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college of nursing

The Effects of Workplace Bullying on the Productivity of Novice Nurses

P. A. Berry, MSN, RN
G. L. Gillespie, PhD, RN
D. M. Gates, EdD, RN
J. Schafer, PhD

UNIVERSITY OF Cincinnati

What is Workplace Bullying?

- What is workplace bullying (WPB)?*
  - Work behavior perceived by the target that is intentional, sustained, and repeated behaviors that
    - Belittles
    - Humiliates
    - Frightens
    - Punishes
    - Socially isolates
  - Creates a power imbalance the target and perpetrator

*Einarsen, Hoel, & Notelaers, 2009; Salin, 2003

Significance of Study

- Impact to the nurses
  - Psychological and physical consequences*
- Impact to healthcare facilities
  - 30 -35% intend to leave their current job**
  - Undermines the patient safety culture***
- Impact to patients***

* Laschinger, Grau, Finegan, & Wilk, 2010; Quinn, 2001; Yildirim & Yildirim, 2007; Yildirim, Yildirim, & Timucin, 2007; Yildirim, 2009

**Johnson & Rae, 2010; Laschinger et al., 2010; Simons, 2008

***The Joint Commission, 2006

Specific Aims of Study

- 1. To determine the prevalence of WPB
- 2. To determine the change in work productivity of the NN when WPB occurred
- 3. To identify the relationship of NN characteristics (age, gender, educational attainment) to workplace bullying and the change in work productivity

Research Method

- Descriptive cross-sectional Internet-based survey design targeting novice nurses using :
  - Healthcare Productivity Survey*
  - Negative Acts Questionnaire (NAQ)**
  - Demographic survey.

*Gillespie, Gates, & Succop, 2009

**Einarsen, Raknes, Matthiesen, & Hellsoy, 1994; Hoel, 1999

Healthcare Productivity Survey*

- 29 item survey: scaled from -2 (decreased ability) to +2 (increased ability) to work after a stressful event.
  - Score ranging -58 to -1 have decreased work productivity
  - Score ranging 1 to 58 have increased work productivity
  - Score 0 means no change
- 4 subscales:
  - cognitive demands
  - handling/managing workload
  - support and communication with patients and visitors
  - providing safe care

*Gillespie, Gates, & Succop, 2010

Negative Acts Questionnaire

- 22 item inventory: scored as never = 0, now & then = 2, monthly = 6, weekly = 25, and daily = 125*
- Three bullying subscales.
  - Personal related
  - Work related
  - Physical related
- Strong reliability with a Cronbach's alpha of .90.
- NAQ negatively correlates with measures of job satisfaction (r = -.24 to r = -.44)*
- NAQ negatively correlates to psychological health and well being (r = -.31 to r = .52)*

* Simon, 2008

**Einarsen et al., 2009

Sampling Procedures

- After IRB approval
  - Only NNs were recruited*
  - Mailing lists from Ohio, Kentucky, and Indiana state boards secured for 2009 & 2010.
  - Randomized mailing lists with 5000 names and addresses equally divided between states.
  - Postcard invitation with ID# and Internet survey site + $10 gift card

*Benner, 1984

Posthoc Analysis

- Using Gpower*: an observed linear multiple regression model with a total sample size of 197 with 6 predictors and an observed R^2 =0.3, CI (1-α) = .95.
  - Indicated power (1-error probability) was equal to 99% for an effect size of .15.

*Faul, Erdfelder, Lang, & Buchner, 2007

Nurse Demographics

Educational Attainment	**N = 197 (100%)**
Diploma	1 (.5%)
Associate's Degree	93 (47.2%)
Bachelor's Degree	101 (51.3%)
Master's Degree	2 (1.0%)

Nurse Demographics - continued

Facility Employed	**N = 197 (100%)**
Hospital	147 (74.6%)
Nursing Home	31 (15.7%)
Home Care	6 (6.4%)
Other	13 (6.6%)

Nurse Demographics - continued

Ethnicity	**N = 197 (100%)**
Non-Hispanic White or Caucasian	179 (90.9%)
Non-Hispanic Black or African-American	9 (4.6%)
Hispanic	3 (1.5%)
Other	6 (2.5%)

Nurse Demographics - continued

Age range (in years)	**N = 197 (100%)**
20 -29	117 (59.4%)
30 - 39	54 (27.4%)
40 and above	26 (13.2%)
Gender	
Female	180 (91.4%)
Male	17 (8.6%)

Specific Aim 1: WPB Prevalence

Have you been bullied at work?	**N = 197**
No	109 (55.3%)
Yes, but only rarely	52 (26.4%)
Yes, now and again	32 (16.2%)
Yes, several times per week	4 (2.0%)
Yes, daily	0

Specific Aim 2: Productivity to WPB

- Describe a bullying event in the last month that was stressful for you.

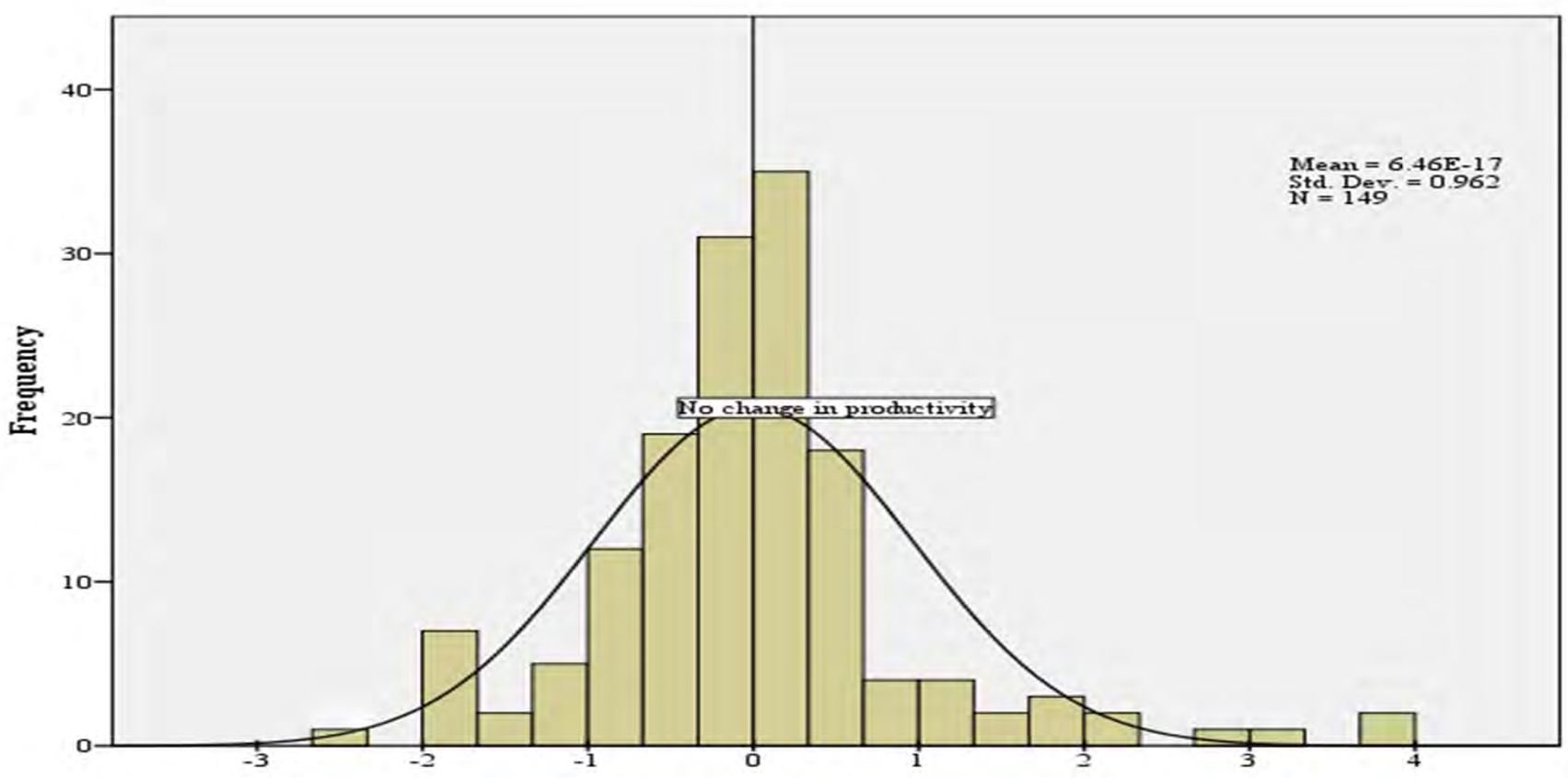
No event	46 (24.4%)
Target	102 (58.4%)
Observer	34 (17.3%)

Work Productivity

No Change	**23.9%**	**n=49**	**-.99 - +.99**
Increased Change	**29.4%**	**n=56**	**1 - 58**
Decreased Change	**46.7%**	**n=92**	**-1 - -58**

N= 197
Range -58 - 58

Work Productivity WPB Event



ANOVA Productivity Mean to Perpetrator of Negative Behavior

Perpetrator	N	Mean	Std. Dev.	Std. Error	Lower Bound	Upper Bound	Min	Max
Doctor	12	-1.5	13.399	3.868	-10.014	7.014	-27	20
Nurse Leader*	38	-6.632	11.252	1.825	-10.331	-2.933	-32	15
Staff Nurse	88	0.796	14.753	1.573	-2.331	3.921	-29	56
Other Staff	8	8.125	14.827	5.242	-4.271	20.521	-10	32

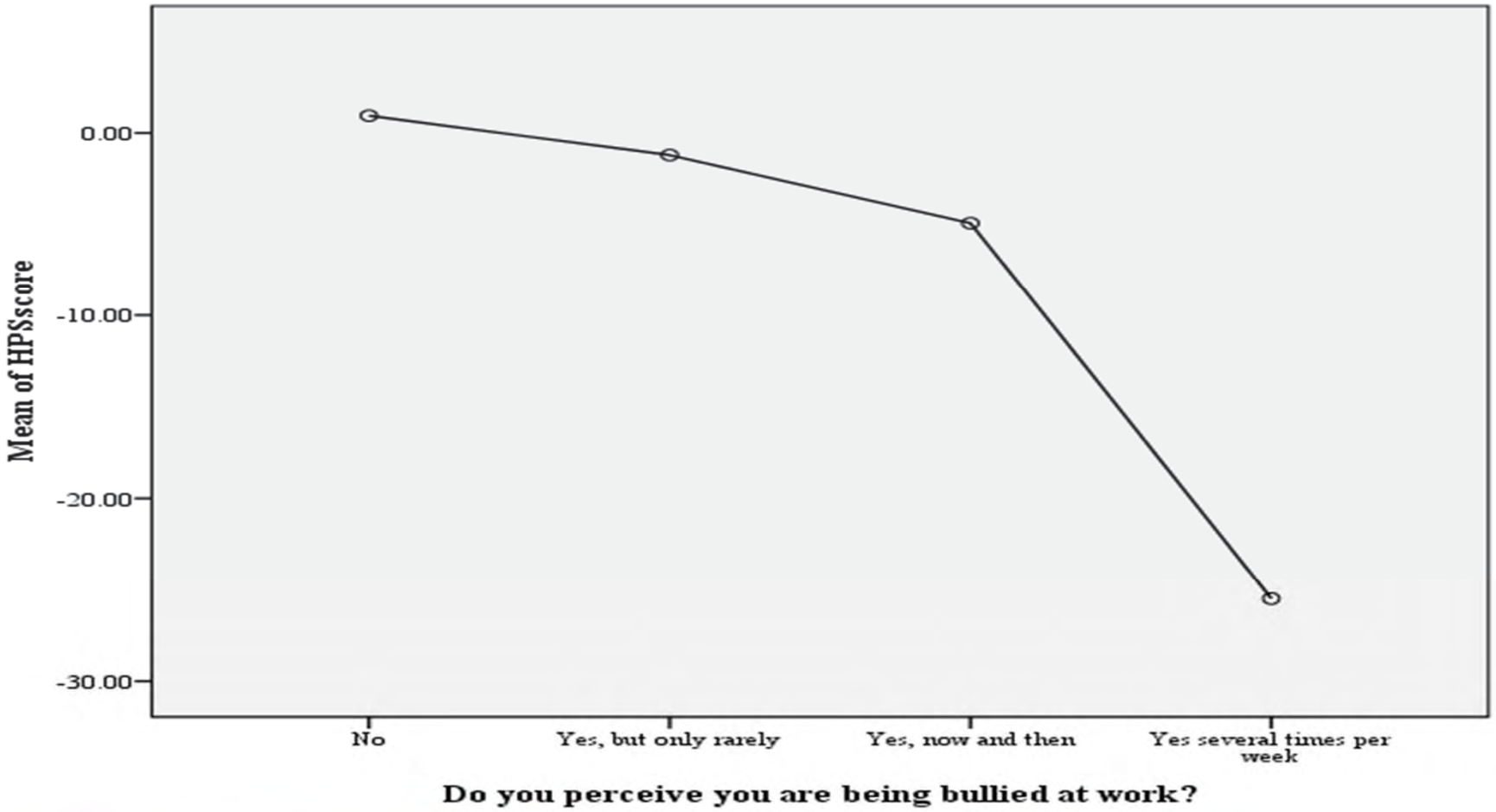
* Director of Nursing, manager, supervisor, charge nurse, nurse preceptor, and nurse educator

Aim 2: Determine Change In Work Productivity With WPB

ANOVA Healthcare Productivity to WPB

Are you bullied?	N	Prod. mean	Std. Dev	Std. Error	Lower Bound	Upper Bound	Mini-mum	Maxi-mum
No	109	0.96	15.85	1.518	-2.06	3.95	-56	56
Rarely	52	-1.21	15.80	2.19	-5.61	3.19	-46	47
Now and then	32	-4.94	15.39	2.72	-10.49	0.61	-48	32
Several times a week	4	-25.50	9.75	4.87	-41.00	-9.99	-32	-11

Work Productivity Mean to Perceived Bullying



Third Specific Aim

- Identify the relationship of NN characteristics to WPB and the change in work productivity.
  - $PROD = b^0 + b^1(WPB) + b^2(SDV) + b^3(CHAR) + b^4(WPB*SDV) + b^5(WPB*CHAR) + e$
    - PROD = productivity
    - WPB = workplace bullying
    - SDV = socio-demographic variables
    - CHAR = workplace characteristics

Computed NAQ score (125 or above considered bullied)

No bullying acts	**14 (7.1%)**
Computed: 2 - 124	140 (71.6%)
Computed: ≥125	43 (21.3%)

Overall Regression Model for NNs Experiencing WPB Incident

Work Productivity	B	SE	β	F	Pearson's r
NAQ	0.114	0.062	1.888	0.045**	0.322
SDV Age	-329	0.185	-0.132	.077*	-0.096
SDV * NAQ <+125					
Ethnicity with NAQ	0.061	0.026	1.023	.019*	-0.268

** = significant at one tailed, p <.01

* = significant at two-tailed, p<.05

Potential Limitations

- Selection Bias:
  - Self-select out if not bullied
  - Those bullied more motivated to continue the survey
  - Might over- or under-report negative acts or over- or under-inflate the effect of negative act on their productivity

Future Direction

- Longitudinal data in the US on Nurse WPB and its effects on retention
- Determine evidence based best practices to eliminate these behaviors from healthcare
- Determine evidence based best practice on increasing NN communication and resiliency in the healthcare environment

Conclusions

- Adverse workplace behaviors such as WPB have a negative effect to work productivity. Interventions need to be done that protect novice nurses from experiencing decreased work productivity that may subsequently lead to job stress, anxiety, and patient safety errors.

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