 37, 59, 76, 75
Europe	72, 66, 61, 60, 50, 39, 28, 65	-	-	14, 58, 65	-	-	
North America	54, 9, 3	38	43	52, 29	15	-	-
Australia	48	13	-	16, 62, 63	-	-	-
Trans-continental	27, 67, 70	-	-	17	-	26	-

Section A1 presents the reference for article numbers used in the mapping

## **Discussion**

This section presents a detailed discussion of the findings derived from this systematic literature review. The discussion delves into the key issues, publication outlets, year of publication, level of analysis, theoretical and conceptual approaches, methodologies, research themes and gaps in organizational behavior and nursing turnover research.

### **Factors in Organizational Behavior and Nursing Turnover Research**

In the organizational behavior and nursing turnover literature, a number of factors have been proven to be related to turnover intentions and ultimately, turnover behavior. These factors have been examined either as predictors, mediators or outcomes, in relation to nursing turnover. These factors are conceptualized and explained in the ensuing sections.

Job satisfaction, also termed as work environment satisfaction (Yu & Lee, 2018), has largely been indicated in literature as a predictor of nursing turnover intentions (Labrague, Gloe, et al., 2018; Pahlevan et al., 2021; Yuanyuan Yang & Chen, 2020). It has been defined as “a pleasurable or positive emotional state resulting from the appraisal of one's job” (Locke, 1976). It is the extent to which a person has affection towards their job and its main constituents (Li et al., 2019). Job satisfaction has been identified as a major predictor of turnover intentions among nurses. The relationship, however, is an inverse one in the sense that the greater a nurse's job satisfaction, the less likely they are to intend to leave or actually leave their workplace or the profession as a whole (Li et al., 2019; Experiences et al., 2013).

Organizational commitment (OC) is another factor which has been established as affecting turnover amongst nurses. It is defined as an “employee's mental connection with his/her present organization, and is related to their behavioral investment with the organization, and the coincidence of individual and organizational goals (Mowday et al., 1982). It is the extent to which a person identifies with and involves themselves with activities within a particular organization (Yuanyuan Yang & Chen, 2020). For OC to exist within a nurse, they must first of all believe in and accept the goals and values of the organization. They must also be ready to perform tasks and take responsibility on behalf of the organization and also be willing to stay within the organization (Mowday et al., 1979). OC influences nursing turnover positively, in the sense that the higher the OC of a nurse, the more likely they are to remain in an organization (Aly & Hashish, 2015; Gieter et al., 2011).

Turnover intention and behavior among nurses is also influenced by the Organizational Culture within the facility in which they find themselves. The culture within an organization is reflected in certain elements which bind the members in the organization (Glaser, 1987). These elements include but are not limited to the beliefs of the members, their faith, symbolism used within the organization and its values. These elements have the tendency to affect the behavior of organizational members (Yom et al., 2013). In an institution with a healthy organizational culture, nurses are less likely to leave their jobs (Lee & Jang, 2019).

Nursing has been reported to be one of the most stressful and challenging jobs globally. The stressful nature of nursing is as a result of the complex nature of the profession, the need for nurses to specialize and handle emergency situations (Oyeleye & Connor, 2013). In the nursing turnover literature, Job Stress is also referred to as burnout or nurses fatigue, and has been defined as a state of emotional exhaustion (Lee & Lang, 2019) or a mismatch between a person's coping abilities and the demands of the job (AbuAlRub, 2004). Studies have proven that job stress, burnout and/or fatigue have a positive correlation with nursing turnover. The higher the stress, fatigue and burnout levels among nurses, they more likely they are to leave their jobs (Lee & Jang, 2019).

Workplace violence and bullying among nurses is classified under physical or psychological acts which increased the likelihood of a nurse to leave an organization (Liu et al., 2018). These acts include but are not limited to verbal abuse, harassment and threatening of nurses. Further, demographic characteristics such as age, gender, educational level, financial and marital status are individual factors which have been examined in the nursing turnover literature as affecting turnover intentions and behavior among nurses (Lee & Jang, 2019). Other factors which have been seen to influence turnover amongst nurses include Leadership (Joylynn et al., 2021; Dwyer et al., 2019), Organizational cynicism (Munir et al., 2018; Çaylak & Altuntas, 2016), Career opportunities (Huyghebaert, 2018) and Workplace relationships (Carter & Tourangeau, 2012).

### **Publication Outlets (Journals of Publication)**

The publication outlets which were included in this review were 37 in number. As can be seen

From Table 4, the journals with the highest number of publications were the Journal of Nursing Management (with articles such as as Huyghebaert, 2018; S. Choi & Lee, 2017; Chang & Lee, 2018; Laschinger & Laschinger, 2012; Jarosova et al, 2016; Majeed, 2021), International Journal of nursing sciences (eg. Lyu et al., 2019; Shah et al., 2019; Labrague, Gloe, et al., 2018; Chen et al., 2018) and the Journal of Advanced Nursing (Zahednezhad et al., 2020; Carter & Tourangeau, 2012; Brunetto et al., 2013; Waeyenberg et al 2015). These three journals had 7 articles (9.1%) each on organizational behavior and nurse turnover, followed by the journal of Applied Nursing Research (Shahpouri et al., 2016; T. Yang et al., 2021; Dwyer et al., 2019; Simone et al., 2017; Labrague, Mcenroe, et al., 2018), International Nursing Review (Rn & Rn,2016; Article et al., 2017; M. Kim, 2018; Experiences et al., 2013) and Leadership in Health Services (Sellgren et al., 2007; J. S. Park & Kim, 2006; Cziraki et al., 2020) respectively.

In as much as the number of publication outlets was significantly large, it can be observed that the number of articles per journal were relatively small, with the highest number of publications in a single journal being seven and a substantial number of the journals having one article each. Even though this phenomenon may be due to the inclusion and exclusion criteria applied in this systematic literature review, the researchers believe that this is representative of a gap in organizational behavior and nursing turnover research in the various journals which needs to be addressed in future research. This is important because of the already established role of organizational behavior variables in nurse turnover

intentions and behavior.

Still with regards to the publication outlets, it can be seen that the journals containing the articles were not restricted to strictly nursing journals. Organizational behavior and nursing turnover research is multidisciplinary in nature and goes beyond clinical nursing. This kind of research cuts across human resource management, human rights, management, leadership and administration. Thus, journals such as *Leadership in Health Services*, *International Journal of Human Rights in Healthcare*, *International Journal of Manpower*, *Career Development International*, *Personnel Review*, *Team Performance Management* are included in the publication outlets.

### **Year of Publication**

With regards to the databases which were used for this systematic literature review, The emergence of Organizational behavior and nursing turnover research was observed in the year 2002 with one article (Kirschenbaum & Mano-Negrin 2002), and the next article being published in 2005 (Chiu, 2005). Thereafter, articles were published in 2007 (Golan, 2007; Sellgren et al., 2007) and 2009 (Hasselhorn, 2009; Heijden et al., 2009) respectively, with the first peak in publication occurring in the year 2013 where six articles were recorded (eg. Armstrong-stassen & Stassen, 2013; Oyeleye & Connor, 2013; Battistelli et al., 2013; Experiences et al., 2013). This phenomenon is likely due to the increased rates of turnover among the nursing force and its resultant nursing shortage. The year 2018 saw the highest number of articles (Chang & Lee, 2018; Chen et al., 2018; Labrague, Gloe, et al., 2018; Labrague, Mcenroe, et al., 2018; Lohmann et al., 2018), after which there has been a decline in number of publications till the year 2021 (Africa et al., 2021; Chamroonsawasdi et al., 2021; Joylynn et al., 2021). This trend is suboptimal as the global nurse shortage menace still persists according to the WHO (2020). It is believed that trends emerging from this systematic literature review will prompt further research into the subject matter.

### **Geographical Distribution**

The geographical distribution of the articles used in this systematic literature review was done based on continents. The papers were observed to have been carried out on the following continents; Asia (eg. I. Kim & Shim, 2018; B. Park & Ko, 2020; Shahpouri et al., 2016; T. Yang et al., 2021; Labrague, Mcenroe, et al., 2018, Yuanyuan Yang & Chen, 2020), Europe (Gieter et al., 2011; Huyghebaert, 2018; Galletta et al., 2016; Joylynn et al., 2021; Fasbender et al., 2019), North America (Wells & Peachey, 2011; Cziraki et al., 2020; Fallatah et al., 2017; Laschinger & Laschinger, 2012), Australia (Sheehan et al., 2018; Cheng et al., 2016; Brunetto et al., 2013), and Africa (Aly & Hashish, 2015). the trans-continental papers were articles which contained research conducted in more than one continent (Sungur et al., 2019; Vermeir et al., 2018; Brunetto et al., 2013). Asia had the largest number of articles (43 papers), followed by Europe, North America, Trans Continental, Australia and Africa in that order. It is evident that the growing number of organizational behavior and nursing turnover literature is centered around the Asian continent. Africa, especially, lacks papers in this field of research. This gap needs to be addressed in order to mitigate the negative clinical and economical outcomes of nursing turnover

### **Level of Analysis**

Categorization of the articles according to level of analysis was done by examining the focus of the papers, as to whether individual, group, organizational, country or cross-country factors were examined. As presented in Figure 5, the Micro level of Analysis recorded the highest number of papers (Yürümezoglu et al., 2019; Tourani et al., 2016; Hayward et al., 2016; Islam et al., 2018; Golan, 2007) followed by General level which focused on issues which can be applied across all levels (papers do not focus on a particular level) (Armstrong-stassen & Stassen, 2013; Lee & Jang, 2019; Fallatah et al., 2017), Macro (Zahednezhad et al., 2020; T. Yang et al., 2021)) and Meso (Fallatah et al., 2017) in that order.

## **Theoretical Approaches**

With regards to the theoretical approaches employed by organizational behavior and nursing turnover research, this review revealed that majority of the studies were atheoretical; that goes to say that they were conducted without a theoretical underpinning, conceptual framework or a model (Yang Yang et al., 2015; Islam et al., 2018; Sheehan et al., 2018; Liu et al., 2018; Nojehdehi et al., 2015). That notwithstanding, the researchers believe that organizational behavior and nursing turnover research can benefit from the vast array of organizational, leadership and management theories. Theoretical underpinning in research is important because it guides the researcher to make consistent predictions (Reeves et al., 2008), design research questions and select relevant data for analysis (Mitchell & Jolley, 2021) and aid in the overall quality of the research. Thus, future research in this field must endeavor to employ the appropriate theoretical underpinnings. This systematic literature review further revealed that a large percentage of the papers (36.4%) made use of conceptual models (Chiu, 2005; Wells & Peachey, 2011; Park & Kim, 2006; Aly & Hashish, 2015; Sungur et al., 2019). With the conceptual models, the authors reviewed literature and formulated hypotheses out of the literature. Perceived associations between the variables under study were then presented in a diagrammatic form to represent the conceptual underpinning of the study. These studies were mostly quantitative in nature and mostly made use of structural equation modelling as their statistical tool. Other theories which were used in the articles include Alexander model (Zahednezhad et al., 2020) Authentic leadership theory (Fallatah et al., 2017), Blau's social exchange theory (Munir et al., 2018), Conger and Kanungo's process model of empowerment (Cziraki et al., 2020), Culture-work model (Lee & Jang, 2019), leader-member exchange theory of voluntary turnover (M. Kim, 2018), Organizational theories (Kirschenbaum & Mano-negrin, 1999), Psychological ownership theory (Pahlevan et al., 2021), Rosabeth Moss Kanter's Structural Theory of Organizational Behavior (1977, 1993) and the Social Ecology Model [SEM] (Dwyer et al., 2019), Social cognitive theory (Warden et al., 2021), Social exchange theory (Brunetto et al., 2013) and Social identity theory (Cheng et al., 2016). These theories however had between one to three papers each, indicating the need for more organizational behavior and nursing turnover research with theoretical grounding.

## **Methodology**

The methodologies used in organizational behavior and nursing turnover were mostly quantitative in nature (Nojehdehi et al., 2015; Sil et al., 2020; Vermeir et al., 2018; Gieter et al., 2011; Lamptey et al., 2021). these studies made use of numerical data and employed an array of statistical tools in running analyses. Majority of these papers made use of structural

equation modelling (Armstrong-stassen & Stassen, 2013; Islam et al., 2018; Munir et al., 2018), while correlation and regression analyses, ANOVA, t tests and their non parametric equivalents formed the remaining number of quantitative studies. The predominance of structural equation modelling in organizational behavior and nursing is largely due to the dominance of conceptual frameworks as theoretical underpinnings of these studies. This is because structural equation modelling is useful in testing and evaluating the relationships, together with the direct and indirect causal effects between multiple variables at a single point in time (Fan et al., 2016).

This systematic literature review further revealed that qualitative and mixed methods methodologies were highly underutilized in organizational behavior and nursing turnover research. Out of a total number of seventy seven papers which were used in this review, only two qualitative (S. P. Choi et al., 2011; Hayward et al., 2016) and one mixed methods (Joylynn et al., 2021) were found. In as much as quantitative enquiries are beneficial in the sense that larger sample sizes can be employed with better generalization of findings, qualitative together with mixed methods approaches also allow for indebt information to be harnessed from the target population. This indebt information serve as a means on triangulating quantitatively derived information and also server as a more detailed source of data to aid in instituting remedial actions in dealing with nursing turnover and its associated global nursing shortage. Thus, it is important for further researches to employ more qualitative and mixed methods approaches.

### **Research Themes**

Three research themes were derived from the articles used for this systematic literature review. The first theme was the Predictor theme. This theme included papers which focused on those factors which lead to nursing turnover (Rawashdeh, 2020; Robson & Robson, 2016; Kim & Shim, 2018; Nojehdehi et al., 2015; Vermeir et al., 2018; Sil et al., 2020). The second theme was the mediators theme, which included papers which focused on mediators on nursing turnover (Al Sabei et al., 2019; Majeed, 2021; Pahlevan et al., 2021). The outcome theme focused on papers which examined the outcome of nursing turnover (Warden et al., 2021). it was observed, from this review, that the predictor theme dominated organizational behavior and nursing turnover research, followed by the mediator and outcome themes respectfully. This goes to show that more research needs to be conducted to examine the mediating factors and outcomes of nursing turnover. Research in this area will help in deriving more evidence-based means of mitigating nursing turnover.

A further mapping of research themes against the geographical distribution of the papers was done. As can be seen from Table 5, studies examining predictors only were prevalent in Asia and Europe, indicating that more predictor studies need to be conducted in north America, south America, Australia Africa and on a trans continental level. Studies examining mediators only were scanty across all the continents, together with Studies examining predictors and outcomes, studies examining mediators and outcomes and studies examining predictors, mediators and outcomes. These thematic combinations thus, need more attention, irrespective of geographical distribution. Studies examining predictors and mediators were fairly well studied in Asia but understudied in Africa, Europe, North America, Australia and trans-continental. as such, more studies need to be conducted in these continents.

## **Gaps**

This systematic literature review has revealed some salient gaps in literature which need to be addressed by future studies. These gaps range from methodological gaps, theoretical gaps, issue gaps, contextual gaps, gaps in level of research analysis and publication outlets. As discussed in the previous sections of this paper, organizational behavior and nursing turnover research has so far focused on using quantitative approaches. It is therefore imperative for future research to employ more qualitative and mixed methods studies to aid in triangulation of information and attaining more indebt knowledge on the subject matter.

Secondly, more theories must be employed in future research, as majority of the papers are atheoretical. The authors of this review suggest organizational, management and leadership theories such as ... for future research. With the issue gaps, research into the mediators, outcomes, predictors and outcomes, mediators and outcomes and predictors, mediators and outcomes of nursing turnover must be considered for future research, as these studies are lacking across all the continents

Contextual gaps were also identified in this review. It was observed that organizational behavior and nursing turnover research were least conducted in Africa, followed by Australia, transcontinental, north America and Europe. Thus, it is important for researchers in these geographical locations, especially in Africa, to consider conducting more organizational behavior and nursing turnover research.

With regard to the level of analysis, more studies need to be conducted at the macro and meso levels in order to fill the paucity of literature on these levels. The final gap is with regards to the publication outlets, it was observed that the maximum number of papers in a single journal was seven papers, with majority of the journals recording a single paper each. It is our believe that if the above stated gaps are addressed, the total number of organizational behavior and nursing turnover research will increase, which will in turn increase the number of papers in each publication outlet, which will also lead to a rise in the distribution os articles by year of publication, at least, from 2021 onwards.

## **Conclusions**

The nursing workforce is a very important one as nurses form a vital component of healthcare delivery worldwide. The global nursing shortage is continuously wreaking havoc at all levels of the global health system, with no end in sight. Nursing turnover intensions leading to actual turnover has been established as a major cause of this shortage. Considering the fact that organizational behavior variables have been established in literature as closely related to nursing turnover, this study sought to present a systematic literature review of empirical literature in the field of organizational behavior and nursing turnover research. The study sought to examine the research issues, theoretical and conceptual approaches, methodologies, geographical distribution and key research trends and gaps related to organizational behavior and nursing turnover research. The study revealed that the research issues commonly examined in organizational behavior and nursing turnover research are the organizational behavior variables which serve as predictors of nursing turnover. Further, most organizational behavior and nursing turnover papers are atheoretical in nature, employ a quantitative approach to data collection and analyses, are mostly conducted in Asia and Europe, and focus mostly on the micro level of analyses. From these findings,

methodological, contextual, theoretical, issue gaps were identified, together with gaps in the level of analysis and publication outlets. It is our believe that if these gaps are adequately addressed in future research, the state of organizational behavior and nursing turnover literature will be better in quantity and quality, and this will lead to better solutions at mitigating nursing turnover and nursing shortage globally.

#### **Appendix A1: Reference for Article Numbers Used in Mapping (Table 5)**

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