



# What is Behind Counterproductive Work Behaviors in the Nursing Profession? A Systematic Review

Francesco Zaghini<sup>1,2\*</sup>, Roberta Fida<sup>3</sup>, Rosario Caruso<sup>2,4</sup>, Mari Kangasniemi<sup>5</sup> and Alessandro Sili<sup>1</sup>

<sup>1</sup>*Policlinico Tor Vergata, Rome, Italy*

<sup>2</sup>*Department of Biomedicine and Prevention, University Tor Vergata of Rome, Italy*

<sup>3</sup>*Organisational Behaviour, Norwich Business School, University of East Anglia, Norwich, UK*

<sup>4</sup>*Health Professions Research and Development Unit, IRCCS Policlinico San Donato, Milan, Italy*

<sup>5</sup>*Department of Nursing Science, Faculty of Health Sciences, University of Eastern Finland, PO Box 1627 70211, Kuopio, Finland*

\***Corresponding author:** Francesco Zaghini, Policinico Tor Vergata, Rome, Italy, Tel: +39 338 3903396; E-mail: [francesco.zaghini@ptvonline.it](mailto:francesco.zaghini@ptvonline.it)

**Received date:** June 10, 2016; **Accepted date:** July 09, 2016; **Published date:** July 11, 2016

**Copyright:** © 2016 Zaghini F, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

## Abstract

**Background:** Counterproductive work behaviors are considered an important issue for every workplace. This is particularly the case in the nursing setting, as such behaviors can also be detrimental for patients. However, the reasons underpinning nurses' counterproductive behavior have been little studied, and the literature from the perspective of perpetrators' is fragmented.

**Purpose:** The aim of this systematic literature review was to identify and summarize studies concerning antecedents that could lead nurses to display counterproductive work behaviors.

**Methods:** The PRISMA Statement and Flowchart were used to select the studies included in this review. The research was performed in July 2015 using the PubMed, CINAHL, PsycINFO, and Cochrane databases. Data were selected in stages based on inclusion, exclusion and quality criteria, and analyzed using Popay's method.

**Results:** Fourteen papers were selected. Counterproductive work behaviors in the nursing work environment were observed. The majority of studies were performed in North America (USA and Canada), using quantitative or qualitative designs. These work behaviors were studied in order to delineate predisposing factors and their relationship to Moral Disengagement. When counterproductive work behaviors are not sanctioned, and enforcement policies are not applied, they become an important problem for organizations. From the results of our systematic review, it is possible to identify two main foci: counterproductive work behaviors' protective factors, and counterproductive work behaviors' risk factors.

**Conclusion and implications for practice:** This literature review identified specific antecedents that predispose nurses to engaging in counterproductive work behaviors, which negatively affect the quality of assistance and which can result in endangering the patient. This literature review helps to understanding the reasons that lead nurses to display counterproductive work behaviors, and can help prevent and restrict these phenomena.

**Keywords:** Antecedents; Counterproductive work behavior; Deviant behavior; Ethics; Literature review; Nurse

## Introduction

Deviant behavior at work is one of the most prevalent problems for organizations [1-3]. The main feature of such behavior is a violation of ethical and moral norms, such as theft, sabotage, aggression, and physical or verbal abuse. This behavior has been given various names, including "deviant behavior" [4], "misconduct" [5], "unethical behavior" [6], "aggression" [7], "violence" [8], and "workplace bullying" [9]. All these behaviors fall into a broader category termed counterproductive work behaviors (CWB) [10]. Workers who display CWB are aware that they are violating commonly shared ethical and moral principles, such as rules [10,11], so that their aim is to harm the organization and even the people within it, including colleagues, supervisors, subordinates, and clients [10,12].

CWB has been categorized into actions directed toward organizations (CWB-O), and those directed toward people (CWB-I). Workers carry out CWB-O by taking excessively long breaks, pretending to stay at home from work with a fictitious illness, or signing the presence in the workplace on behalf of a colleague [13], for example. CWB-I includes spreading false rumors about others, bullying, using violence, and physically or verbally abusing [14].

In the organizational literature, a model often used by researchers to understand the antecedents of CWB is the stressor-emotion model [10]. This model illustrates stressful situations at work, and the organization's characteristics that could lead workers to feel negative emotions, which increase the likelihood of counterproductive responses. Thus, CWB is considered a response to a perceived organizational stress, in order to reduce frustrations arising from the organizational environment [10,15]. Several studies have identified interpersonal conflicts, workload, and organizational constraints<sup>10</sup> as the main antecedents of CWB. Moreover, other research has found that

organizational aspects, such as the lack of social support, injustices, role ambiguity, and role conflict, can play a relevant role in the development of CWB [16]. In addition, previous studies have investigated the relationship between personal characteristics [17-19] and certain demographic factors [20] or even organizational factors [21,22].

The literature shows that nurses are particularly subject to stressful situations [23]. Therefore, it is likely that continuous and prolonged exposure to inevitable stressful workplace situations can lead to CWB. This is especially true if we consider the overall situation experienced by nurses at their workplaces. Indeed, they are increasingly subjected to urgent and heavy workloads and, thus, their mood is often extremely low [24].

Nevertheless, the nursing literature has mainly analyzed harassment and bullying from the point of view of the victim [25]. While many studies have dealt with the aforementioned aspect, research with the aim of understanding the reasons why nurses perform these behaviors is lacking. However, it is easy to conceive how important the understanding of the dynamics of CWB is, since nurses' behaviors could damage patients. In our opinion, investigations on the factors underpinning CWB are critical for developing preventive strategies.

## Objective

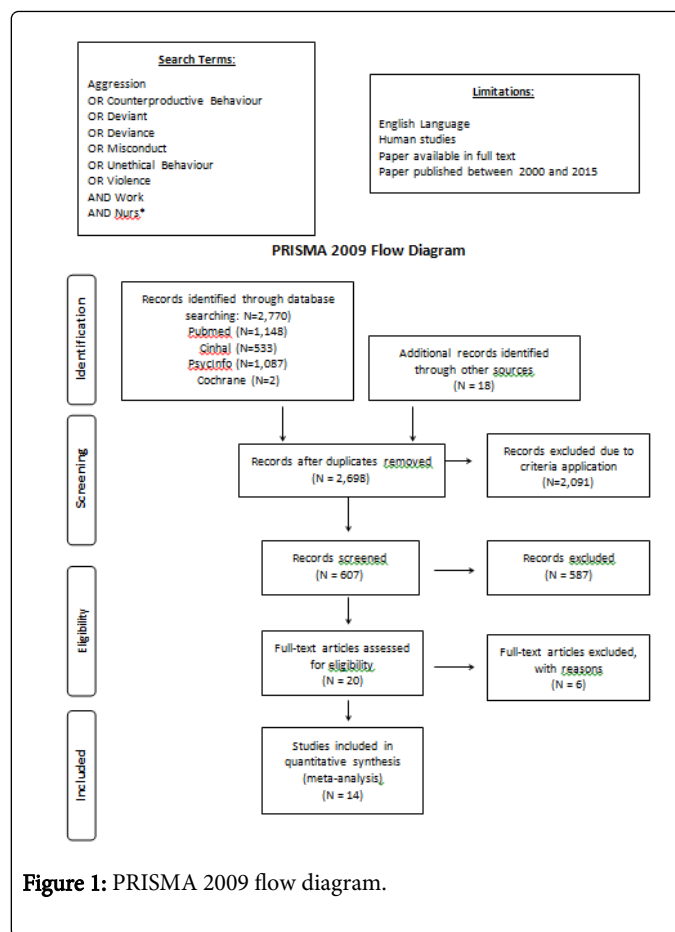
The objective of this systematic review is to identify and describe the antecedents in the nursing profession that push workers to counterproductive work behaviour (CWB).

## Methods

The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) [26] were used to select studies to include in this review (Figure 1). A PRISMA statement is an evidence-based minimum set of items for reporting in systematic reviews and meta-analyses, useful for ensuring the rigor of systematic searches, and that all relevant literature was included, in order to decrease selection bias [27]. The PRISMA flowchart was used to map the number of records identified, included and excluded, and reasons for exclusion.

### Search strategy

Electronic searches were performed on databases containing published studies on the nursing field and workers' behavior. The databases PubMed, CINAHL, and Cochrane were selected for this purpose. Searches were conducted by using search terms and their combinations, concerning counterproductive work behavior and related to different rule-breaking actions in nursing (Figure 1). Searches were limited to scientific articles, available in full-text and published in English between January 2000 and July 2015. The query used was: (((((((Aggression) OR Counterproductive Behaviour) OR Deviant) OR Deviance) OR Misconduct) OR Unethical Behaviour) OR Violence) AND Work) AND Nurs\*. Filters: Full text; Publication date from 2000/01/01 to 2015/12/31; Humans; English.



**Figure 1:** PRISMA 2009 flow diagram.

### Evaluation of eligibility

Paper selection was conducted in phases based on the titles, abstracts and full-texts, by using inclusion and exclusion criteria, following the PRISMA statement and flowchart (i.e. four phases: identification, screening, eligibility and inclusion). The papers' first selection (i.e. identification and screening, based on the title/abstract reading) and eligibility evaluation (i.e. full-text reading) were conducted by the independent work of two authors, with potential disagreements being resolved by consensus discussions. The following criteria were used, with papers being included if they: a) focused on nurses' workplaces; b) focused on CWB; c) described CWB-related actions; and d) presented the perpetrator's point of view. In addition, e) empirical, original papers were selected. Any papers focusing on harassment, bullying and mobbing between workers, were excluded.

### Quality appraisal

The quality of studies included in this review was evaluated with the JBI QARI critical appraisal checklist for interpretive and critical research (Figure 2). A consensus decision was taken by the review team, based on data retrieved during the data extraction phase of the review. Papers were included after an independent quality appraisal performed by two authors, and their consensus discussion on the overall appraisal.

Synopsis of JBI QARI Critical Appraisal Checklist for Interpretive & Critical Research after consensus discussion

Reviewer: ..... Date: .....

	Ahmed et al., 2013	Ceylan et al., 2011	Christian et al., 2014	De Jonge et al., 2009	Doubtchikova et al., 2013	Fida et al., 2015	Lee et al., 2002	Longo et al., 2007	Peng et al., 2011	Polceno et al., 2013	Schneeberger et al., 2014	Sih et al., 2014	Stanley et al., 2007
1. Is there congruity between the stated philosophical perspective and the research methodology?													
2. Is there congruity between the research methodology and the research question or objectives?													
3. Is there congruity between the research methodology and the method used to collect data?													
4. Is there congruity between the research methodology and the representation and analysis of data?													
5. Is there congruity between the research methodology and the interpretation of results?													
6. Is there a statement locating the researcher culturally or theoretically?													
7. Is the influence of researcher in the research, and vice-versa, addressed?													
8. Are participants, and their voices, adequately represented?													
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?													
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?													

Legend: 1 = Yes 0 = No / = Not Applicable

Overall Appraisal:  Include  Exclude

Comments (including reason for exclusion):

.....

.....

.....

Figure 2: Synopsis for JBI QARI appraisal checklist for interpretive and critical research after consensus discussion.

### Data extraction and synthesis

After the selection of papers, they were read several times to get an overview of the content. After that, each paper was tabulated according to author(s), country, year, aim of the study, methods and results. These results were synthesized using narrative techniques [28], carried out separately by two authors (FZ, RC) and based on four phases: (a) defining the theoretical framework of the synthesis, (b) developing a preliminary synthesis, (c) exploring relationships within and between studies, and (d) assessing the robustness of the synthesis.

### Results

The database search provided a total of 2,770 papers. After removing duplicates, 2,698 remained. An additional 2,088 papers were excluded because they did not relate to the nursing field. Of the 610 remaining, 590 studies were discarded after reviewing the abstracts, because they did not consider the perpetrator's perspective. Thus, the full text of the 20 remaining papers was examined, but only 14 studies met all our inclusion criteria and were included in the review. After the narrative analysis, two main foci were identified: CWB preventive factors and CWB risk factors. Table 1 summarizes the studies identified in this review.

Of the 14 selected papers, four were qualitative [29-32] and nine quantitative [8,33-40]. One of the studies used a mixed-method [41]. For qualitative studies, semantic content analysis methods were used to identify specific themes [29,30,32] with the participants being nurses and other healthcare workers (owners, managers and physicians, etc.) [31]. Regarding quantitative measurements, web surveys [8,35,38] with anonymous paper questionnaires were used [33,34,36,37,39,40]. Participants in the quantitative studies were from 52 countries, and totaled 700 registered nurses. Six of the studies were conducted in the U.S, 2 in Italy, and one each in Canada, Taiwan, the Netherlands, Israel, Turkey and Pakistan.

S. No	Authors, Country and Year	Aim of the Study	Method	Results
1	Ahmed et al. Pakistan, 2013 [33]	The aim of the study is to investigate the impact of most common and significant factors upon deviant work behavior of nurses and doctors in Pakistan	A Cross-sectional study was conducted on 300 medical staff and nurses in the public sector	CWB increase when employees perceive from the organization a sense of injustice and cynicism
2	Ceylan et al. Turkey, 2011 [34]	The purpose of this study is to examine the effects of each of the organizational injustice dimensions on work alienation in hospitals	A cross-sectional study was conducted on 700 doctors and nurses working in public and private hospitals in Istanbul	The relationship between CWB and procedural injustice, such as work alienation, is relatively strong
3	Christian et al. USA, 2014 [35]	The aim of this study is to explore the role of moral disengagement and turnover intentions with respect to deviant work behavior	A cross-sectional study was conducted on a sample of 44 nurses from a hospital system in Southwestern United States, and a sample of 52 working adults collected from an online survey system	Moral disengagement (MD) is closely related to CWB
4	De Jonge et al. Netherlands, 2009 [36]	The objectives of the study were to test the extent to which job incumbent self-report and co-worker report of CWB in health care work converge, and the extent to which job incumbent-reported work-related antecedents similarly predict both self-reported and co-worker-reported behaviors	A cross-sectional survey with anonymous questionnaires was conducted on 54 healthcare workers, employees in residential elderly care organization	The job demand-resources (JD-R) model explains the implementation of CWB

5	Drach-Zahavy et al. Israel, 2013 [37]	The aim of this study was twofold: first, to explore the link between unit-level surface diversity in terms of ethnicity, gender, age and tenure and individual-level perceptions of inter-personal aggression; and second, to examine the moderating role of a unit's diversity climate in these relationships.	A cross-sectional study was performed on 130 registered nurses from two large urban hospitals	Individual differences amongst components of a working group, as well as the group's characteristics, do not affect the frequency of CWB
6	Egues et al. USA, 2013 [29]	The aim of this paper is to analyze horizontal violence in nursing and explore strategies to address it	Qualitative research was performed by the authors to identify the main topics of horizontal violence. Workshops and focus groups were performed that allowed nurses to exchange information about their experiences with horizontal violence	CWB are negatively correlated with ethical leadership
7	Fida et al. Italy, 2015 [38]	This study aimed at developing and validating a nursing moral disengagement scale and investigated how moral disengagement is associated with counterproductive and citizenship behaviour at work	The research comprised a qualitative and quantitative study. Participants were 60 Italian nurses involved in clinical work and enrolled as students in a postgraduate master's programme, who took part in the qualitative study. A cross-sectional study was performed for the quantitative study, the researchers recruited 434 nurses from different Italian hospitals	CWB have a significant association with MD
8	Lee et al. Canada, 2002 [38]	The aim of this study was to investigate the role of affect and cognitions in predicting organizational citizenship behavior and workplace deviance behavior	The study was performed with survey packets being mailed to the nurses that incorporate a self-report questionnaire and another one that asked each nurse to forward to the co-worker that could best observe their behavior at work. A total of 149 registered nurses and their coworkers were enrolled.	Some specific negative emotions (e.g., hostility) did contribute to the prediction of CWB
9	Longo et al. USA, 2007 [30]	The aim of this study was to summarize some experiences about lateral violence	This study is based on a brief report by experts in the nursing field	CWB are negatively correlated with social support
10	Peng et al. Taiwan, 2011 [39]	The purposes of this study were to explore how the supervisor feedback environment influences employee deviance and to examine the mediating role played by work-related stress	Participants in this research were 276 registered hospital nurses and 276 supervisors who were asked to complete a cross-sectional questionnaire survey	CWB are negatively correlated with constant feedback from supervisors CWB are a partial mediator of the relationship between the environment and the negative emotions experienced by nurses
11	Policastro et al. USA, 2013 [31]	The aim of this study was to examine the characteristics of medical equipment fraud cases	A qualitative study was performed to review 258 reported cases of durable medical equipment fraud.  The data used for the current study were drawn from Medicaid Fraud Reports. This publication was compiled by the National Association of Medicaid Fraud Control Units and is published six to ten times a year. All of the reports from January 2005 to March 2011 were examined to create the dataset for the current analysis.	CWB are justified by the conflict between hospital administrators and nurses
12	Sanner-Stiehr et al. USA, 2014 [32]	The aim of this study was to discuss lateral violence	A case study research approach was used, and the "Nurse Wounded Healer framework" was applied to describe how the decision to leave a job, because of lateral violence, is made	Working environment where CWB are commonly perpetrated and not properly sanctioned by the organization is characterized by a culture of violence that allows the performance of CWB as the norm
13	Sili et al. Italy, 2014 [40]	The aim of this study was to validate a specific scale to measure nursing counterproductive work behavior and the nurses' moral disengagement	A cross-sectional study was performed in a sample of 347 nurses	Nurses with high levels of MD implement more CWB in the workplace
14	Stanley et al. USA, 2007 [8]	This paper describes the development, testing, incidence and severity of lateral violence in the nursing field	The participants of the study were 663 nurses who responded to a cross-sectional online survey	When CWB are not sanctioned by management, a vicious cycle can develop,

				where victims of CWB become its perpetrators
--	--	--	--	--

**Table 1:** CWB preventive factors and CWB risk factors.

Overall, counterproductive work behavior in the nursing workplace were studied in order to analyze predisposing factors, such as ethical leadership [29], the applicants' environments [36], characteristics of the group [37], organizational justice [33,34], negative emotions [38], social support [30], and feedback from supervisors [39]. In addition, several studies have shown a strong relationship between CWB and DM [35,40,41]. Finally, it was shown that where CWB are not sanctioned, and enforcement policies are not applied, this behaviour becomes an important problem for organizations [8,32].

### CWB preventive factors

Based on our findings, the factors which prevent CWB are related to individual characteristics of workers and also those of the leadership. Previous studies suggest that individual differences (e.g. age, sex, ethnicity) do not affect the frequency of CWB, or the group's characteristics; although more homogeneous groups are able to perform more efficiently as a team than heterogeneous groups, group characteristics (i.e., heterogeneity or homogeneity) do not appear to be antecedents for CWB [37]. Leadership has been found to be an important factor in preventing CWB. Indeed, constant feedback from supervisors is negatively correlated to CWB [39]. More specifically, in a supportive environment with ethical leaders, nurses displayed less CWB [29,30].

### CWB risk factors

Risk factors for nurses' CWB include: various characteristics of the work environment; the perception of organizational injustice; perceived fairness; experiencing negative emotions; organizational culture; psychophysical wellbeing; and the existence of moral disengagement (MD).

The association between characteristics of the nursing work environment (e.g. salary) and the frequency of CWB is widely confirmed in the literature [38]. More specifically, nurses' perceptions of organizational injustice are one of the most studied antecedents of CWB, which increase when employees perceive a sense of injustice and cynicism from the organization [33,34].

Employees' perceived fairness and the organization's overall justice determine potential dissatisfaction with work that can result in feelings of helplessness and isolation amongst staff members. Dissatisfaction can arise from issues concerning work role, oppression, strict organizational hierarchy, workers' low self-esteem, and perceptions of powerlessness. All these factors can lead nurses to experience negative emotions, and create conflicts between hospital administrators and nursing staff [31]. This can negatively affect workers' attitudes and behaviors, leading to dysfunctional and triggering phenomena, such as absenteeism, increased turnover, or even sabotage and theft [34].

Working environments where CWB are commonly perpetrated, and not properly controlled by the organization, are typically characterized by a culture of violence that sees CWB as the norm. The major risk in these situations is the development of a vicious circle, whereby the victims of CWB become the perpetrators of CWB themselves [8,32].

Apart from nurses' job satisfaction, other features are associated with CWB, such as psychophysical wellbeing and/or interpersonal and emotional relationships [38].

Another antecedent to CWB in the nursing field is the intention to leave the job. Indeed, for CWB implementation, it is necessary for nurses to appeal to the psychological mechanism of MD [40,41]. In fact, newly hired nurses who perform CWB often justify their behavior with MD [35].

### Discussion

The literature concerning CWB within the nursing field is sparse. This is particularly the case involving studies from the perpetrator's point of view. However, there do appear to be specific work characteristics that lead to nurses engaging in deviant conduct. The job demand-resources (JD-R) model suggests these include various work stresses, such as heavy workloads and interpersonal conflicts [36,42]. This model provides a good approximation of relationships between work characteristics, health, and well-being [43]. In a similar vein, a study of Australian call centre workers, carried out by Lewig and Dollard [44], showed that the JD-R model accounted for more variance in emotional exhaustion and job satisfaction, which are both putative CWB antecedents [45]. As noted by Spector and Fox [10], negative emotions experienced at work can cause feelings of frustration and anger in some people, affecting their general well-being and causing them to show signs of deviant behavior.

In order for a worker to develop CWB, they need to use the psychological mechanism of moral disengagement (MD), a self-regulatory process used to exercise cognitive control over thoughts and behaviors [46], which has been shown to be closely associated with CWB [35,40,41]. MD explains why individuals with strong ethical and moral principles can, in some circumstances, commit acts in conflict with these rules, without feeling guilt or shame [46]. Nurses occasionally report MD during their work activities [41]. This phenomenon appears to be very expensive for organizations [2], but also, and above all in the nursing field, it negatively impacts patient health and safety [15,47].

Another important fact emerging from this literature review is the relationship between CWB and the intention to leave the job [35]. This may be due the fact that nurses intending to leave are projected towards another organization, and they feel less responsible for what happens in their company or hospital [48]. Furthermore, nurses planning to change jobs have less fear of organizational sanctions when their behaviors are identified and disputed [49].

Nurses' CWB inevitably entail consequences on the quality of healthcare, the clinical practice, and the climate in which the patients live. Such CWB can negatively affect other healthcare professionals' decisions. For example, a faulty recording of a patient's observations in the medical notes, or the deliberate administration of a medication that is not prescribed, such as sedating an agitated patient, could result in patient harm. This phenomenon is constantly increasing due to worldwide socio-economic factors, therefore it is necessary to fully

understand this phenomenon in order provide better assistance, and improve health services and nurses' performance. In this way, nursing executives could prevent and restrict CWB.

This study adds an important element to the nursing CWB literature, by gathering and summarizing research about antecedents that contribute to CWB, and it is hoped this work represents a starting point for future studies.

## Limitations

The results of this systematic review should be considered with some limitations. For example, the majority of studies used self-assessment questionnaires with cross-sectional data collection, and convenience sampling. Also, the awareness of CWB is relatively recent within the nursing field. In addition, CWB has previously been given many names. Therefore, it is possible that some publications on this topic have been excluded, and that this systematic review is not completely exhaustive. Finally, the search strategy and quality of the studies' evaluation criteria would have been influenced by the results obtained in the eligible studies. In any event, the results of this review are not intended to be a final goal in CWB understanding within the nursing profession, but as a stage for moving towards further research.

## Conclusions

Nurses' CWB may lead to unfavorable outcomes for patients, and if not prevented, countered, or controlled, could cultivate a culture of deviant conduct that may easily infiltrate the entire membership of the organization, with extremely dangerous results for hospital clients. Our work had two main foci: "risk factors" and "protective factors". The organizational context variables that lead nurses to enact CWB also condition them to limit the phenomenon. CWB are becoming an increasing problem in organizations. This is also the case in the nursing field, and impacts the quality of healthcare, as well as general workplace health and safety. Therefore, we hope that the results of this study are carefully considered by health managers, in order to build pathways that can promote protective factors and reduce risk factors of CWB. More research is needed, in order to bring to light other unknown factors associated with counterproductive work behaviour.

## References

1. Fida R, Paciello M, Tramontano C, Fontaine RG, Barbaranelli C, et al. (2015) An integrative approach to understanding counterproductive work behavior: the roles of stressors, negative emotions, and moral disengagement. *J Bus Ethics* 130: 131-144.
2. Vardi Y, Weitz E (2016) *Misbehavior in Organizations: A Dynamic Approach*. Routledge, USA.
3. Lo Iacono J, Weaven SK, Griffin D (2016) Examination into the effects of job satisfaction on salesperson deviance: The moderating role of customer orientation. *J Bus Econ Manage* 17: 173-186.
4. Hollinger RC (1986) Acts against the workplace: Social bonding and employee deviance. *Deviant Behav* 7: 53-75.
5. (2005) Final Rule on Research Misconduct. Office of Research Integrity, USA.
6. Trevino LK, Weaver GR, Reynolds SJ (2006) Behavioral ethics in organizations: A review. *J Manage* 32: 951-990.
7. Hershcovis MS, Turner N, Barling J, Arnold KA, Dupré KE, et al. (2007) Predicting workplace aggression: a meta-analysis. *J Appl Psychol* 92: 228.
8. Stanley KM, Martin MM, Michel Y, Welton JM, Nemeth LS (2007) Examining lateral violence in the nursing workforce. *Issues Ment Health Nurs* 28: 1247-1265.
9. Knorz C, Zapf D (1996) Mobbing an extreme form of social stressors in the workplace. *Zeitschrift fuer Arbeits- und Organisations Psychologie* 40: 12-21.
10. Spector PE, Fox S (2005) A model of counterproductive work behavior. In: Fox S, Spector PE (edn.) *Counterproductive work-place behavior: investigations of actors and targets*. Washington, DC: APA 151-174.
11. Collins JM, Griffin RW (1998) The psychology of counterproductive job performance. In: Griffin RW, O'Leary-Kelly A, Collins JM (edn.) *Dysfunctional behavior in organizations: Non-violent dysfunctional behavior*. Monographs in organizational behavior and relations. 23: 219-242.
12. Fox S, Spector PE, Miles D (2001) Counterproductive work behavior (CWB) in response to job stressors and organizational justice: some mediator and moderator tests for autonomy and emotions. *J Vocat Behav* 59: 291-309.
13. Robinson SL, Bennett RJ (1995) A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy Manage J* 38: 555-572.
14. Sackett PR, De Vore CJ (2001) Counterproductive behaviors at work. In: Anderson N, Ones D, Sinangil H, Viswesvaran C (edn.) *Handbook of industrial, work, and organizational psychology*. Sage Publications, London.
15. Penney LM, Spector PE (2005) Job stress, incivility, and counterproductive work behavior (CWB): The moderating role of negative affectivity. *J Organizat Behav* 26: 777-796.
16. Baillien E, De Witte H (2009) Why is organizational change related to workplace bullying? Role conflict and job insecurity as mediators. *Econ Indust Democ* 30: 348-371.
17. Dalal RS (2005) A meta-analysis of the relationship between organizational citizenship behavior and counterproductive work behavior. *J Appl Psychol* 90: 1241-1255.
18. Berry CM, Ones DS, Sackett PR (2007) Interpersonal deviance, organizational deviance, and their common correlates: A review and meta-analysis. *J Appl Psychol* 92: 410-424.
19. Fida R, Paciello M, Barbaranelli C, Tramontano C, Fontaine RG (2014) The role of irritability in the relation between job stressors, emotional reactivity, and counterproductive work behaviour. *European J work Organizat Psychol* 23: 31-47.
20. Hansen ÅM, Høgh A, Persson R, Karlson B, Garde AH, et al. (2006) Bullying at work, health outcomes, and physiological stress response. *J Psychosomatic Res* 60: 63-72.
21. Caruso R, Fida R, Sili A, Arrigoni C (2015) Towards an integrated model of nursing competence: an overview of the literature reviews and concept analysis. *Prof Inferm* 69: 35-43.
22. Arrigoni C, Caruso R, Campanella F, Berzolari FG, Miazza D, Pelissero G (2015) Investigating burnout situations, nurses' stress perception and effect of a post-graduate education program in health care organizations of northern Italy: a multicenter study. *G Ital Med Lav Ergon* 37: 39-45.
23. Vijay M, Vazirani N (2012) A comparative study on stress among nurses in private and public hospitals in Mumbai. *BVIMR Manage Edge* 5: 46-52.
24. Chaloff J (2008) Mismatches in the formal sector, expansion of the informal sector: Immigration of health professionals to Italy. *OECD Health Working Papers*: 34.
25. Johnson SL (2009) International perspectives on workplace bullying among nurses: a review. *Int Nurs Rev* 56: 34-40.
26. Liberati A, Altman DG, Tetzlaff J, Mulrow C, Gøtzsche PC, et al. (2009) The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. *Ann Intern Med* 151: W65-W94.
27. Hamer S, Collinson G (2014) *Achieving evidence-based practice: A handbook for practitioners*. Elsevier Health Sciences, USA.
28. Popay J, Roberts H, Sowden A, Petticrew M, Arai L, et al. (2006) Guidance on the conduct of narrative synthesis in systematic reviews. *ESRC methods programme* 15: 047-71.

29. Egues AL, Leinung EZ (2013) The bully within and without: Strategies to address horizontal violence in nursing. *Nurs Forum* 48: 185-190.
30. Longo J, Sherman RO (2007) Leveling horizontal violence. *Nurs Manage* 38: 34-37.
31. Policastro C, Payne BK (2013) An examination of deviance and deviants in the durable medical equipment (DME) field: characteristics, consequences, and responses to fraud. *Deviant Behav* 34: 191-207.
32. Sanner-Stiehr E, Ward-Smith P (2014) Lateral violence and the exit strategy. *Nurs Manage* 45: 11-15.
33. Ahmed W, Kiyani AA, Hashmi SH (2013) The study on organizational cynicism, organizational injustice & breach of psychological contract as the determinants of deviant work behavior. *Актуальні проблеми економіки* 2: 145-154.
34. Ceylan A, Sulu S (2011) Organizational injustice and work alienation. *Ekonomika* 2: 65-78.
35. Christian JS, Ellis AP (2014) The crucial role of turnover intentions in transforming moral disengagement into deviant behavior at work. *J Bus Ethics* 119: 193-208.
36. De Jonge J, Peeters MC (2009) Convergence of self-reports and coworker reports of counterproductive work behavior: A cross-sectional multi-source survey among health care workers. *Int J Nurs Stud* 46: 699-707.
37. Drach-Zahavy A, Revital T (2013) Opposites attract or attack? The moderating role of diversity climate in the team diversity-interpersonal aggression relationship. *J Occup Health Psychol* 18: 449.
38. Lee KA, Allen NJ (2002) Organizational citizenship behavior and workplace deviance: The role of affect and cognitions. *J Appl Psychol* 119: 193-208.
39. Peng JC, Tseng MM, Lee YJ (2011) Relationships among supervisor feedback environment, work-related stressors, and employee deviance. *J Nurs Res* 19: 13-24.
40. Sili A, Fida R, Zaghini F, Tramontano C, Paciello M (2014) Counterproductive behaviors and moral disengagement of nurses as potential consequences of stress-related work: validity and reliability of measurement scales. *Med Lav* 105: 382-394.
41. Fida R, Tramontano C, Paciello M, Kangasniemi M, Sili A, et al. (2015) Nurse moral disengagement. *Nurs ethics*.
42. Demerouti E, Bakker AB, Nachreiner F, Schaufeli WB (2001) The job demands-resources model of burnout. *J Appl Psychol* 86: 499.
43. Van Veldhoven MJPM, Taris TW, De Jonge J, Broersen S (2005) The relationship between work characteristics and employee health and well-being: how much complexity do we really need? *Int J Stress Manage* 12: pp. 3-28.
44. Lewig KA, Dollard MF (2003) Emotional dissonance, emotional exhaustion and job satisfaction in call centre workers. *Euro J Work Organizat Psychol* 12: pp. 366-92.
45. Bakker AB, Demerouti E (2007) The job demands-resources model: State of the art. *J Manage psychol* 22: 309-328.
46. Bandura A (1990) Mechanisms of moral disengagement. In: Reich W (edn.) *Origins of terrorism: Psychologies, ideologies, theologies, and state of mind*. Cambridge University Press, New York, 161-191.
47. Moore C (2008) Moral disengagement in processes of organizational corruption. *J Bus Ethics* 80: 129-139.
48. Montes SD, Rousseau DM, Tomprou M (2015) Psychological Contract Theory. *Wiley Encyclopedia of Management* 11: 1-5.
49. Rousseau DM (2001) Schema, promise and mutuality: The building blocks of the psychological contract. *J Occupat Organizat Psychol* 74: 511-541.