Background

Bullying is defined as actions and behaviors that threaten interpersonal connections (McNamara, 2012). Examples of bullying include verbal abuse, sexual harassment, and physical altercations (McNamara, 2012). As a result of bullying, a nurse may have gastrointestinal complications, cardiovascular irregularities, and even suicidal ideations (McNamara, 2012; Thompson, 2013). As a result, nurses are not able to deliver optimal nursing care (Christie & Jones, 2014). Nurses who are unable to perform their job due to bullying place patients at risk for negative outcomes.

Workplace bullying exists as a reality in nursing. Nurses get bullied by physicians, fellow healthcare professionals, patients, and even other nurses (McNamara, 2012). An area of focus in research has been the effect of bullying on victims, and correlational studies have shown a relationship between bullying and negative physical and emotional outcomes (Merecz, Drabek, & Moscicka, 2009; Thompson, 2013). Research has been limited to understanding correlational relationships; causal relationships are ethically difficult to study as bullying cannot be deliberately introduced into a patient situation. A method of simulating bullying acts must be developed in order to allow researchers to design and execute experiments to study this causal relationship.

Significance

Though there is a perceived link between nurses’ exposure to bullying and patient outcomes (Rosenstein & O’Daniel, 2005; Rosenstein & O’Daniel, 2008), a direct link has not been made. This is due to the inability to perform experimental studies in which bullying is intentionally carried out. Therefore, one can only infer how the impact of bullying on nurses will affect the care. Correlational studies rely on the participant’s recollection of past experiences of bullying. A potential solution to understanding the impact of bullying on patient outcomes is through narrative transportation via vignettes. Finch (1987) argued that vignettes are short stories about hypothetical characters in specified circumstances, to whose situation the interviewee is invited to respond. Utilizing Finch’s definition, this study will use vignettes as the vehicle of simulating bullying without psychologically subjecting the participants to harm. Moreover, the use of vignettes allows researchers to highlight a single incident of bullying. Rather than reading a paragraph listing bullying behaviors such as name calling or physical violence, the reader can read each vignette as an example of workplace bullying.

Therefore, this study will explore the use of vignettes as possible media through which bullying can be studied and correlated with emotional responses.

When attempting to induce an emotional response from a reader, there needs to be assurance that the reader is drawn into the narrative. Transportedness is the level of immersion and engagement a reader has with a narrative (Green & Brock, 2000). Transformed readers are immersed into a narrative such that the reader can feel the emotions within a narrative and emerge from their journey changed (Green & Brock, 2000). One important aspect of transportation is the emotional connection. The stronger the emotional connection to the story, the greater level of transportedness one has to said story (Green & Clark, 2012). The narrative allows researchers to replicate experiences like workplace bullying without physically harming participants. However, it is unknown how different narrative types, like vignettes, may be experienced and whether readers are transported into the short narrative style. Also, the link between emotional response and the level of transportedness within the vignettes is unknown.

Theoretical Framework

This study was grounded in two theoretical frameworks: The Transportation Theory (Green & Brock, 2000) and Nursing as Caring (Boykin & Schoenhofer, 2001). A response to reading a bullying scenario is dependent upon the level of engagement in a story. The Transportation Theory (Green & Brock, 2000) offers a way to understand how readers become immersed in a story through cognition, emotion, and attention (Green & Brock, 2000). According to the Transportation Theory, the transported individual may experience strong feelings, even if the story is fictitious (Green & Brock, 2000). Narrative transportation is a valuable tool that can be used in a variety of capacities. Originally created as a method for persuasion, the Transportation Theory uses psychological principles to capture readers into a story (Green & Brock, 2000). Green and Brock (2000) further comment that individuals who have returned from their transported state can experience changes in their temperament, moods, and attitudes. The Transportation Theory, however, requires the narrative to have a distinct beginning, middle, and ending (Green & Clark, 2012). Though vignettes are not designed in this manner, this study will offer the opportunity to determine if transportation is possible for other forms of narrative.
Bullying Vignettes

The bullying vignettes were created by the research team using a systematic approach (Longo and DeDonno, 2018). The vignettes were created from reported examples of workplace bullying. The two principle investigators created a series of vignettes of a variety of lengths. Every vignette featured a bully named Betsy and the victim as the reader. Therefore, the stories were written in the second person point of view. Each vignette focused on a single example of bullying such as eye rolling or physical violence. The vignettes were arranged in order of increasing severity. The vignettes were tested for content validity by a panel of experts. Based on their evaluation, the vignettes were arranged in order of increasing severity.

Measures

Three methods of data collection were used: demographics, the Transportation Scale, and the Negative Affect Scale. Each measure will be described and explained.

Demographic information included gender, age, culture, race, educational level, major, and employment status. The items were measured on a nominal scale.

To measure transportedness, the Transportation Scale was used. The Transportation Scale is an 11-item scale that highlights the major themes of transportation put forth by Green and Brock (2000) such as "I was mentally involved in the scene of the events described in the narrative." Each item in the scale was distinct and directly related to transportedness. The Transportation Scale is a summative measure and so the higher the sum of all the transportation items, the higher the extent of transportedness. A Cronbach's alpha of 0.76 has been reported (Green & Brock, 2000). Participants rated how they felt about an item on a Likert scale of one to seven, where one is "I strongly disagree with this statement" and seven was "I strongly agree with this statement." The participants are given the measure after reading all the vignettes provided. A total score for the scale was computed. The higher the score, the more a reader was transported.

To measure the negative emotions after reading the bullying vignettes, the Negative Affect Scale (NAS) was used. Watson, Clark, and Tellegen (1998) studied mood and developed both a positive and negative affect scale based on relevancy. After testing the reliability and validity of a reduced sample of 14 items, the final NAS is composed of 10 items: distressed, upset (distressed), hostile, irritable (angry), afraid, ashamed, guilty, nervous, and jittery (Watson, Clark, & Tellegen, 1998). Participants respond on a Likert scale of one to five where one is “very slightly/not at all” and five is “extremely”. The reader has a more negative affect the higher the score. The participants are given the measure after each vignette. The NAS had a reliability of 0.87 on Cronbach’s alpha (Watson, Clark, & Tellegen, 1998).

Study Purpose

This study has two purposes: 1) to determine the level of transportedness after reading a series of bullying vignettes. and 2) to assess the relationship between transportedness and emotional response. The first hypothesis is that participants will experience a high score of transportedness after reading the bullying vignettes. The second hypothesis is that there will be a direct relationship between transportation and negative emotional response.

Design

A nonexperimental research design was used to explore the relationship between narrative transportation and the subsequent emotional response when reading bullying vignettes. A correlational study was performed to determine the relationship between an emotional response and transportation. Data collection will be discussed under measures.

Sampling/Recruitment/Setting

The sample was assembled via convenience sampling. The only inclusion criterion was that the participants were a minimum of 18 years old, as there were no exclusion criteria. The participants were undergraduate and graduate nursing students studying at a university in the Southeastern United States. They were recruited via an online flier which offered compensation via a Starbucks gift card instead of course credit. Each participant was debriefed virtually upon completion of the Negative Affect Scale, the Transportation Scale, and the demographic measure (which included a mailing address for the researcher to send the gift cards).

Procedure

Participants read eleven vignettes where each vignette was a different type of workplace bullying. After reading each vignette, the participants completed items from the Negative Affect Scale (NAS). Upon completion of the final NAS survey, each participant answered the Transportation Scale. Finally, the participants answered demographic questions.
Data Analysis

The transportation scores will be averaged to determine the degree of transportedness. The results of the NAS will be correlated with the results of the Transportation Scale via a bivariate correlation analysis. The first variable is the level of transportedness that participants experience when reading bullying vignettes. The second variable is the emotional response that students exhibit in response to the bullying vignettes. A correlation coefficient will be determined which will illustrate the relationship emotion and transportation. The demographic data and the transportation score will be computed in the descriptive analysis.

Results

SPSS version 19.0 software was used to perform descriptive and inferential statistics.

There were 51 participants total (Table 1). The mean age of participants was 27 years old (SD=10.10) with the majority being females (n=50, 98%). There were more undergraduate participants (n=29) compared to graduate participants (n=22). Of the participants, 74.5% of them were employed (n=38) with 45.1% (n=23) employed as nurses. Most of the participants were white (n=39, 76.5%).

In hypothesis one, it was stated that the participants will have a high score of transportedness after reading the bullying vignettes. In this study, the scale had a Cronbach's alpha of .716. The average score for all of the participants was 54.67 (SD=10.5). The average score of 54.67 suggests that the participants were transported significantly into the vignettes.

Hypothesis two is that a greater level of transportedness will lead to a greater negative affect. A Pearson correlation test was performed to evaluate the relationship between transportation and negative affect (Table 2). The Negative Affect scale had a Cronbach's alpha of .977. For each vignette, each question from the NAS scale were added together. For each vignette, the average score was 24.2 (SD=6.2). The relationship between negative affect and transportation was statistically significant (r=.339, p<0.05). The relationship is positive which suggests that as transportedness increases, so does negative affect. This supports the hypothesis that a higher score of transportedness is related to a greater negative affect.

A linear regression was also performed to determine if one can predict emotional response based on transportedness. A significant regression was uncovered F(1,50)=6.168, p<0.05, with an R2 of .112. The R2 value means that transportation accounts for 11.2% of the variation in the emotional response. The analysis illustrates that transportation does occur as a result of reading bullying vignettes and there is a subsequent negative affect to transportation.

Discussion

The primary purpose of the study was to determine if transportation occurred when reading bullying vignettes (Green & Brock, 2000). The results showed that vignettes can be used as a medium of transportation. The hypothesis stating that the participants will experience a high score of transportation was supported. The secondary purpose of the study was to explore the relationship between transportedness and negative affect in response to reading the bullying vignettes. The results illustrate a positive relationship between transportedness and negative affect, where an increase in transportedness is linked with an increase in the negative emotions. The corresponding hypothesis that a higher level of transportedness will lead to a greater negative affect was supported.

Transportation of the participants into the bullying vignettes was an expected result due to the fact that vignettes are still a form of narrative. Each vignette portrayed a single example of bullying, such as eye rolling, written from the second-person perspective. Therefore, as the participant read each vignette, they were involved in the story. The story had a central theme of workplace bullying; each vignette had the same bully who was the perpetrator of each example of bullying. Solja, Liljander, and Söderlund (2018) used short stories in the packaging of muesli (a type of oat product used in breakfast and brunch) and found that transportation occurred despite the story being short enough to fit on packaging. Their findings support the concept that shortened forms of narratives can transport readers.

The correlation between transportation and negative affect was an expected outcome. The more transported a reader is, the more they experience negative feelings related to reading bullying vignettes. Bullying is associated with an abundance of negative physical and psychological effects and may generate negative emotions. In this study, the self-report of negative emotions increased as the participants read more vignettes. One possible explanation is that as the participant read each vignette, with the victim being the reader and the bully being the same character, the negative emotions built up in conjunction with the transportedness that the participants experienced. Gordon, Ciocirciari, and Laer (2018) found through the use of electroencephalograms when viewing visual narratives, working memory was increased during the opening segment of a video, decreased during the actual viewing of the narrative segment, and later increased at the end of the viewing. They postulated that the viewer reflected on the narrative (Gordon, Ciocirciari, & Laer, 2018) which suggests that the participants reflect on their own experiences of workplace bullying as they read the vignettes.
The relationship between transportation and negative emotions also created another unexpected finding. Narratives can cause readers to empathize the emotions caused by workplace bullying without the necessity of bullying in real life. Mar, Oatley, Djikic, and Mullin (2011) found that emotions generated from narratives impact one’s cognitive performance. Reading vignettes about workplace bullying creates negative emotions which can translate into negative patient outcomes due to an impaired performance.

**Implications for PRAXIS (Practice, Research, and Education)**

Vignettes, as the medium of transportation, effectively give researchers the opportunity to use the phenomenon of bullying as an independent variable in a study about performance. In understanding how bullying can cause alterations in one’s emotional state, further research is needed to create a link on the causal relationship between bullying and alterations in cognition that can lead to deficits in performance.

Regarding education, narrative transportation can be used to reinforce learning. Nursing situations, which are stories of specific examples of nursing concepts in the clinical setting, have been used to support student’s instruction. Vignettes can be used by nursing faculty to demonstrate pointed examples of how to care for patients.

**Limitations**

One limitation of the study is the absence of a scoring criteria for the Transportation Scale. In searching the original work and subsequent recreations, there was no consensus on how to evaluate the results of the Transportation Scale. In lieu of a scoring algorithm, the researcher postulated that the midway point (44) between the highest possible score (77) and the lowest possible score (11) represents a level of transportation that is equivalent to regular reading and lacks evidence of transportation. The average of the participants (54.67) is greater than the midway point which suggests that transportation occurred in response to reading the vignettes. Future research will look to establish a standard of evaluation.

Another limitation of the study is the lack of a control over confounding variables. The study was completed via an online survey. The researcher was unable to account for distractions, like television or cellphone use, that may take attention away from the bullying vignettes. If the participant’s attention was affected, then their subsequent score may be affected; the actual score of transportedness for each participant may be slightly different.

Gender is a limitation of the study as well. 98% (n=50) of the participants are female which presents gender bias in the results. There is an inability of viewing the intersection between gender and age, gender and occupational status, or gender and race/ethnicity. This population further limits the control over confounding variables that may ultimately alter the results.

**Conclusion**

Narrative transportation opens up a world where we can use text to engage readers and tie them to a situation via their emotions. Readers experience emotions that are directly attributable to a stimulus that is physically and psychologically safe in the form of vignettes. Vignettes allow us to ethically manipulate emotions and thereby simulate bullying and its direct impact on mood. We were able to demonstrate that short vignettes on bullying engaged readers but more importantly that vignettes have the potential for future research in understanding the impact of bullying on victims.
References


### Appendix A: Table 1

**Descriptive Statistics**

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### Appendix B: Table 2

**Correlations of Average Sum of All NAS Scores and Sum of Transportation**

**Descriptive Statistics**

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**Correlations**

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*Correlation is significant at the 0.05 level (2-tailed).*