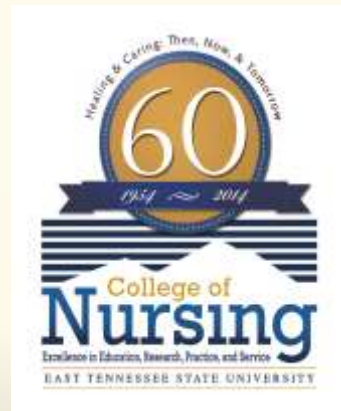


# A Model of Health for Family Caregivers

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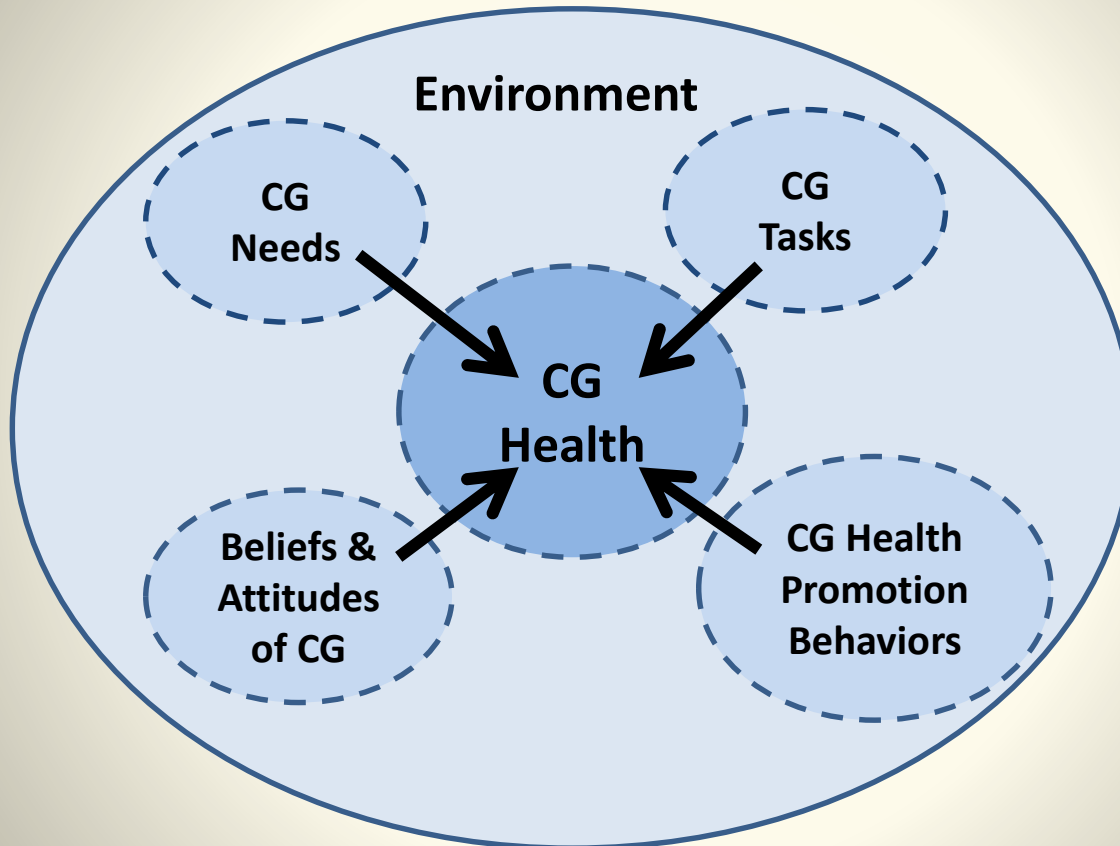
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# Health

- **“a complete state of physical, mental and social well-being, and not merely the absence of disease or infirmity.”** World Health Organization (WHO) (1946)

# Purpose

- The purpose of the study was to examine the caregiver health model CGHM



- The first aim was to identify which health determinant contributed to the caregiver health status.
- The second aim was to determine if there were changes in the Caregivers health status and what they were over 16 weeks.

# Determinants of Health

- *Health Promotion:* What does the caregiver do to stay healthy
- *Attitudes and Beliefs:* Why does the caregiver provide care for the care recipient
- *Tasks:* What does the caregiver do for the care recipient
- *Needs:* What does the caregiver need help with

# Instruments

- **Health: Promis Global Health Instrument**
- **Health Promotion: Walker's Health Promoting Lifestyle Profile II**
- **Attitudes and Beliefs: Kozloski's Caregivers' Beliefs and Attitudes**
- **Tasks: Oberst's Caregiving Burden Scale**
- **Needs: Hileman's Home Caregiving Needs Survey**

# Procedure

- **Mail Survey**
  - Stamped self addressed return envelope
  - Separate color for each time point
- **Three time points**
  - Time 1: Consent
  - Time 2: 8 weeks
  - Time 3: 16 weeks

# Recruitment & Retention

- **Recruitment**
  - Word of mouth
  - Health Care & Elder Care Providers
  - Newspaper & Media
- **Retention**

Number Enrolled	Time 1 Completed	Time 2 Completed from time 1	Time 3 Completed from time 2	completed 3 time periods	Completed study consent to time 3
90	75/90=83.3%	66/75=88%	62/66=93.9%	62/75=82.6%	62/90=68.8%

# Participants

	Male n=11	Female n=64
Age	M=68 (24-86)	M=54 (38-77)
Number of hours of care provided per week	M=130 (30-168)	M=95 (3-168)
Number of Activities of Daily Living (ADL) provided	M=2.55 (0-5)	M=3 (0-5)
Number of Independent Activities of Daily Living (IADL) provided	M=6.55 (4-8)	M=9.48 (4-8)
Total number of ADL/IADL provided	M=9.09 (5-13)	m-9.48 (4-13)
Length of time caregiving	M=6 years (3 months-20 years)	M=5 years (2.5 months-30 years)
Number of Care recipients with medical diagnosis Alzheimers/Dementia	6 (54.5%)	30 (46.8%)
Number of caregivers with chronic health condition (DM, CVD, Respiratory or musculoskeletal problems)	5 (45.4%)	48 (75%)



# Analysis: Regression

- Step-wise backwards elimination method
  - Each Time Point: time 1, time 2, time 3
  - Each Health Measure: physical, mental
  - 11 measures
- Generalized Linear Regression, generalized estimating equations
  - All time points
  - Each Health Measure: physical, mental
  - 12 measures (11 + time)

# Model Measures by Determinant

## Measure

- **HPLP**
- **Affection**
- **Obligation**
- **Spirituality**
- **Value**
- **Demand**
- **Difficulty**
- **Energy**
- **Hope**
- **Rest**
- **Stress**

## Determinant

- **Health Promotion**
- **Attitudes and Beliefs**
- **Tasks**
- **Needs**

# Predictors associated with Physical and Mental Health by Time

Item	Beta					
	Time 1		Time 2		Time 3	
	PH	MH	PH	MH	PH	MH
HPLP	-.793***	-.485***	-.554***	-.486**	-.518**	-.488**
Demand						.026
Difficulty				.012*		
Affection				-.043**		
Spirituality		-.072**	-.053*			
Energy			.011*		.016*	
Hope	.011**		.011*	.013**		
Rest		.019**		.013**		
Stress		.022***				.026***

significance <.100 \*, <.05\*\*, <.000\*\*\*

# Predictors associated with Physical Health in Longitudinal Analysis

Parameter	Beta	95% Wald Confidence Interval		Sig.
		Lower	Upper	
(Intercept)	1.592	1.253	1.931	.000
[time=1 baseline]	-.132	-.199	-.064	.000***
[time=2 8 weeks]	.003	-.055	.060	.928
[time=3 16 weeks]	0 <sup>a</sup>	.	.	.
<b>HPLP</b>	-.258	-.340	-.177	.000***
<b>Demand</b>	-.004	-.007	-.001	.008**
<b>Difficulty</b>	.003	.000	.006	.080*
<b>affection</b>	.006	-.003	.015	.167
<b>obligation</b>	-.007	-.015	.001	.069*
<b>value</b>	.006	-.003	.014	.169
<b>spirituality</b>	-.017	-.038	.004	.112
<b>energy</b>	.004	.002	.005	.000***
<b>rest</b>	-.002	-.005	.000	.061
<b>hope</b>	.003	7.946E-5	.005	.043**
<b>stress</b>	.002	-.001	.005	.117
<b>(Scale)</b>	.047			

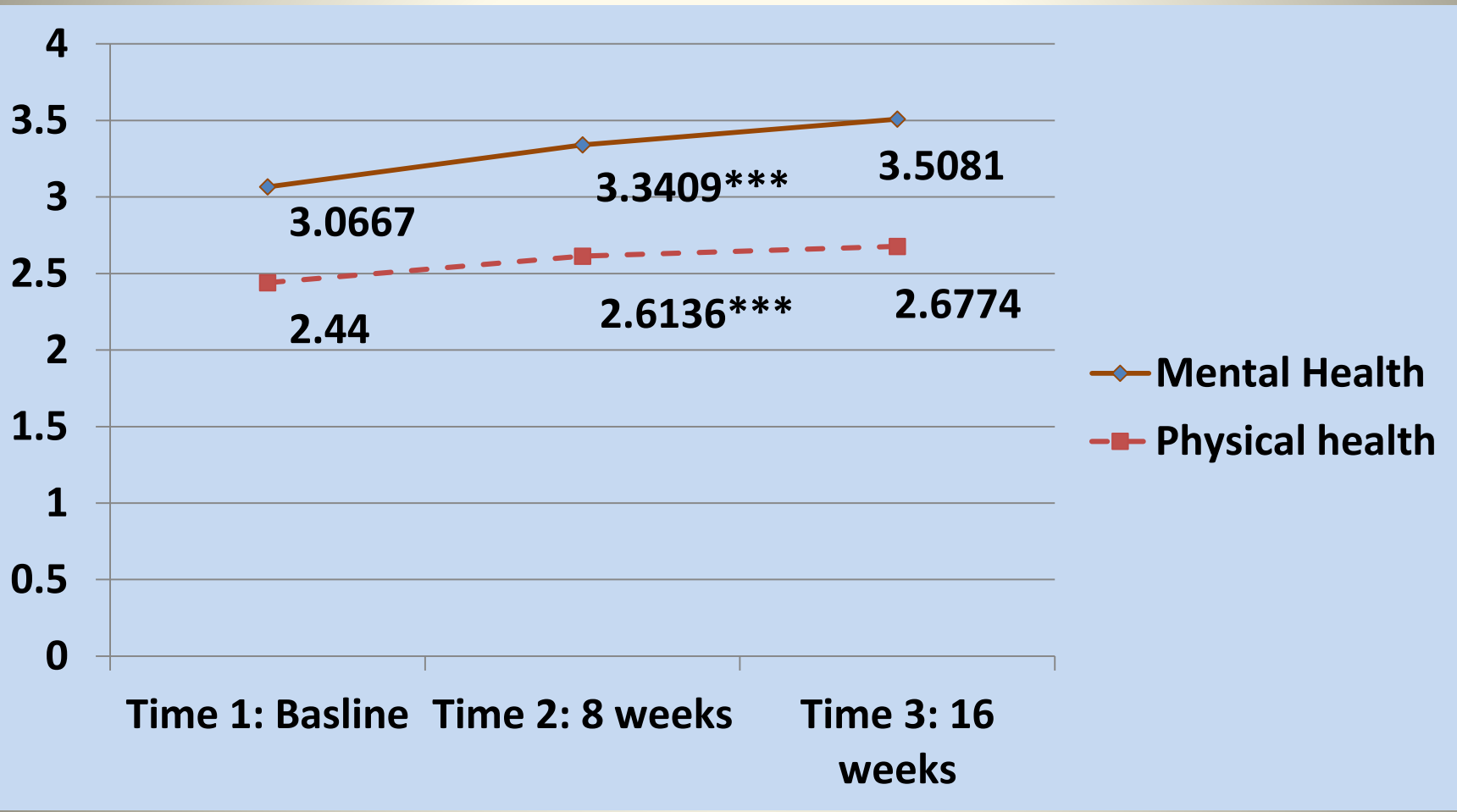
Significance ,.100\*, < .05\*\*, < .000\*\*\*

# Predictors associated with Mental Health in Longitudinal Analysis

Parameter	B	95% Wald Confidence Interval		Sig.
		Lower	Upper	
(Intercept)	1.530	1.241	1.818	.000
[time=1 baseline]	-.120	-.174	-.066	.000***
[time=2 8 weeks]	-.015	-.058	.027	.487
[time=3 16 weeks]	0 <sup>a</sup>	.	.	.
<b>HPLP</b>	-.177	-.274	-.081	.000***
<b>Demand</b>	-.001	-.004	.003	.740
<b>Difficulty</b>	.003	.000	.007	.070*
<b>affection</b>	-.004	-.010	.002	.226
<b>obligation</b>	-.002	-.009	.005	.526
<b>value</b>	.003	-.004	.009	.441
<b>spirituality</b>	-.012	-.028	.005	.171
<b>energy</b>	.000	-.003	.002	.786
<b>rest</b>	.001	-.001	.003	.168
<b>hope</b>	.002	.000	.004	.019***
<b>stress</b>	.004	.002	.007	.000***
<b>(Scale)</b>	.035			

Significance ,.100\*, < .05\*\*, < .000\*\*\*

# Mental and Physical Health Change over Time



Significance  $.100^*$ ,  $< .05^{**}$ ,  $< .000^{***}$

# Discussion

- **Mental and Physical Health Change at 8 weeks**
- **Health Promotion positive contribution**
- **Attitudes and Beliefs positive contribution**
- **Needs negative contribution**
- **Tasks negative contribution**

# Environment

CG Needs

Negative contribution

CG Tasks

CG Health

Beliefs & Attitudes of CG

Positive contribution

CG Health Promotion Behaviors



# Practice Implications

- **Change in Health**
- **Recruiting Caregivers**
- **Holistic View of Health vs Disease**
- **Spiritual Contribution to health**
- **Health Promotion and health prevention**

# Future Directions

- **Extending Caregiver Health Model**
  - **Non Family Caregivers - Certified Nursing Assistants**
- **Practice Implications**
  - **Attitudes and Beliefs:**
    - Spirituality, affection, and obligation
  - **Health Promotion**
    - Identify specific health promotion measures
- **Environment of Care**
  - **Geographic areas**
    - Urban Areas
    - States
    - Regions

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