# Social Support and Self Efficacy's Influence on Helplessness Following an Acute Myocardial Infarction

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# The Nitty Gritty

- Disclosures
  - No disclosures to report
  - No conflicts of interest to report
  - No sponsorships
- Employer
  - Duke University School of Nursing

# Objectives

- Identify relationship between social support, self-efficacy, & helplessness

- Social support and self-efficacy's specific impact on helplessness

- Consider future steps to decrease helplessness in AMI patients
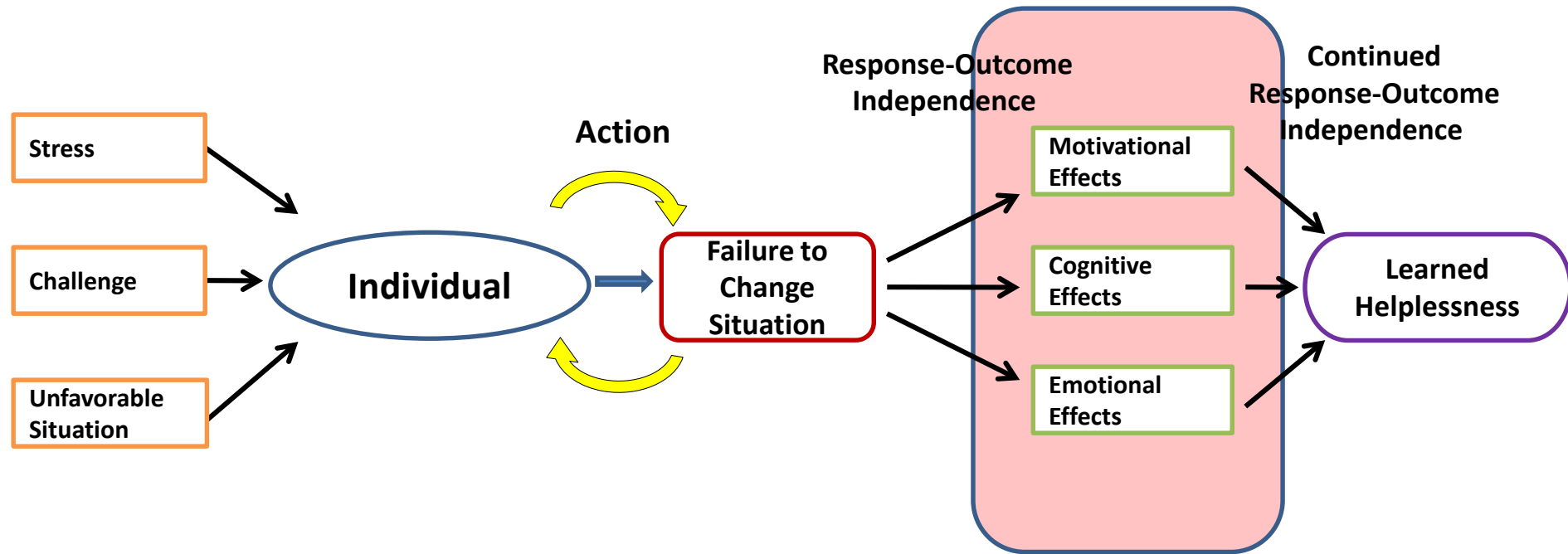
# Background & Significance

- CAD
  - 360,000 CAD deaths per year in USA
  - 790,000 AMI per year
- Associated psychological factors
  - Social support
  - Self-efficacy
  - Learned helplessness

# Purpose

- Examine the relationship
  - Social support, self-efficacy, and learned helplessness
  - Targeted demographic, clinical, and psychosocial factors

# Theory of Learned Helplessness



(Maier, 1976; Seligman, 1975)

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# Research Design

- Descriptive

- Correlational

- Cross-sectional

# Sample Selection

**Inclusion Criteria**

- 18 years of age

- Diagnostic criteria for AMI

- Ability to speak and understand English

- AMI within 12 months of the date of data collection

**Exclusion Criteria**

- Failure to obtain a confirmed diagnosis of AMI

- Unable to speak and understand the English language

- A diagnosed history of psychological illness, including depression, at the time of the individual's AMI

# Research Sample
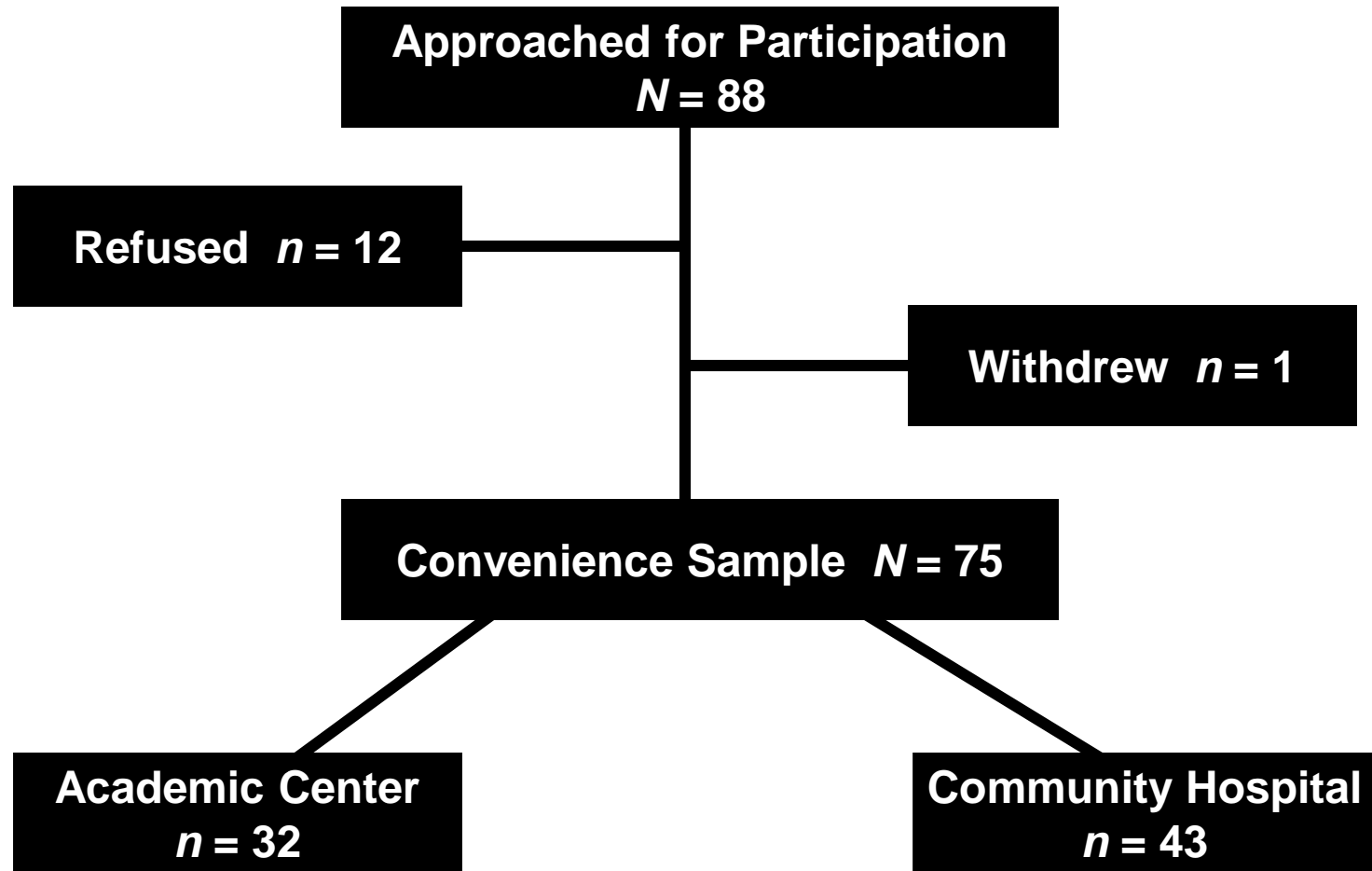
# Demographics

- Age
- Gender
- Race
- Ethnicity
- Relationship Status
- Employment Status
- Highest Grade Completed
- Estimated Yearly Household Income

# Clinical Characteristics

- Length of Stay
- Time since AMI
- Number of previous AMIs
- Number of Co-morbidities
- CK-MB & Troponin level

# Instruments

| Instrument | Description | Reported Alpha | Alpha in this study |
|---|---|---|---|
| **Learned Helplessness Scale** (Quinless & Nelson, 1988) | **20-item** **4-point Likert Scale** | **.71-.94** (Flynn, 1997; Quinless,1988; Wilson, 1993) | **.95** |
| **Multidimensional Scale of Perceived Social Support** (Zimet, Dahlem, Zimet, & Farley, 1988) | **12-item** **7-point Likert Scale** | **.85-.88** (Chou, 2000; Zimet et al., 1988) | **.93** |
| **Cardiac Self Efficacy Scale** (Sullivan, LaCroix, Russo, & Katon, 1998) | **13-item** **5 point Likert Scale** | **.80-.90** (Sarka, 2007:  Sullivan, 1998) | **.93** |

# Results

- Descriptive statistics
  - Predominately married Caucasian males
  - 58.8 years old
  - High school educated
  - Employed
  - $40,000 or less

# Correlations with Learned Helplessness

| Variables | LHS |
|---|---|
| Age (years) | -.17 (.155) |
| Gender | -.12 (.302) |
| Education | -.34 (.003) |
| Comorbidities | .13 (.280) |
| One Previous AMI | -.14 (.230) |
| Two Previous AMI | .23 (.049) |
| Greater Than Two Previous AMI | -.13 (.265) |
| Disability Status | .22 (.055) |
| Estimated Yearly Household Income | -.44 (<.001) |
| MSPSS | -.48 (<.001) |
| CSE | -.61 (<.001) |

# Hierarchical Regression- Step 1

**Age**

*beta* = -.17, $p$ = 0.121

**Disability Status**

*beta* = .05, $p$ = 0.697

**Estimated Income**

*beta* = -.44, $p$ < 0.001

**Learned Helplessness**

Multiple R = 0.48
F= 7.15  df=3, 71
$p$ < 0.001
Adjusted $R^2$ = 0.20
$R^2$ change = 0.23,
$p$ < 0.001

~20% variance

# Hierarchical Regression- Step 2

**Age**

$beta = -.18, p = 0.098$

**Disability Status**

$beta = .05, p = 0.653$

**Estimated Income**

$beta = -.40, p = 0.001$

**AMI ≤ 2**

$beta = .09, p = 0.390$

**AMI > 2**

$beta = -.16, p = 0.133$

**Co-morbid Factors**

$beta = .06, p = 0.625$

**Multiple R = 0.52**
**F=4.276  df=3, 68**
$p = 0.280$
**Adjusted $R^2$ = 0.28**
**$R^2$ change = 0.04,**
$p = 0.01$

**Learned Helplessness**

**~21% variance**

# Discussion

- Benefit to ameliorating learned helplessness in AMI patients

- Role played by social support
  - How to impact this concept

- Role played by self-efficacy
  - How to impact this concept

# Conclusion

- Social support and self-efficacy are correlated with learned helplessness in patients post AMI

- Attention placed at discharge in identifying social support system prior to discharge

- Help patients develop an empowerment plan to combat self-efficacy

# Questions??

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