

University of Minnesota Morris Digital Well

University of Minnesota Morris Digital Well

Undergraduate Research Symposium 2013

Undergraduate Research Symposium

4-2013

Psychological Factors, Health Care Knowledge, and Experiences and How They Impact Students' Illness Behaviors on a Rural Campus

Elizabeth Pappenfus
University of Minnesota - Morris

Chelsea Walsh
University of Minnesota - Morris

Follow this and additional works at: https://digitalcommons.morris.umn.edu/urs_2013



Part of the [Health Psychology Commons](#)

Recommended Citation

Pappenfus, Elizabeth and Walsh, Chelsea, "Psychological Factors, Health Care Knowledge, and Experiences and How They Impact Students' Illness Behaviors on a Rural Campus" (2013). *Undergraduate Research Symposium 2013*. 9.

https://digitalcommons.morris.umn.edu/urs_2013/9

This Book is brought to you for free and open access by the Undergraduate Research Symposium at University of Minnesota Morris Digital Well. It has been accepted for inclusion in Undergraduate Research Symposium 2013 by an authorized administrator of University of Minnesota Morris Digital Well. For more information, please contact skulann@morris.umn.edu.

Psychological Factors, Health Care Knowledge, and Experiences and How They Impact Students' Illness Behaviors on a Rural Campus

Elizabeth Pappenfus and Chelsae Walsh
Jeffrey Ratliff-Crain (Faculty Advisor)

UNIVERSITY OF MINNESOTA
MORRIS

Introduction

When entering college, most students go through critical transitional and developmental stages into adulthood (Montgomery & Cote, 2003). Therefore, it is necessary that college students use health care appropriately and maintain a good health status by exhibiting positive illness behaviors. Illness behavior is defined as the manner in which a person monitors their body, interprets their symptoms, and how they react to those symptoms. In the current study, the Theory of Planned Behavior (TPB) (Ajzen, 1985) model, which combines attitudes, subjective norms, and perceived control in order to predict health decision-making behavior, was used.

In this study, we examined the current factors (i.e. past experiences, education, demographics as barriers, attitudes, and social support) that affect health-care seeking behavior intentions by students. We hypothesized that a high knowledge about health care, positive health care experiences, strong social support, and stable psychological variables (i.e. positive healthcare seeking attitudes) will better predict students' illness behavior choices; while a rural setting could create negative barriers and predict lower health care utilization.

Methods

Participants

- Participants included 199 undergraduate students from a small, liberal arts college in the Midwest.

Table 1- Demographics

	Male	Female
Total	N=63	N=136
Age	20.41 (SD=2.84)	19.8 (SD=2.68)
Class Status	2.29 (SD=1.25)	2.19 (SD=1.12)
Caucasian	79%	84%
Pre-professional	23%	22%
Hometown		
Rural	15%	24%
Small	23%	29%
Suburban	36%	25%
Urban	10%	12%
City	18%	11%

Materials

- We developed a survey based off a previous study (Ratliff-Crain, 1999) that tested the Theory of Planned Behavior, past health care experiences, basic health knowledge, and the Social Support Scale (Cohen & Wills, 1985).

Procedure

- Students were recruited from various disciplines to complete the survey, which took about 30-60 minutes.
- Following completion of the survey students received compensation and a list of local health care resources.

Abstract

Our research objective was to examine factors that contribute to students' illness behavior, particularly in the transition phase of independent living and in a rural setting. We hypothesized that a high knowledge about health care, positive health care experiences, strong social support, and stable psychological variables (i.e. attitude) would better predict students' illness behavior choices; while a rural setting could create negative barriers and predict lower health care utilization. We found that high social support, positive previous experiences, attitudes, and subjective norms all contributed to a positive illness behavior whereas participants' hometowns and basic health knowledge did not correlate with illness behavior. These findings suggest that fostering high levels of social support and positive experiences with health care will elicit better illness behaviors in college students.

Results

- Individual items were included in the regression analyses based on a significance of 0.05 using bivariate correlations and independent t-tests.
- Table 2 shows the results of multiple linear regression analysis, displaying the contribution of each significant group of predictors for illness behavior in our final model, $F(14)=3.665, p < .001$.
- From Table 2, the final model's *R*-square value of .217 indicated that 21.7% of the variation in illness behavior is explainable by our predictors.
- Table 3 shows the standardized regression coefficients (beta), t-statistic, and significance for each set of predictors and individual items of each set.

Table 2- Final Model Summary

Model	R Square	DF	F-Statistic	P-Value
I. Gender	0.041	3	2.805	.041*
Caucasian				
Relation to Professional				
II. Health Care Trust	.043	5	1.752	.125
Basic Health Knowledge				
III. Chronic Health	.110	9	2.608	.007*
Past Year Med Attention				
Overall Rating				
Treatment Rating				
IV. First Generation Student	.132	11	2.589	.004*
Social Support				
V. Health Attitudes	.217	14	3.655	.000*
Peer Norms				
Subjective Norms				

Table 3- Final Model Coefficients

Model	Beta	T-Statistic	Sig.
I. Constant	17.817	16.912	.000
Caucasian	-.593	-.919	ns
Gender	-.042	-.080	ns
Relation to Professional	1.433	2.729	.007
II. Constant	18.069	15.997	.000
Basic Health Knowledge	-.075	-.530	ns
Health Care Trust	-.086	-.604	ns
III. Constant	17.622	15.593	.000
Overall Rating	1.251	2.643	.009
Treatment Rating	-.293	-.608	ns
Chronic Health	1.096	1.834	ns
Past Year Med Attention	.229	.409	ns
IV. Constant	14.982	8.964	.000
Social Support	.099	2.162	.032
First Generation Student	.093	.179	ns
V. Constant	14.253	8.144	.000
Health Attitudes	.171	2.371	.019
Peer Norms	-.023	-.410	ns
Subjective Norms	.143	2.372	.019

ns- not significant

Discussion

This study was designed to examine factors that predict students' illness behavior intentions related to the use of different sources of health care. Results indicate that their attitudes and subjective norms (i.e., what important others want them to do and their intent to comply) strongly predict intended illness behavior, along with positive previous experiences and high social support, including having a friend or close relative as a health professional.

Previous hospital or other health care experiences, as measured by ratings of treatment and overall satisfaction with services provided, showed high positive correlation with attitudes and, indirectly, illness behavior choices. Similarly, participants with a chronic illness and those who have sought medical attention for reasons other than routine check-ups in the past 12 months had a significant positive correlation with attitudes and illness behavior. Social support contributed positively to subjective norms, which indicates the importance of the nature of support (i.e. availability and extent of support) in illness behavior.

Although it was hypothesized that a rural hometown would create barriers and negatively affect illness behaviors, there were no significant findings. Specifically, no difference was found between rural hometowns and other hometowns (e.g. Suburban, City) in predicting health care utilization. Also, even though we predicted high knowledge about health care would positively correlate with illness behavior choices, no significant correlations were found.

Further analyses indicated that basic health knowledge and health care trust indirectly predicted illness behaviors. Specifically, participants with a high amount of basic health knowledge lacked trust in the health care system and vice versa, which could lead to negative illness behavior. Future research should take into account the relationship between these two factors.

These results suggest that there are predictors of illness behavior and health care use that can be applied to similar populations. Although we cannot change students' past experiences with health care and sources of social support, current institutions have the ability to elicit positive illness behaviors by creating environments that foster high social support and positive experiences.

References

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), *Action-control: From cognition to behavior* (pp. 11-39). Heidelberg: Springer.
- Cohen, S. & Wills, T.A. (1985). Stress, social support, and the buffering hypothesis. *Psychol. Bull.* 98, 310-57.
- Montgomery, M. J., & Côté, J. E. (2003). In Adams G. R., Berzonsky M. D. (Eds.), *College as a transition to adulthood*. Malden: Blackwell Publishing.
- Ratliff-Crain, J., Donald, K. M., & Dalton, J. (1999). Knowledge, beliefs, peer norms, and past behaviors as correlates of risky sexual behaviors among college students. *Psychology and Health*, 14, 625-641.

This research was funded by Undergraduate Research Opportunity Program at the University of Minnesota, Morris. Special thanks to the UMM Psychology Discipline and our advisor Dr. Jeff Ratliff-Crain.