

# Introducing Destructive Therapy as a Means of Assisting Health Profession Students Manage Stress and Anxiety

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### Background

- Graduate and professional level students in the healthcare disciplines report elevated rates of stress and anxiety compared to other populations.<sup>1,2</sup>
- Reducing stress and anxiety among these students may improve their quality of life, knowledge retention, and professional development.<sup>3</sup>
- Occasional participation in destructive therapy has been recommended by psychotherapists as a creative and effective means for managing stress, reducing anxiety, and lowering blood pressure.<sup>4,5</sup>
- A typical session of destructive therapy last between five and twenty minutes, involves wearing protective gear, selecting a tool, and smashing items one would not otherwise break.
- Empirical research examining the influence destructive therapy may have on the mental well-being of graduate or professional level healthcare students does not exist in published literature.

### Objective

- Evaluate the effect of a social cognitive theory-based intervention that incorporates destructive therapy, on the perceived stress, general anxiety, situational perception, outcome expectations, and self-efficacy of graduate and professional level healthcare students.

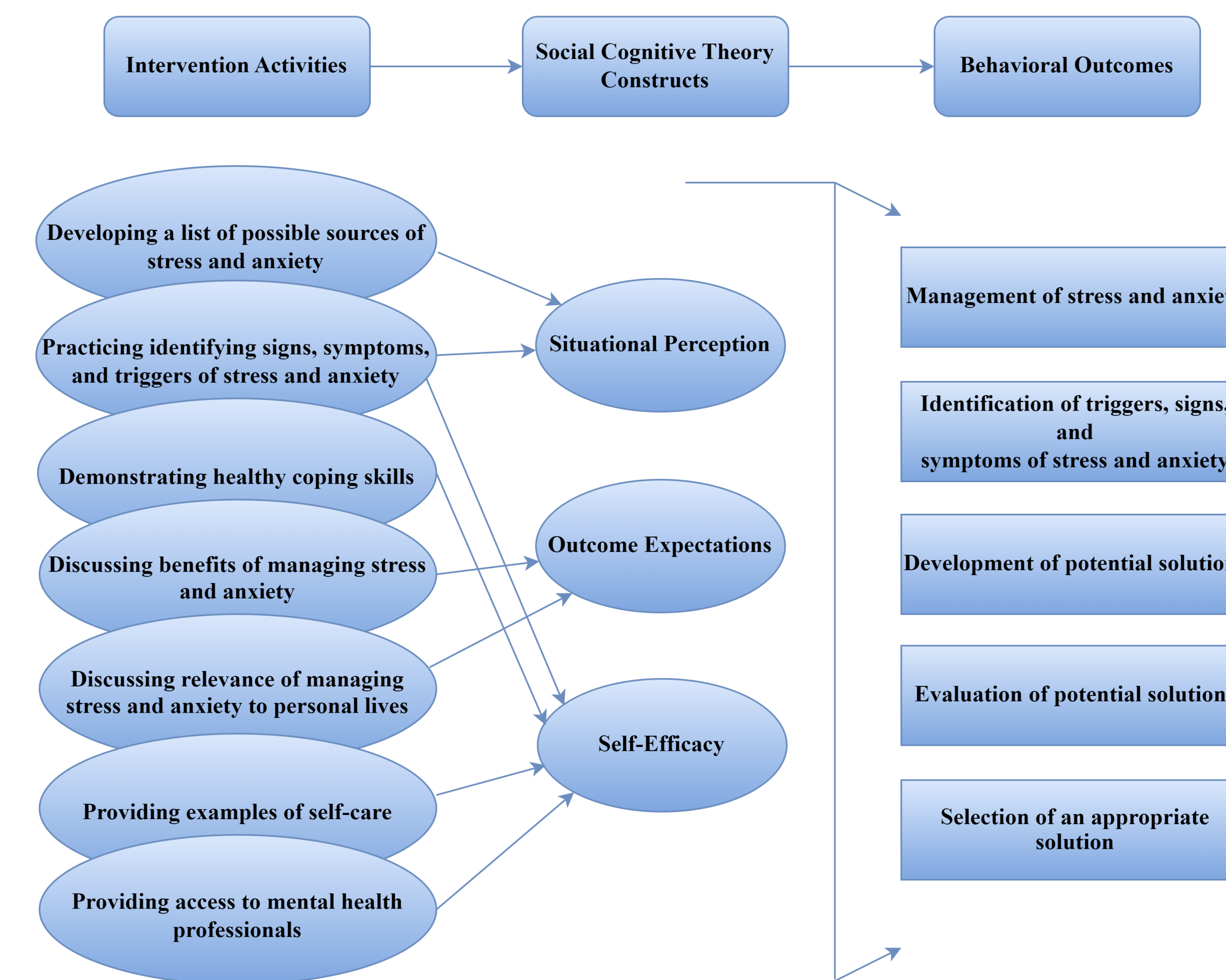
### Theoretical Framework

- The social cognitive theory (SCT) served as the basis for this study.<sup>6</sup>
- Constructs believed most critical to the success of the intervention included:
  - Situational Perception - recognize situations that may result in stress and anxiety,
  - Outcome Expectations - believe properly coping with stress and anxiety will have beneficial consequences and improper coping negative consequences, and
  - Self-Efficacy - be confident in abilities to properly cope with stress and anxiety.
- These constructs, along with measures of stress and anxiety, served as the dependent variables and the intervention served as the independent variable.

### Methods

- This investigation utilized a pretest/posttest control group design.
- Data were collected from participants one week before and one week after the intervention utilizing self-administered questionnaires.
- Graduate and professional level healthcare students participated in an intervention consisting of 60-minute seminars held once weekly for three weeks, and a 10-minute destructive therapy session (n=30).
- A random sample of students opting not to join the intervention served as the control group (n=32).
- Seminars were led by a licensed clinical therapist, included presentations, two outside assignments, guided discussions, and small group learning activities.
- Three scales were developed and psychometrically tested to assess SCT constructs. Stress and anxiety were measured utilizing the Perceived Stress Scale (PSS-10)<sup>7</sup> and Generalized Anxiety Disorder-7 (GAD-7),<sup>8</sup> respectively.
- Readability, face validity, and content validity of the instrument were established by a panel of experts in a two round review process. Cronbach's alphas for the five scales ranged between 0.81 and 0.95.
- Descriptive statistics, chi-squares, and ANOVAs were generated to examine the data. Comparisons were made between groups for each posttest measure using analysis of covariance. All comparisons were made using an *a priori* alpha level of .05.
- The Union University Institutional Review Board (IRB) approved this study.

### Description of Intervention and Links between SCT Constructs and Outcomes



### Data

Comparison of posttest scores (adjusted for pretest scores) of the dependent variables and results of statistical testing between the groups (n = 62)

Variable (possible range)	Control Group (n = 32) Mean (SD)	Experimental Group (n = 30) Mean (SD)	Total (n = 62) Mean (SD)	P
PSS-10 (0 – 40)	21.16 (4.21)	18.10 (5.82)	19.68 (5.24)	.02*
GAD-7 (0 – 21)	10.19 (4.04)	7.50 (4.39)	8.89 (4.39)	.01*
Self-Efficacy (12 – 60)	38.78 (8.19)	44.37 (6.22)	41.48 (7.78)	<.01*
Situational Perception (12 – 60)	32.09 (7.23)	37.67 (8.38)	34.79 (8.24)	.01*
Outcome Expectations (12 – 60)	49.47 (7.47)	51.00 (6.80)	50.21 (7.13)	.34

\* Significant at the .05 level.

Abbreviations used: PSS-10, Perceived Stress Scale 10; GAD-7, Generalized Anxiety Disorder 7; SD, standard deviation.

PSS-10 (10 items): 0 (never) to 4 (very often). Higher scores indicate higher perceived stress.

GAD-7 (7 items): 0 (not at all) to 3 (nearly every day). Total scores of 5, 10, and 15 correspond to mild, moderate, and severe anxiety, respectively, with a cut-off score of 10 or higher indicating possible GAD.

Self-Efficacy (12 items): 1 (not at all confident) to 5 (extremely confident).

Situational Perception (12 items): 1 (strongly disagree) to 5 (strongly agree).

Outcome Expectations (12 items): 1 (strongly disagree) to 5 (strongly agree).

Higher scores indicate more favorable responses on the self-efficacy, situational perception, and outcome expectations assessments.

### Intervention Learning Objectives

- Recognize the signs and symptoms of stress and anxiety.
- Identify main sources of stress and anxiety in one's personal life.
- Describe possible physical and physiological responses to stress and anxiety.
- Demonstrate healthy coping skills that can be used to effectively manage stress and anxiety.
- Define **Destructive Therapy** and describe its role in stress and anxiety management.
- Understand how to conduct a personal stress and anxiety assessment.
- Demonstrate the ability to develop a stress and anxiety management plan based on information learned from the personal stress and anxiety assessment.

### Results

- The intervention and control groups did not differ in the distribution of demographic variables (i.e., age, program, gender, or race) at pretest.
- The two groups did not differ in the distribution of study variables at pretest.
- Compared with the control group, significant improvements at posttest were observed in the intervention group on the measures of perceived stress and general anxiety ( $p=.02$  and  $p=.01$ , respectively).
- Significant improvements were also observed within the intervention group for self-efficacy ( $p<.01$ ) and situational perception ( $p=.01$ ).
- Differences were not found to exist for outcome expectations in any analyses.

### Discussion

- Findings of this investigation provide evidence that stress, anxiety, and scores on SCT measures of situational perception and self-efficacy are modifiable among healthcare students at the graduate and professional levels when destructive therapy is incorporated into an intervention.
- More than 60% of participants in both the intervention and control groups scored on the positive end (i.e., agree or strongly agree) of the scale assessing outcome expectations over time.
- The finding of no difference on this construct indicates participants already possess the belief that properly managing their stress and anxiety will result in beneficial consequences.
- Overall, approximately 60% of participants reported GAD scores of 10 or greater at pretest, indicating possible generalized anxiety disorder.
- This finding supports previous studies indicating healthcare students at the graduate and professional level experience elevated rates of stress and anxiety.
- This study should be replicated in programs that differ in various demographic variables, such as socioeconomic status, race, and geographic location.

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