Reversal Theory Research Instruments

This document lists research instruments developed to capture the phenomenology of Reversal Theory. Instruments are listed in alphabetical order. Selected Fact Sheets about the instruments follow the overviews.

Apter Motivational Style Profile (AMSP)

A research version of The Apter Motivational Style Profile (AMSP), a state dominance measure, is available by agreement and free of charge, to bona fide researchers. This facility allows the profile to be administered over the Internet, scored automatically, and the data to be saved in the form of a spreadsheet to which the researcher has confidential access.

Instrument Contact: Michael Apter: mjapter@aol.com.

Exercise Tension Scale (ETS)

Measures participants' ratings of tension before skipping exercise for three reversal-theory state pairs at a self-identified time in the last month when they skipped exercise.

Instrument Contacts: Kelli Kramer-Jackman: kkramer-jackman@kumc.edu Sue Popkess-Vawter: spopkess@kumc.edu University of Kansas Medical Center

Exercise Motivation Questionnaire-Mexican American (EMQ-MA)

Intended for Mexican Americans, this assessment assesses motives for participating in physical activity based on metamotivational states. The purpose of this study was to test a culturally relevant exercise motivation instrument with 269 Mexican Americans living along the Southern New Mexico Border area. There is potential for developing individualized exercise interventions based on exercise motivation as measured by the EMQ-MA.

Instrument Contacts: Rebecca Keele: bkeele@nmsu.edu

Feeling Tension Scale (FTS)

Measures participants' ratings of tension before feeling down or low for three reversal-theory state pairs at a self-identified time in the last month when they felt down or low.

Instrument Contacts: Kelli Kramer-Jackman: kkramer-jackman@kumc.edu Sue Popkess-Vawter: spopkess@kumc.edu University of Kansas Medical Center

Negativism Dominance Scale

Also called *Social Reactivity Scale*. Allows for the investigation of two dimensions of negativism, distinguishing between proactive and reactive rebelliousness. This instrument captures dominance measures rather than metamotivational states.

Instrument Contact: Mark R. McDermott School of Psychology, University of East London m.r.mcdermott@uel.ac.uk.

Overeating Tension Scale (OTS)

Measures participants' ratings of tension overeating for three reversal-theory state pairs at a self-identified time in the last month when they choose to overeat.

Instrument Contacts: Kelli Kramer-Jackman: <u>kkramer-jackman@kumc.edu</u> Sue Popkess-Vawter: <u>spopkess@kumc.edu</u> University of Kansas Medical Center

State of Mind Indicator for Athletes (SOMIFA)

Asks subjects to select the responses which most closely describes their feelings during a specific sporting performance.

Instrument Reference: Kerr, J. H. & Apter, M. J. (1999). The State of Mind Indicator for Athletes. In J. H. Kerr (Ed.), Experiencing sport: Reversal theory (pp.242-244). Chichester, England: Wiley.

Telic/Paratelic State Instrument

The Telic/Paratelic State Instrument (T/PSI) is a 12 item scale comprising a Serious-Minded/Playful subscale and an Arousal-Seeking/Arousal Avoidance Subscale. The items ask participants to circle numbers on 6-point rating scales with terms representing opposing metamotivational states at each end of the rating scales. Scores are summed to achieve subscale scores and the subscale scores are added together to produce a total score.

Instrument Contact: Teachers College Columbia University Kathleen O'Connell: oconnell@tc.columbia.edu

Reversal Theory Instruments

Name of tests:

Exercise Tension Scale (ETS)

The ETS was adapted from the original tension scale, the overeating tension scale (OTS)

Contact e-mail address:

Kelli Kramer-Jackman <u>kkramer-jackman@kumc.edu</u> Sue Popkess-Vawter <u>spopkess@kumc.edu</u>

Variables measured:

Measures participants' ratings of tension **before** skipping exercise for three reversal-theory state pairs at a self-identified time in the last month when they skipped exercise.

<u>Intended population(s):</u> These scales have been used with populations over the age of 20, whom are of varying body mass index categories.

Brief description (less than 300 words):

Currently, measures are lacking that assess the parameters of the multifaceted problem of obesity. Earlier studies suggest that measures are needed to assess overeating tension, exercise tension, and feelings tension as contributing factors to the obesity epidemic in America. These three tension scales, Overeating Tension Scale (OTS), Exercise Tension Scale (ETS) and Feelings Tension Scale (FTS), were piloted with 61 participants to evaluate their computer-administration and psychometric analysis, in three rural settings served by the University of Kansas Telehealth Program. Phase 1 established: readability at a 5th grade level using a linguistics expert; content validity using reversal theory experts, content validity index, and kappa score; usability, human-computer interaction, and performance using expert evaluation and participant evaluation. In Phase 2, internal consistency reliability and construct validity were supported. Participants with higher Body Mass Index (BMI; [kg]/height [m2]) had higher tension scores on the Overeating Tension, Exercise Tension, and Feelings Tension Scales compared to those with lower BMI. Future work will continue to establish convergent validity of these three scales and their ability to assess overeating tension, exercise tension and feelings tension in rural telehealth weight management patients. Scales are currently only available in English.

Electronic version available:

Authors suggest use of the electronic versions over paper and pencil, but scales are currently located on KUMC servers.

Coding available: No

Norms available: Yes

Key References:

- 1) Kramer, K. L. (2007) Psychometric analysis of three tension scales in rural telehealth setting for weight management practice. UMI: 1-357. www.il.proquest.com
- 2) Popkess-Vawter, S., Gerkovich, M.M., & Wendel, S. (2000). Reliability and Validity Testing of the Overeating Tension Scale, *Journal of Nursing Measurement*, 8(2), 145-160.

Reversal theory instruments

Name of test: Exercise Motivation Questionnaire-Mexican American

Contact e-mail address: bkeele@nmsu.edu

Variables measured: Motives for participating in physical activity based on metamotivational

states

Intended population(s): Mexican Americans

Brief description (less than 300 words): Prevalence of physical inactivity is the highest among Mexican-Americans (40%) as compared to only 18% among Caucasians. The purpose of this study was to test a culturally relevant exercise motivation instrument with 269 Mexican Americans living along the Southern New Mexico Border area. Construct validation was supportive with items clustering into five factors consistent with reversal theory constructs explaining 54% of the variance. Further support was achieved with a positive correlation between the EMQ-MA and the Motives for Activity Participation Questionnaire (r = .10 to .77) and with regular exercisers scoring higher on all subscales. Internal consistency values for the subscales ranged from .80 to .90. There is potential for developing individualized exercise interventions based on exercise motivation as measured by the EMQ-MA

Electronic version available? yes

Coding available? yes

Norms available?

Key References: Keele, Rebecca (2009). Development of the Exercise Motivation

Questionnaire. Journal of Nursing Measurement, 17, 3, pp183-194.

Reversal Theory Instruments

Name of tests:

Feelings Tension Scale (FTS)

The FTS was adapted from the original tension scale, the overeating tension scale (OTS)

Contact e-mail address:

Kelli Kramer-Jackman <u>kkramer-jackman@kumc.edu</u> Sue Popkess-Vawter <u>spopkess@kumc.edu</u>

Variables measured:

Measures participants' ratings of tension **before** feeling down or low for three reversal-theory state pairs at a self-identified time in the last month when they felt down or low.

<u>Intended population(s)</u>: These scales have been used with populations over the age of 20, whom are of varying body mass index categories.

Brief description (less than 300 words):

Currently, measures are lacking that assess the parameters of the multifaceted problem of obesity. Earlier studies suggest that measures are needed to assess overeating tension, exercise tension, and feelings tension as contributing factors to the obesity epidemic in America. These three tension scales, Overeating Tension Scale (OTS), Exercise Tension Scale (ETS) and Feelings Tension Scale (FTS), were piloted with 61 participants to evaluate their computer-administration and psychometric analysis, in three rural settings served by the University of Kansas Telehealth Program. Phase 1 established: readability at a 5th grade level using a linguistics expert; content validity using reversal theory experts, content validity index, and kappa score; usability, human-computer interaction, and performance using expert evaluation and participant evaluation. In Phase 2, internal consistency reliability and construct validity were supported. Participants with higher Body Mass Index (BMI; [kg]/height [m2]) had higher tension scores on the Overeating Tension, Exercise Tension, and Feelings Tension Scales compared to those with lower BMI. Future work will continue to establish convergent validity of these three scales and their ability to assess overeating tension, exercise tension and feelings tension in rural telehealth weight management patients. Scales are currently only available in English.

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Norms available: Yes

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Reversal Theory Instruments: Overeating Tension Scale

Name of tests:

Overeating Tension Scale (OTS)

Contact e-mail address:

Kelli Kramer-Jackman <u>kkramer-jackman@kumc.edu</u> Sue Popkess-Vawter <u>spopkess@kumc.edu</u>

Variables measured:

Measures participants' ratings of tension **before** overeating for three reversal-theory state pairs at a self-identified time in the last month when they choose to overeat.

<u>Intended population(s)</u>: These scales have been used with populations over the age of 20, whom are of varying body mass index categories.

Brief description (less than 300 words):

Currently, measures are lacking that assess the parameters of the multifaceted problem of obesity. Earlier studies suggest that measures are needed to assess overeating tension, exercise tension, and feelings tension as contributing factors to the obesity epidemic in America. These three tension scales, Overeating Tension Scale (OTS), Exercise Tension Scale (ETS) and Feelings Tension Scale (FTS), were piloted with 61 participants to evaluate their computer-administration and psychometric analysis, in three rural settings served by the University of Kansas Telehealth Program. Phase 1 established: readability at a 5th grade level using a linguistics expert; content validity using reversal theory experts, content validity index, and kappa score; usability, human-computer interaction, and performance using expert evaluation and participant evaluation. In Phase 2, internal consistency reliability and construct validity were supported. Participants with higher Body Mass Index (BMI; [kg]/height [m2]) had higher tension scores on the Overeating Tension, Exercise Tension, and Feelings Tension Scales compared to those with lower BMI. Future work will continue to establish convergent validity of these three scales and their ability to assess overeating tension, exercise tension and feelings tension in rural telehealth weight management patients. Scales are currently only available in English.

Electronic version available:

Authors suggest use of the electronic versions over paper and pencil, but scales are currently located on KUMC servers.

Coding available: No

Norms available: Yes

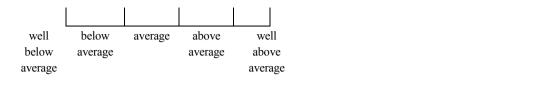
Key References:

- 1) Kramer, K. L. (2007) Psychometric analysis of three tension scales in rural telehealth setting for weight management practice. UMI: 1-357. www.il.proquest.com
- 2) Popkess-Vawter, S., Gerkovich, M.M., & Wendel, S. (2000). Reliability and Validity Testing of the Overeating Tension Scale, *Journal of Nursing Measurement*, 8(2), 145-160.

State of Mind Indicator for Athletes (SOMIFA: Kerr & Apter, 1999)

			Age:		
				Activity:	
INSTRUCTIO	Occasion/Event: Outcome:				
Please answer the following questions about the sporting event or the specific part of the event indicated.					
I Choose one from each of the following pairs of statements which most closely describes your feelings during this performance. (Check the appropriate box in each case). Please try to judge in terms of THE TIME YOU WERE ACTUALLY PERFORMING (NOT how you felt immediately before or after, how you should have felt, how you feel now, or how you usually would have felt).					
I WANTED TO:					
1.a. □achieve something important to me (e.g., status, money, improved skill).					
1.b. □ simply enjoy the fun of participating in the event.					
2.a. □ keep to the instructions and expectations of coaches and others.2.b. □ do my own thing whatever the consequences.					
3.a. ☐ be tough with and dominating over my opponent(s) during perfromance.					
3.b. ☐ be friendly and sympathetic with my opponent(s) during performance.					
4.a. □perform well for myself.					
4.b. □perform well for others (e.g. coach, team, supporters, etc.).					
5.Of all the items which you chose above, which is the					
ONE that you were most aware of					
	during performance. (Please write the				
number and letter in this box)					
IIPlease circle the appropriate point on the scales below.					
1. How DID YOU FEEL in relation to each of the following dimensions? (Please circle the appropriate point.)					
		1 1	I		
calm			'worked		
			up'		
sleepy	I I	1 1	ı		
			wide		
ысору			awake		
		1 1	i		
0.: 1			energetic		
fatigued					
2. How WOULD YOU HAVE LIKED TO HAVE FELT in relation to each of the following dimensions?					
calm	'worked				
			up'		
	l I	1 1	ĺ		
sleepy			wide		
awake					
	1	j I	ı		
fatigued			energetic		
ianguca			2110150110		

3. How well do you consider you performed by your own standards? (Average means YOUR average, etc.)



Kerr, J. H. & Apter, M. J. (1999) . The State of Mind Indicator for Athletes. In J. H. Kerr (Ed.), *Experiencing sport: Reversal theory* (pp.242-244). Chichester, England: Wiley.

Reversal Theory Instruments

Name of test: Telic/Paratelic State Measure

Contact e-mail address: oconnell@tc.columbia.edu

Variables measured: Telic versus Paratelic States with subscales of Serious-Minded/Playful; Arousal-Seeking/Arousal Avoidance; and Total Scores.

Intended population(s): Adults; has also been used with adolescents.

Brief description (less than 300 words):

The Telic/Paratelic State Instrument (T/PSI) is a 12 item scale comprising a 7-item Serious-Minded/Playful subscale and a 5-item Arousal-Seeking/Arousal Avoidance Subscale. The items ask participants to circle numbers on 6-point rating scales with terms representing opposing metamotivational states at each end of the rating scales. Scores are summed to achieve subscale scores and the subscale scores are added together to produce a total score. Scoring instructions also suggest Cut-off points for determining telic or paratelic states. The construct validity and reliability of the scale was established with a sample of 571 adults. Other aspects of the scale are reported in the *Personality and Individual Differences* paper (O'Connell & Calhoun, 2001) listed below, which should be cited when the scale is referred to in a manuscript or publication.

Electronic version available? From Kathleen O'Connell

Coding available? From Kathleen O'Connell

Norms available? No

Key References:

Calhoun, J. E. (1995). *Construct validity of the telic/paratelic state instrument*. Kansas City, Kansas: Unpublished doctoral dissertation.

O'Connell, K. A., & Calhoun, J. E. (2001). The telic/paratelic state instrument (T/PSI): Validating a reversal theory measure. *Personality and Individual Differences*, *30*, 193-204.