

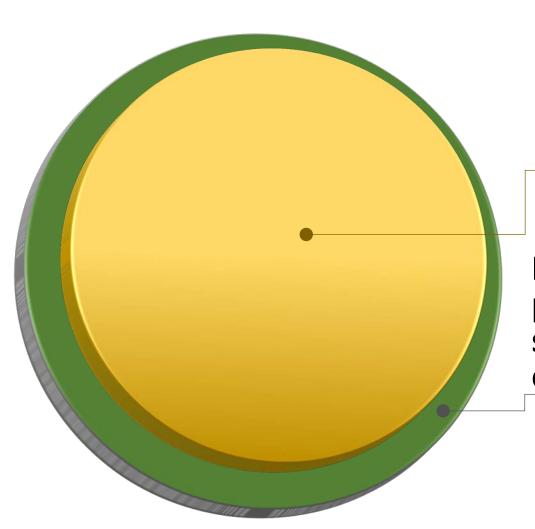




# At work but not present

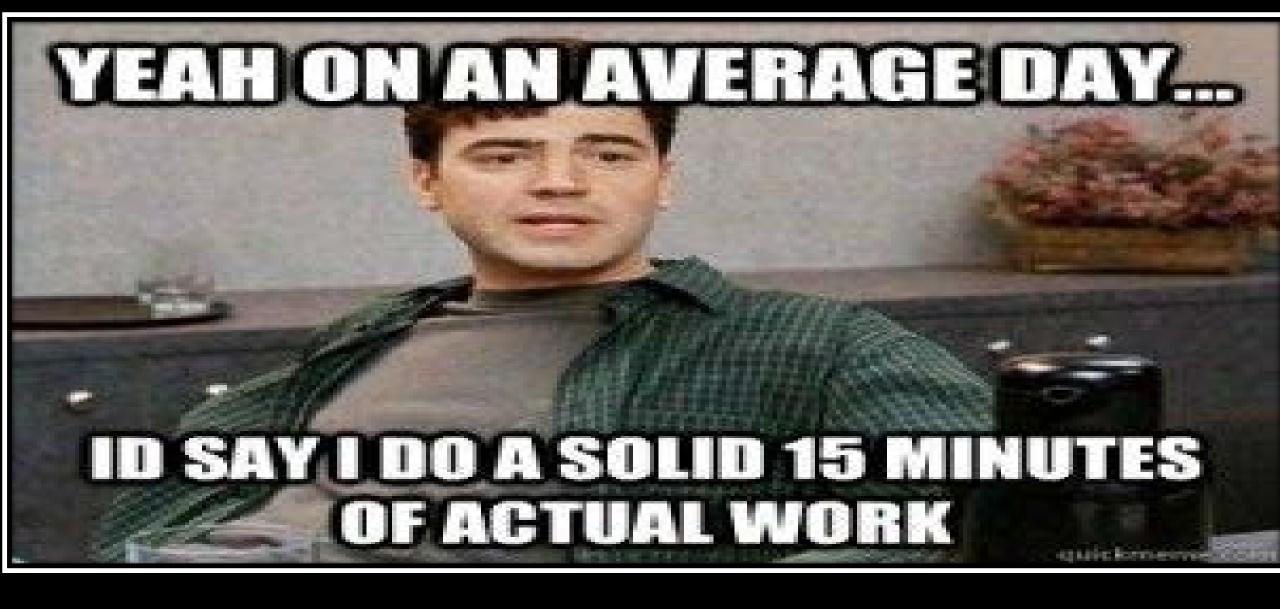
Roberta Christopher, EdD(c), MSN, ARNP, NE-BC, CHTS-CP Assistant Professor, Jacksonville University

# Objectives



#### **Define Presenteeism**

Discuss the relationship among presenteeism, absenteeism, nurse safety outcomes, patient safety outcomes, and quality of care



What is Presenteeism?

### Health & Wellbeing of Nurses

- Significant, contributing factor to quality care and safety (Burke, Koyuncu, & Fiksenbaum, 2011).
- Impaired health in nurses negatively alters physical, emotional, and cognitive engagement in patient care and job performance (Hilton, Scuffham, Sheridan, Cleary, & Whiteford, 2008; Johns, 2010; Love, Grimby-Ekman, Eklof, Hagberg, & Dellve, 2010)

### Work/Life Balance

- Stress of balancing work and personal life =
- Diminished job performance

(McMillan, Morris, & Atchley, 2011)

# Poor Practice Environments

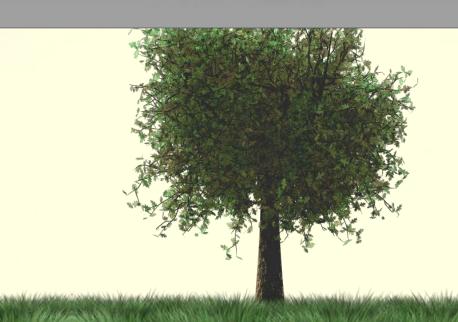
- Insufficient staffing & Higher workloads
- Yield increased risk for injury, infections, and error

(Institute of Medicine, 2000, 2004; Ludwick & Silva, 2003Biron, Brun, Ivers, & Cooper, 2006; Letvak, Ruhm, & Gupta, 2012; Prater & Smith, 2011).

# Reported Costs of Decreased Job Productivity

- •Impaired health of nurses = \$36.6 billion/year
- •Work-relatedinjury= \$1.2 billion/year

### Factors Associated with Presenteeism



**Physical Illness** 

Fatigue

Sleep Disturbances

Musculoskeletal Problems

Burnout

Performance-Based Self-Esteem

Mental Illness

Health Risks

Occupation

Age & Gender

**Health Status** 

**Workplace Characteristics** 

### So what is the problem?

General Problem

- Loss of concentration
- Work impairment

Specific Problem

 Safety risks for nurses and patients



### Primary Aim:

Examine the relationships of presenteeism with absenteeism, nurse safety outcomes (musculoskeletal, needle stick, and exposure-related workplace injury), and quality of nursing care, as perceived by nurses.

### Secondary Aim:

Describe patient safety outcomes (clinical errors, near errors, and untoward clinical incidents), personal and contextual factors, and well-being assessment for productivity, which may influence presenteeism, absenteeism, nurse safety outcomes, and quality of nursing care.



### **Research Questions**

RQ1 – What is the relationship between nurse self-reported presenteeism & nurse safety outcomes?

RQ2 – What is the relationship between nurse self-reported presenteeism & self-reported quality of nursing care?

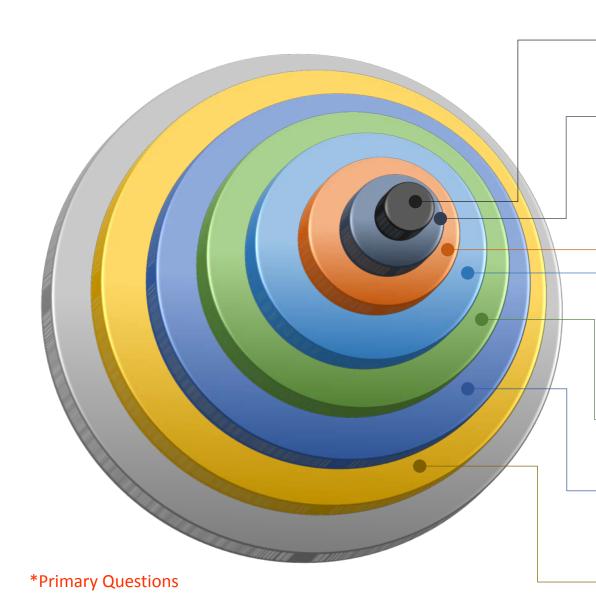
RQ3 – What is the relationship between self-reported presenteeism and self-reported absenteeism?

RQ4 – Is there a difference in the proportion of nurses reporting presenteeism who experience specific negative patient safety outcomes (clinical errors, near errors, and untoward clinical incidents?

RQ5 – Is there a difference in the proportion of nurses reporting presenteeism who experience specific personal factors?

RQ6 – Is there a difference in the proportion of nurses reporting presenteeism who experience specific contextual factors?

RQ7 – Is there a difference in the proportion of nurses reporting presenteeism who experience well-being related barriers to productivity?



### Hypotheses

H1A: There is a relationship between nurse self-reported presenteeism and nurse safety outcomes.

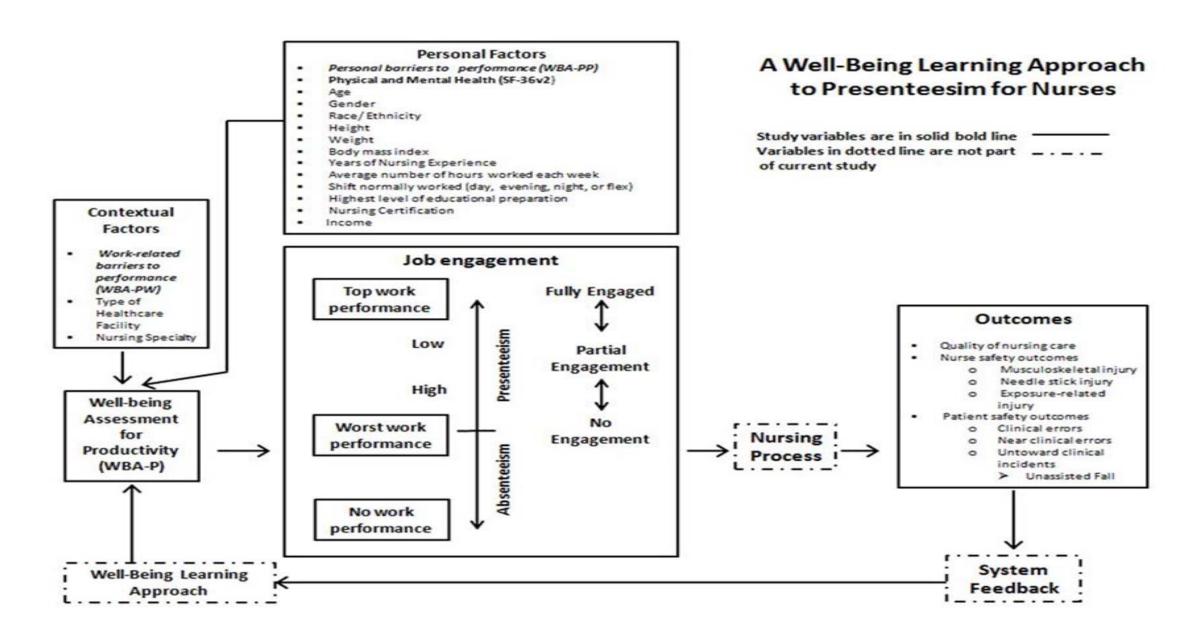
H10: There is no relationship between nurse self-reported presenteeism and nurse safety outcomes.

H2A There is a relationship between nurse self-reported presenteeism and self-reported quality of nursing care.

H20: There is no relationship between nurse self-reported presenteeism and quality of nursing care. H3A: There is a relationship between nurse self-reported presenteeism and self-reported absenteeism.

H30: There is no relationship between nurse self-reported presenteeism and self-reported absenteeism.

### **Theoretical Framework**



# The Literature: Why do nurses come to work ill or distracted?

35% = no one to cover their work if they were away because of sickness 71 % = were worried about placing an extra burden on their team when they take time off because of sickness

41 % = felt under a great deal of stress at work at present 27% = put themselves under pressure to come to work when unwell

43% = unable to adjust their work if they were unwell

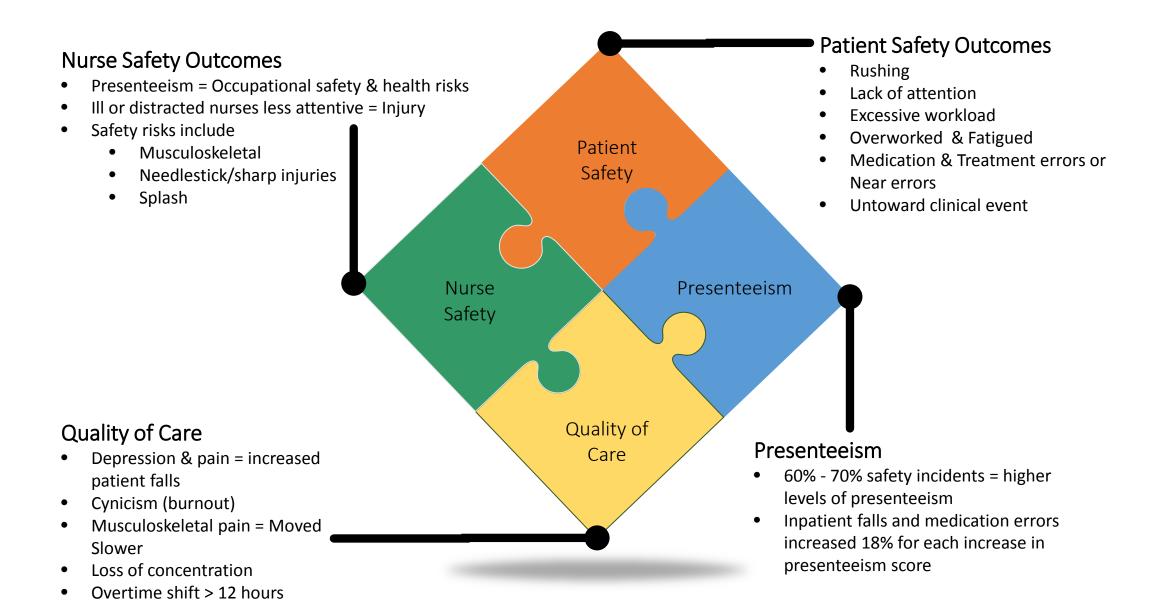
28% = felt under pressure from leaders & team to come into work unwell







(Ashby & Mahdon, 2010)



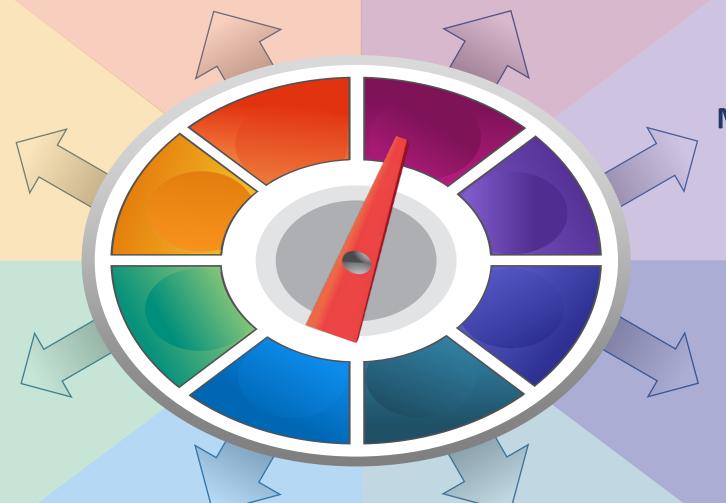
### The Literature

(Gillen et al., 2007; Vecchio, Scuffham, Hilton, & Whiteford, 2011; Videman, Ojajarvi, Riihimaki, & Troup, 2005; Campo & Darragh, 2012; Charney & Schirmer, 2007; De Castro, Fujishiro, Rue, Tagalog, Samaco-Paquiz, & Gee, 2010; Ghofranipour, Asadpour, Ardebili, Niknami, & Hajizadeh, 2009; Gropelli & Corle, 2011; Halbesleben, 2010; Nahrgang, Morgeson, & Hofmann, 2011; Singru & Banerjee, 2008; Vecchio et al., 2011; De Castro et al., 2010; Jeffs, Affonso, & MacMillan, 2008; Mwachofi, Waltson, & Al-Omar, 2011; Rogers, 2008; Ludwick & Silva, 2003; Burke, Koyuncu, & Fiksenbaum, 2010; Burhans & Alligood, 2010); Letvak, 2009; Rogers, Hwang, Scott, Aiken, Dinges, 2004; Robertson, Leach, Doerner, & Smeed, 2012; Aronsson & Gustafsson, 2005; Barker, Flynn, Pepper, Bates, & Mikeal, 2002)

#### **Demanding Workloads**

#### **Caring for Oneself**

**Weights of Safe Control of S** 



**Morale Does Suffer** 

Noticing you are unwell, Yet Please Stay!

Working Short Staffed without Anyone to Call in

Obligated to Come to Work

Cracking Down on Sick Time

#### Quantitative

- Descriptive
- Correlational (Associative)
- Regressive relationships

Permission to Use Premises

A PARTICIPATION OF THE PARTY OF

Simple, Random Sampling

**Data Collection** 

Informed Consent & Confidentiality

Geographic Location & Population

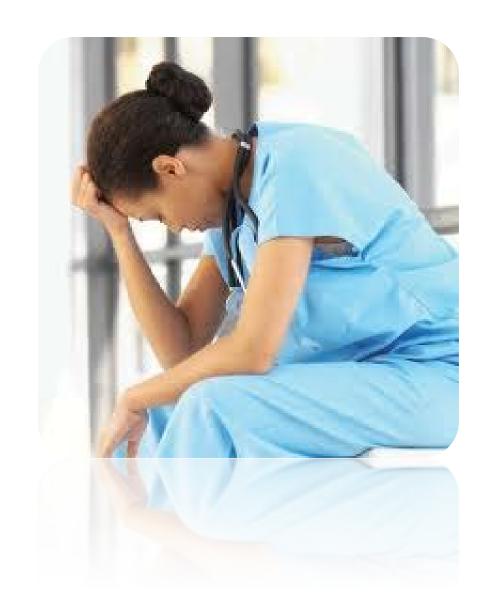
# RQ/Hypothesis 1: Relationship between presenteeism and nurse safety outcomes

- Work-related musculoskeletal disorder (WRMD)
  - No statistically significant relationship was noted between relative presenteeism and WRMDs in this study overall or at categorical level (with and without WRMDs) (p = 0.1077)
- Accidental needlestick or sharps injury (ANSIs)
  - No statistically significant relationship was noted between relative presenteeism and ANSIs in this study overall or at categorical level (with and without ANSIs) (p = 0.4703)
- Accidental splash exposure (ASEs)
  - No statistically significant relationship was noted between relative presenteeism and ASEs in this study overall or at categorical level (with and without ASEs) (p = 0.5073)



RQ/Hypothesis 2: Relationship between presenteeism and self-reported quality of nursing care (QNC)

• Findings suggest relative presenteeism did differ significantly between those with low self-reported quality of nursing care and those with high reported quality of nursing care (p = 0.0136).



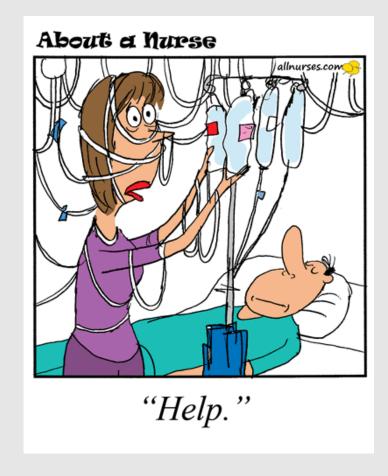


### RQ/Hypothesis 3: Relationship between presenteeism and selfreported absenteeism

- As presenteeism goes up then absenteeism goes down by 0.07.
- Findings suggest presenteeism has a negative relationship with absenteeism (-.14 correlation with p=0.048).
- For every unit presenteeism increases, the absenteeism score drops by 0.1, with scores ranging from -1 (works more than expected) to +1 (always absent).

RQ/Hypothesis 4: Is there a difference in the proportion of nurses reporting presenteeism who experience specific negative patient safety outcomes (clinical errors, near errors, and untoward clinical incidents)?

 Model suggests there is not a significant difference in the proportion of nurses reporting presenteeism who experience patient safety outcome (clinical errors, near clinical errors, and unassisted patient falls).



# THE LOOK I GIVE WHEN I'M COMPLETELY

# RQ/Hypothesis 5: Is there a difference in the proportion of nurses reporting presenteeism who experience specific personal factors?

- Personal factors for this research question included:
  - Physical and mental health,
  - Age,
  - Gender,
  - Race/ethnicity,
  - Highest level of educational preparation,
  - Nursing certification,
  - Number of hours worked each week,
  - Shift normally worked, and
  - Years of nursing experience
  - Income
- The model suggests there is <u>not a significant difference</u> in the proportion of nurses reporting presenteeism who experience specific personal factors.



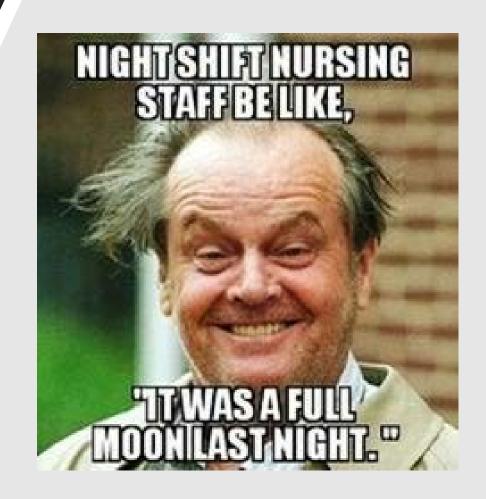
RQ/Hypothesis 6: Is there a difference in the proportion of nurses reporting presenteeism who experience specific contextual factors?

- Contextual factors: Type of healthcare facility and nursing specialty.
- Significant difference between nurses reporting presenteeism who work in <u>acute care</u> healthcare facilities when compared to those who work in psychiatric healthcare facilities.
- Significant difference between nurses reporting presenteeism who work in the <u>critical care</u>, nursing specialty when compared to those who work in the psychiatric specialty.

# RQ/Hypothesis 7: Is there a difference in the proportion of nurses reporting presenteeism who experience well-being related barriers to productivity?

- Well-being personal barriers (WBA-PP) included (a) health or physical condition, (b) taking care of someone else, (c) personal problems or worries, (d) depression or anxiety, and (e) financial stress or concerns (Prochaska et al., 2011).
- Well-being work-related barriers included

   (a) lack of resources, (b) issues with coworkers, (c) having too much to do and not enough time, (d) issues with supervisors, (e) lack of sufficient training, and (f) technology issues.
- \*Lack of sufficient training significant





### Interesting Findings:

- BMI 67% overweight or obese
- Critical Care Practice environment
  - Lack of resources = Burnout or emotional exhaustion
- Personal factors
  - Caring for someone else = financial stress or concerns = decreased vitality
    - Lack of restorative rest = Total fatigue (mental and physical)
  - Increased BMI, decreased physical functioning, bodily pain
- Lack of job engagement = decreased quality of care
  - Positive reinforcement and feedback



## Concerning:

- 20% reported being nervous
- 12.2% reported feeling so down in the dumps that nothing could cheer them
- 17% downhearted and depressed
- 88% reported bodily pain
- 20% reported moderate to very severe bodily pain

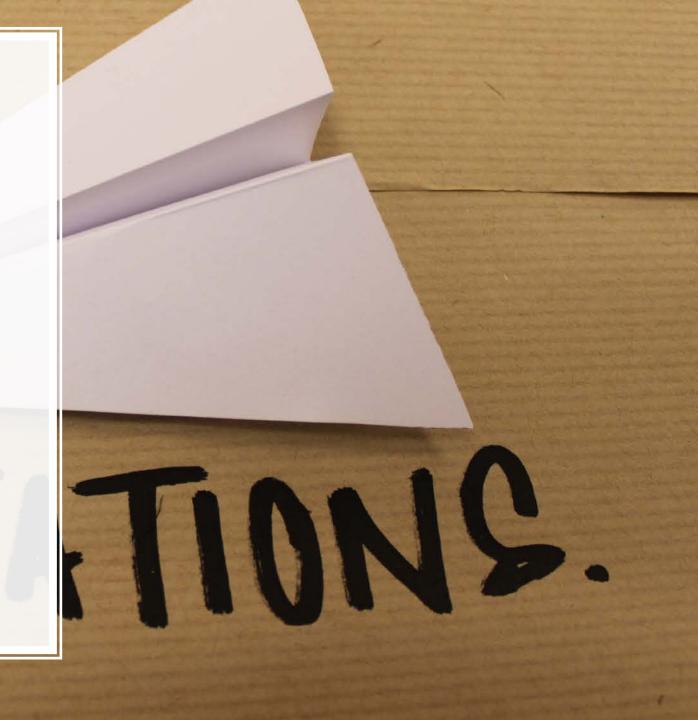
### Future research

- Different healthcare settings
- Larger sample
- Recruit nurses < 30 years of age, minority racial groups, and males
- Different instruments
- Shorter instrument
- Extend recall period to one year
- Examine lack of sufficient training
- Vitality and bodily pain
- BMI
- Mental health anxiety and depression
- Practice environment



# Potential study limitations

- Type of hospital
- Geographical location
- Sample size
- Age of participants
- Recall bias
- Recall period
- Repeatability of surveys
- Length of survey
- Reliability of study instruments



# Questions?



- Aiken, L. H., Sloane, D. M., & Klocinski, J. L. (1997). Hospital nurses' occupational exposure to blood: Prospective, retrospective, and institutional reports. American Journal of Public Health, 87, 103-107.
- Aronsson, G., & Gustafsson, K. (2005). Sickness presenteeism: Prevalence, attendance-pressure factors, and an outline of a model for research. Journal of Occupational and Environmental Medicine, 47, 958-966.
- Aronsson, A., Gustafsson, G., & Dallner, M. (2000). Sick but yet at work. An empirical study of sickness presenteeism. Journal of Epidemiology and Community Health, 54, 502-509.
- Aronsson, G., Gustafsson, K., & Mellner, C. (2011). Sickness presence, sickness absence, and self-reported health symptoms. *International Journal of Workplace Health Management*, 4, 228-242.
- Azadi, A., Anoosheh, M., & Delpisheh, A. (2010). Frequency and barriers of underreported needlestick injuries amongst Iranian nurses, a questionnaire survey. *Journal of Clinical Nursing*, 20, 488-493.

- Baker-McClearn, D., Greasley, K., Dale, J., & Griffith, F. (2010). Absence management and presenteeism: The pressures on employees to attend work and the impact of attendance on performance. *Human Resource Management Journal, 20,* 311-328.
- Barker, K. N., Flynn, E. A., Pepper, G.A., Bates, D.W., & Mikeal, R.L. (2002). Medication errors observed in 36 health care facilities. Archives of Internal Medicine, 162(16):1897–1903.
- Bass, C. E. (2010). *The effect of subjective well-being on employee presenteeism*. Retrieved from ProQuest Dissertations & Theses. (UMI Number: 3430307)
- Bergstrom, G., Bodin, L., Hagberg, J., Lindh, T., Aronsson, G. & Josephson, M. (2009). Does sickness presenteeism have an impact on future general health? *International Archives of Occupational & Environmental Health*, 82, 1179-1190.
- Bilski, B. (2005). Needlestick injuries in nurses The Poznan study. International Journal of Occupational Medicine and Environmental Health, 18, 251-254.
- Biron, C., Brun, J. P., Ivers, H., & Cooper, C. L. (2006). At work but ill: Psychosocial work environment and well-being determinants of presenteeism propensity. *Journal of Public Mental Health*, 5, 26-37.

- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, MA: Harvard University Press.
- Bureau of Labor Statistics. (2010). *Nonfatal occupational injuries and illnesses requiring days away from work, 2009.* Retrieved from http://www.bls.gov/news.release/osh2.nr0.htm
- Burhans, L. M., & Alligood, M. R. (2010). Quality nursing care in the words of nurses. *Journal of Advanced Nursing*, 66, 1689-1697.
- Burke, R. J., Koyuncu, M., & Fiksenbaum, L. (2010). Burnout, work satisfactions and psychological well-being among nurses in Turkish hospitals. *Europe's Journal of Psychology*, 6, 63-81. doi:10.5964/ejop.v6i1.172
- Burke, R. J., Koyuncu, M., & Fiksenbaum, L. (2011). Hospital culture, work satisfaction and psychological well-being among nurses in Turkish hospitals. *Europe's Journal of Psychology, 7*, 624-639.
- Campion, J., & Nurse, J. (2007). A dynamic model for wellbeing. Australian Psychiatry, 15, S24-S28.
- Campo, M., & Darragh, A. R. (2012). Work-related musculoskeletal disorders are associated with impaired presenteeism in allied health care professionals. Journal of *Journal of Occupational and Environmental Medicine*, *54*, 64-70.
- Cancelliere, C., Cassidy, J. D., Ammendolia, C., & Cote, P. (2011). Are workplace health promotion programs effective at improving presenteeism in workers? A systematic review and best evidence synthesis of the literature. *BioMed Central (BMC) Public Health*, 11, 395-434.

- Canfield, G. W., & Soash, D. G. (1955). Presenteeism- A constructive view. *Industrial Medicine and Surgery, 24,* 417-418.
- Charney, W., & Schirmer, J. (2007). Nursing injury rates and negative patient outcomes: Connecting the dots. American Association of Occupational Health Nurses (AAOHN) Journal, 55, 470-475.
- Cooper, C., & Dewe, P. (2008). Well-being absenteeism, presenteeism, costs and challenges. *Occupational Medicine*, 58, 522-524.
- Covner, B. J. (1950). Management factors affecting absenteeism. *Harvard Business Review, 28* (5), 42-48.
- Coyle, Y. M., & Battles, J. B. (1999). Using antecedents of medical care to develop valid quality of care measures. *International Journal for Quality in Health Care*, 11, 5-12.
- D'Abate, C. P., & Eddy, E. R. (2007). Engaging in personal business on the job: Extending the presenteeism construct. *Human Resource Development Quarterly, 18,* 361-383.
- De Castro, A. B., Fujishiro, K., Rue, T., Tagalog, E. A., Samaco-Paquiz, L. P. G., & Gee, G. C. (2010). Associations between work schedule characteristics and occupational injury and illness. *International Nursing Review, 57*, 188-194.
- Demerouti, E., Le Blanc, P. M., Bakker, A. B., Schaufeli, W. B., & Hox, J. (2009). Present but sick: A three-wave study on job demands, presenteeism, and burnout. *Career Development International*, 14, 50-68.
- Dew, K., Keefe, V., & Small, K. (2005). 'Choosing' to work when sick: Workplace presenteeism. *Social Science & Medicine, 60,* 2273-2282.

- Fox, J. B., & Scott, J. F. (1943). Absenteeism managements' problem. Boston, MA: Harvard University Press.
- Ghofranipour, F., Asadpour, M., Ardebili, H. E., Niknami, S., & Hajizadeh, E. (2009). Needle sticks/sharps injuries and determinants in nursing care workers. *European Journal of Social Sciences*, 11, 191-197.
- Gilbreath, B., & Karimi, L. (2012). Supervisor behavior and employee presenteeism. *International Journal of Leadership Studies, 7,* 114-131.
- Gillen, M., Yen, I., Trupi, L. Swig, L., Rugulies, R., Mullen, K. . . . Blanc, P. (2007). The association of socioeconomic status and psychological and physical workplace factors associated with musculoskeletal injury in hospital workers. *American Journal of Industrial Medicine*, 50, 245-260.
- Gilworth, G., Bhakta, B., Eyres, S., Carey, A., Chamberlain, M. A., & Tennant, A. (2007). Keeping nurses working: Development and psychometric testing of the Nurse-Work Instability Scale (Nurse-WIS). *Journal of Advanced Nursing*, 57, 543-551.
- Goetzel, R. Z., Long, S. R., Ozminkowski, R. J., Hawkins, K., Wang, S. & Lynch, W. (2004). Health, absence, disability, and presenteeism cost estimates of certain physical and mental health conditions affecting U.S. employers. *Journal of Occupational and Environmental Medicine*, 46(4), 398-412.
- Gropelli, T., & Corle, K. (2011). Assessment of nurses' and therapists' occupational musculoskeletal injuries. *Medsurg Nursing, 20*, 297-304.
- Halbesleben, J. R. B. (2010). The role of exhaustion and workarounds in predicting occupational injuries: A cross-lagged panel study of health care professionals. *Journal of Occupational Health Psychology*, 15, 1-16.

- Hemp, P. (2004). Presenteeism: at work but out of it. Harvard Business Review, 82, 49-58.
- Hilton, M. F., Scuffham, P. A., Sheridan, J., Cleary, C. M., Whiteford, H. A. (2008). Mental ill-health and the differential effect of employee type on absenteeism and presenteeism. *Journal of Occupational and Environmental Medicine*, 50, 1228-1243.
- Honda, M., Chompikul, J., Rattanapan, C., Wood, G., & Klungboonkrong, S. (2011). Sharps injuries among nurses in a Thai regional hospital:
   Prevalence and risk factors. International Journal of Occupational Medicine and Environmental Health, 2, 215-223.
- Hummer, J., Sherman, B., & Quinn, N. (2002). Present and unaccounted for. Occupational Health and Safety, 71, 40-44; 100.
- Ilhan, M. N., Durukan, E., Aras, E., Turkcuoglu, S., & Aygun, R. (2006). Long working hours increase the risk of sharp and needlestick injury in nurses: The need for new policy implication. *Nursing and healthcare Management and Policy, 56*, 563-568.
- Institute of Medicine. (2000). To err is human: Building a safer health system. Washtington, DC: National Academy Press.
- Institute of Medicine. (2001). Crossing the quality chasm: A new health system for the
- 21st century. Washington DC: National Academy Press.
- Institute of Medicine. (2004). Keeping patients safe: Transforming the work environment. Washington, DC: National Academy Press.
- Institute of Medicine, Committee on Identifying and Preventing Medication Errors. (2007). *Preventing medication errors: Quality chasm series*. Washington, DC: National Academy Press.

- Jeffs, L., Affonso, D. D., & MacMillan, K. (2008). Near misses: Paradoxical realities in everyday clinical practice. *International Journal of Nursing Practice*, 14, 486-494.
- Johns, G. (2009). Absenteeism or presenteeism? Attendance dynamics and employee well-being. In S. Cartwright & C. L. Cooper (Eds.), *The Oxford handbook of organizational well-being* (pp. 7-30). Oxford, UK: Oxford University Press.
- Johns, G. (2010). Presenteeism in the workplace: A review and research agenda. Journal of Organizational Behavior, 31, 519-542.
- Joint Commission on Accreditation of Healthcare Organizations. (2005). The implementation guide for the NQF endorsed nursing-sensitive care performance measures. Oakbrook Terrace, IL: Author.
- Kahn, W. A. (1992). To be fully there: Psychological presence at work. *Human Relations*, 45, 321-349.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal, 33,* 692-724.
- Kendall, E., & Muenchberger, H. (2009). Stressors and supports across work and non-work domains: The impact on mental health and the
  workplace. Work, 32, 27-37.
- Kessler, R.C., Ames, M., Hymel, P.A., Loeppke, R., McKenas, D.K., Richling, D., . . . Ustun, T.B. (2004). Using the WHO Health and Work Performance Questionnaire (HPQ) to evaluate the indirect workplace costs of illness. *Journal of Occupational and Environmental Medicine*, 46(Suppl 6), S23-S37.

- Kessler, R. C., Akiskal, H. S., Ames, M. Bimbaum, H., Greenberg, P., Hirschfeld, R., . . . , & Wang, P. S. (2006). The prevalence and effects of mood disorders on work performance in a nationally representative sample of US workers. *American Journal of Psychiatry*, 163, 1561-1568.
- Kessler, R.C., Barber, C., Beck, A., Berglund, P., Cleary, P.D., McKenas, D., . . . Wang, P. (2003). The World Health Organization health and work performance questionnaire (HPQ). *Journal of Occupational and Environmental Medicine*, 45, 156-174.
- Koopman, C., Pelletier, K. R., Murray, J. F., Sharda, C. E., Berger, M. L., Turpin, R. S., Hackleman, P., . . . , Bendel, T. (2002). Stanford presenteeism scale: Health status and employee productivity. *Journal of Occupational and Environmental Medicine*, 44, 14-20.
- Lack, D. M. (2011). Presenteeism revisited: A comprehensive review. *American Association of Occupational Health Nurses (AAOHN) Journal*, *59*, 77-89.
- Letvak, S. (2009). Hurting at work: The lived experience of older nurses. *International Journal for Human Caring*, 13, 8-16.
- Letvak, S. (2010). The effects of nurse presenteeism on quality of care and patient safety. Retrieved from Robert Wood Johnson Foundation Interdisciplinary Nursing Research Quality Initiative: http://www.ingri.org/uploads/INQRIWebinarLetvakCompatibilityMode.pdf
- Letvak, S. A., Ruhm, C. J., & Gupta, S. N. (2012). Nurses' presenteeism and its effect on self-reported quality of care and costs. *American Journal of Nursing*, 112, 30-38.
- Loeppke, R., Taitel, M., Richling, D., Parry, T., Kessler, R. C., . . . Konicki, D. (2007). Health and productivity as a business strategy. *Journal of Occupational and Environmental Medicine*, 49, 712-721.

- Love, J., Grimby-Ekman, A., Eklof, M., Hagberg, M., & Dellve, L. (2010). Pushing oneself too hard: Performance-based self-esteem as a predictor of sickness presenteeism among young adult women and men a cohort study. *Journal of Occupational and Environmental Medicine*, *52*, 603-609.
- Lynch, J. G. (1999). *Theory and external validity*. Retrieved from https://faculty.fuqua.duke.edu/~jglynch/articles/Lynch%201999.pdf
- Ludwick, R., & Silva, M. (August 15, 2003). Ethics: "Errors, the nursing shortage and ethics: Survey results".
   Online Journal of Issues in Nursing, 8. Retrieved from
   http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/V olume82003/No3Sept2003/ShortageSurveyResults.html
- MacDonald, L. C. (1991). The experience of presenteeism: Acute care nurses working in Northern Health. Retrieved from ProQuest Dissertations & Theses. (MR75146)
- Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1, 3-30.
- Mayo, E. (1945). The social problems of an industrial civilization. Boston, MA: Harvard University Press.
- McMillan, H. S., Morris, M. L., & Atchley, E. K. (2011). Constructs of the work/life interface: A synthesis of the literature and introduction of the concept of work/life harmony. *Human Resources Development Review, 10*, 6-25.
- Nahrgang, J. D., Morgeson, F. P., & Hofmann, D. A. (2011). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *Journal of Applied Psychology*, 96, 71-94.

- O'Brien-Palls, L., Meyer, R. M., Hayes, L. J., & Wang, S. (2010). The patient care delivery model An open system framework: Conceptualization, literature review, and analytical strategy. *Journal of Clinical Nursing*, 20, 1640-1650.
- O'Brien-Pallas, L., Shamian, J., Thomson, D., Alksnis, C., Koehoorn, M., Kerr, M., & Bruce, S. (2004). Work-related disability in Canadian nurses. *Journal of Nursing Scholarship*, *36*, 352-357.
- Onwuegbuzie, A. J., & Leech, N. L. (2005). Taking the "Q" out of research: Teaching research methodology courses without the divide between quantitative and qualitative paradigms. *Quality & Quantity, 39*, 267-296. doi: 10.1007/s11135-004-1670-0
- Pilette, P. C. (2005). Presenteeism in nursing: A clear and present danger to productivity. *Journal of Nursing Administration* 35(6), 300-30.
- Prasad, M., Wahlqvist, P., Shikiar, R., & Shih, Y. T. (2004). A review of self-report instruments measuring health-related work productivity: A patient-reported outcomes perspective. *Pharmacoeconomics*, 22, 225-244.
- Prater, T., & Smith, K. (2011). Underlying factors contributing to presenteeism and absenteeism. *Journal of Business & Economics Research*, 9, 1-14.
- Prochaska, J. O., Evers, K. E., Johnson, J. L., Castle, P. H., Prochaska, J., Sears, L., Rula, E. Y., & Pope, J. E. (2011). The well-being assessment for productivity: A well-being approach to presenteeism. *JOEM*, *53*, 735-742.
- Punnett, L., & Wegman, D. H. (2004). Work-related musculoskeletal disorders: The epidemiologic evidence and debate. Journal of electromyography and Kinesiology, 14, 13-23.
- Rantanen, I., & Tuominen, R. (2010). Relative magnitude of presenteeism and absenteeism and work-related factors affecting them among health care professionals. *International Archives of Occupational and Environmental Health, 84*, 225-230.

- Ruez, P. (2004). Quality and bottom-line can suffer at the hands of the 'working sick'. Managed Care Executive, 14, 46; 48.
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecendents and effects on job performance. Academy of Management Journal, 53, 617-635.
- Richardson, W. (2006). Innovations in patient safety management: Bedside nurses' assessment of near misses. *Topics in Emergency Medicine*, 28(2), 154-160.
- Robertson, I., Leach, D., Doerner, N., & Smeed, M. (2012). Poor health but not absent: Prevalence, predictors, and outcomes of presenteeism. *JOEM*, *54*, 1344-1349.
- Sadler-Smith, E., & Riding, R. (1999). Cognitive style and instructional preferences. Instructional Science, 27, 355-371.
- Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71-92.
- Schultz, A. B., Chen, C. Y., & Edington, D. W. (2009). The cost and impact of health conditions on presenteeism to employers: A review of the literature. *Pharmacoeconomics*, *27*, 365-378.
- Schultz, A. B., & Edington, D. W. (2007). Employee health and presenteeism: A systematic review. Journal of Occupational Rehabilitation, 17, 547-579.
- Shamansky, S. L. (2002). Preseenteeism . . . Or when being there is not being there. *Public health Nursing, 19,* 79-80.
- Singru, S. A., & Banerjee, A. (2008). Occupational exposure to blood and body fluids among health care workers in a teaching hospital in Mumbai, India. *Indian Journal of Community Medicine*, 33, 26-30.
- Sonnentag, S., Mojza, E. J., Demerouti, E., & Bakker, A. B. (2012). Reciprocal relations between recovery and work engagement: The moderating role of job stressors. *Journal of Applied Psychology*, *94*, 842-853.

- Suzuki, K., Ohida, T., Kaneita, Y., Yokoyama, E., & Uchiyama, M. (2005). Daytime sleepiness, sleep habits, and occupational accidents among hospital nurses. *Journal of Advanced Nursing*, *52*, 445-453.
- Umann, J., Guido, L., & Grazziano, E. (2012). Presenteeism in hospital nurses. Revista Latino-Americana de Enfermagem, 20, 159-166.
- Uris, A. (1955). How to build presenteeism. *Petroleum Refiner, 34*, 348-359.
- Vecchio, N., Scuffham, P. A., Hilton, M. F., & Whiteford, H. A. (2011). Work-related injury in the nursing profession: An investigation of modifiable factors. *Journal of Advanced Nursing*, 67, 1067-1078.
- Videman, T., Ojajarvi, A., Riihimaki, H., & Troup, J. D. (2005). Low back pain among nurses: A follow-up beginning at entry to the nursing school. *Spine*, 30, 2334-2341.
- VingArd, E., Alexanderson, K., & Norlund, A. (2004). Chapter 10: Sickness presence. Scandinavian Journal of Public Health, 32 (Supplement 63), 216-221.
- Wang, P., Beck, A.L., Berglund, P.A., Leutzinger, J. A., Pronk, N.P., Richling, D., . . . Kessler, R.C. (2003). Chronic medical conditions and work performance in the HPQ Calibration Surveys. Journal of Occupational and Environmental Medicine, 45, 1303-1311.
- Wang, J., Schmitz, N., Smailes, E., Sareen, J., & Patten, S. (2010). Workplace characteristics, depression, and health-related presenteeism in a general population sample. *Journal of Occupational and Environmental Medicine*, *52*, 836-842.
- Ware, J. E., Kosinski, M., Bjorner, J. B., Turner-Bowker, D. M., Gandek, B., & Maruish, M. E. (2007). User's manual for the SF-36v2<sup>™</sup> Health Survey (2<sup>nd</sup> Ed). Lincoln, RI: QualityMetric Incorporated.
- Warren, C. L., White-Means, S. I., Wicks, M. N., Chang, C. F., Gourley, D., & Rice, M. (2011). Cost burden of the presenteeism health outcome: Diverse workforce of nurses and pharmacists. *Journal of Occupational and Environmental Medicine*, 53, 90-99.

- Widera, E., Chang, A., & Chen, H. L. (2010). Presenteeism: A public health hazard. *Journal of General Internal Medicine*, 25, 1244-1247. doi: 10.1007/s11606-010-1422-x
- Wimmer, R. D., & Dominick, J. R. (2013). Sample size calculator. Retrieved from http://www.rogerwimmer.com/mmr10e/samplesizecalculator.htm
- Woloshynowych, M., Rogers, S., Taylor-Adams, S., & Vincent, C. (2005). The investigation and analysis of critical incidents and adverse events in healthcare. *Health Technology Assessment*, *9*, 1-158.
- Wood, E., Nosko, A., Desmarais, S., Ross, C., & Irvine, C. (2006). Online and traditional paper-and-pencil survey administration: Examining experimenter presence, sensitive material and long surveys. *The Canadian Journal of Human Sexuality, 15,* 147-155.
- Wrate, R. M. (1999). Increase in staff numbers may reduce doctors' "presenteeism." *British Medical Journal, 319,* 1502.