Predictors of Health Promoting Lifestyles in Baccalaureate Nursing Students

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Introduction

• Health Promotion Model
  • Nola Pender – model developed in 1982; revised in 1996
  • Factors in model include:
    • Individual characteristics and experiences
    • Behavior specific cognitions and affect
    • Behavioral outcomes

Research supported by Ohio Nurses Foundation Research Grant
Determine predictors of health promoting lifestyles (HPL’s) in baccalaureate nursing students
Research Questions

• What is the relationship between HPL’s and:
  • personal factors
  • social support
  • academic outcomes
  • perceived self-efficacy

• What are the predictors of HPL’s in nursing students?
Health Promotion Model Study Variables

- Individual Characteristics and Experiences
  - Biological Factors
    - Gender
    - Age
    - BMI
  - Psychological Factors
    - Health Status
    - Depression
  - Sociocultural Factors
    - Ethnicity
    - Race
    - Financial Resources
    - Relationship Status
    - Living Situation

- Behavior-Specific Cognitions and Affect
  - Perceived Self-Efficacy
    - Interpersonal Influences
      - Social Support
    - Situational Influences
      - Academic Outcomes

- Behavioral Outcome
  - Health Promoting Lifestyles
    - Spiritual Growth
    - Interpersonal Relations
    - Nutrition
    - Physical Activity
    - Health Responsibility
    - Stress Management
Method

- **Setting**
  - Three private institutions in Midwest

- **Design**
  - Descriptive, cross-sectional

- **Measurement**
  - Convenience sample of students who completed research tools during the Fall or the Spring semester 2012-2013.
  - Sample size = 330 out of 575 possible (57%)
Tools

- Demographic questionnaire
  - Age, gender, race, financial status, health, height, weight, diagnosis and treatment of mental health disorder
- Beck Depression Inventory II (BDI)
- Interpersonal Support Evaluation List – College Version (ISEL - Social Support)
- General Self Efficacy (GSE)
- Health Promoting Lifestyle Profile II (HPLP)
Predictors of HPL’s in nursing students?
Relationship between personal factors and HPL’s

- HPL’s are significantly influenced by:
  - body mass index \( (p = .000) \)
  - gender (males higher HPL than females) \( (p = .003) \)

- HPL’s are significantly influenced by:
  - health status \( (p = .000) \) and
  - depressive symptoms \( (p = .000) \)

- HPL’s are significantly influenced by perceived financial needs \( (p = .011) \) with students who report their financial needs as met having higher mean HPL scores
Relationship between social support and HPL’s

<table>
<thead>
<tr>
<th></th>
<th>HPLP</th>
<th>HPLP - HR</th>
<th>HPLP - PA</th>
<th>HPLP - NU</th>
<th>HPLP - SG</th>
<th>HPLP - IR</th>
<th>HPLP - SM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ISEL - Overall</strong></td>
<td>.569</td>
<td>.362</td>
<td>.307</td>
<td>.351</td>
<td>.611</td>
<td>.653</td>
<td>.475</td>
</tr>
<tr>
<td><strong>ISEL - Tangible</strong></td>
<td>.361</td>
<td>.177</td>
<td>.180</td>
<td>.235</td>
<td>.383</td>
<td>.437</td>
<td>.337</td>
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<tr>
<td><strong>ISEL - Belonging</strong></td>
<td>.546</td>
<td>.393</td>
<td>.366</td>
<td>.352</td>
<td>.493</td>
<td>.565</td>
<td>.458</td>
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<tr>
<td><strong>ISEL - Appraisal</strong></td>
<td>.400</td>
<td>.237</td>
<td>.181</td>
<td>.229</td>
<td>.484</td>
<td>.516</td>
<td>.308</td>
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<tr>
<td><strong>ISEL - SE</strong></td>
<td>.465</td>
<td>.314</td>
<td>.212</td>
<td>.279</td>
<td>.559</td>
<td>.522</td>
<td>.375</td>
</tr>
</tbody>
</table>

*All correlations significant at the 1% significance level (two-tailed)*
Relationship between academic outcomes and HPL’s

- There is a significant relationship between the HPL nutritional dimension and students’ overall GPA (p=.022).
- There is a significant relationship between the HPL nutritional dimension and students’ nursing GPA (p=.041).
### Relationship between perceived self-efficacy and HPL’s

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<th>HPLP - SM</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Self-Efficacy*</td>
<td>.561</td>
<td>.415</td>
<td>.270</td>
<td>.377</td>
<td>.638</td>
<td>.511</td>
<td>.494</td>
</tr>
</tbody>
</table>

*p < .01

- There is a significant relationship between HPL’s, overall and each dimension, and with generalized self-efficacy.
Conclusions

- Personal factors of significance in path analysis predictive model included:
  - BMI, health status, and depressive symptoms
- Behavior specific cognitions and affect of significance in path analysis predictive model included:
  - Social Support as interpersonal influence
  - Self-Efficacy
Conclusions

• Significant personal factors and behavior specific cognitions and affect predict HPL’s

• Lowest mean HPL subscale was physical activity \((M = 2.46, SD = .74)\).
  • 29% nursing students reported not being physically active
    (Mooney, Timmins, Byrne, & Corroon, 2011)

• 46% nursing students were overweight or obese
  • 32.4% of college students reported being overweight or obese
    (ACHA, 2011)
  • 28.7% nursing students were overweight or obese
    (Al-Kandari, Vidal, & Thomas, 2008)
Future Implications

- Develop wellness program based on path analysis model to include:
  - Nutritional counseling/ weight management
  - Mental health initiatives
  - Physical exercise plan
  - Social support model

- Use a pre-/post-test controlled design with wellness program intervention to measure HPL outcomes
Questions?

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