

**MOTIVATION,
PERFORMANCE GOALS &
SELF-EFFICACY IN
MARATHON
RUNNERS AND WALKERS**

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STATEMENT OF STUDY

This study compared runners and walkers of marathons to discern if there was any difference in motivation, performance goals and self-efficacy between these two groups of athletes

BACKGROUND

- ❑ Physical inactivity is a serious nationwide problem that poses a significant public health challenge
- ❑ 60 % of adult Americans do not achieve the recommended minimum amount of regular physical exercise
- ❑ 25 % do not exercise at all
- ❑ 50 to 70 % of the adults who do begin an exercise program dropped out within 12 to 24 months
- ❑ 40 to 50 % of these adults dropped out during the first six months of exercise

BACKGROUND CONTINUED

- ❑ Walking in the past has not been considered a “status” sport
- ❑ It is only during the last decade that walking as a sport has gained national support among professionals or sponsoring organizations.
- ❑ The marathon walker is responsible for the fastest growing trend in marathoning.
- ❑ During the past few years over 77 million people have turned walking into the number one fitness activity in America

IMPORTANCE OF STUDY

- ❑ First study of marathon walkers
- ❑ Findings may encourage more people to take up walking as their chosen form of exercise
- ❑ May legitimize walking as a status athletic activity and acknowledgement of marathon walkers as athletes in their own right
- ❑ Performance goals differ between marathon runners and marathon walkers – changes in program design is needed for marathon walking participants
- ❑ May encourage injured runners to replace their running with the less physically-stressful activity of fitness walking

THEORETICAL FRAMEWORK

- ❑ Deci and Ryan's Self Determination Theory is a general theory of motivation developed over the course of three decades integrating four mini-theories
 - ❑ cognitive evaluation theory
 - ❑ organismic integration theory
 - ❑ causality orientation theory
 - ❑ basic needs theory
- ❑ Cognitive Evaluation Theory establishes the factors that form the basis of intrinsic motivation
 - ❑ Self-determined
 - ❑ Feeling of competence & a challenge
 - ❑ Feedback
 - ❑ Autonomous
- ❑ Icek Ajzen's Theory of Planned Behavior - intention is fueled by attitude, control and subjective norm

THEORETICAL FRAMEWORK

Continued

- ❑ Locke's Four Mechanisms of Achieving a Goal
 - Direction – attention and action toward that goal
 - Effort – willing to meet the requirements of goal
 - Persistence – effort over time
 - Strategy Development – organize plan to reach the goal
- ❑ Bandura's Self-efficacy Theory states that it is measured by one's confidence in one's ability to perform specific tasks.
 - repeated successes increase self-esteem
 - self-esteem became a part of the self-schema & had a predictive quality that allowed the self to generate inferences about future behavior by generalizing from past success

HYPOTHESES

- ❑ H.1: There is no significant difference in motivation between runners and walkers of a marathon.
- ❑ H.2: There will be a significant difference in the performance goals between marathon runners and marathon walkers.
- ❑ H.3: There is no significant difference in self-efficacy between marathon runners and marathon walkers.

SUBJECTS OF STUDY

The subject population of this study was
“Team In Training” participants
training for the San Diego 2002
Suzuki Rock ‘n’ Roll Marathon,
and the Anchorage 2002
Mayors Midnight Sun Marathon

RECRUITMENT TECHNIQUES AND SAMPLE SIZE

- ❑ Recruited from the 352 “Team In Training” participants who signed up for the 2002 Suzuki Rock ‘n’ Roll Marathon and the 2002 Mayors’ Midnight Sun Marathon by use of announcement, flyers, postcards and stickers
 - 42 Runners
 - 22 Walkers

MOTIVATION

Intrinsic motivation is based on the athlete's
intention to explore and experience
for their own curiosity
and to master and accomplish for
their own sense of flow
or
peak performance

MASTERY-PERFORMANCE AXIS OF MOTIVATION



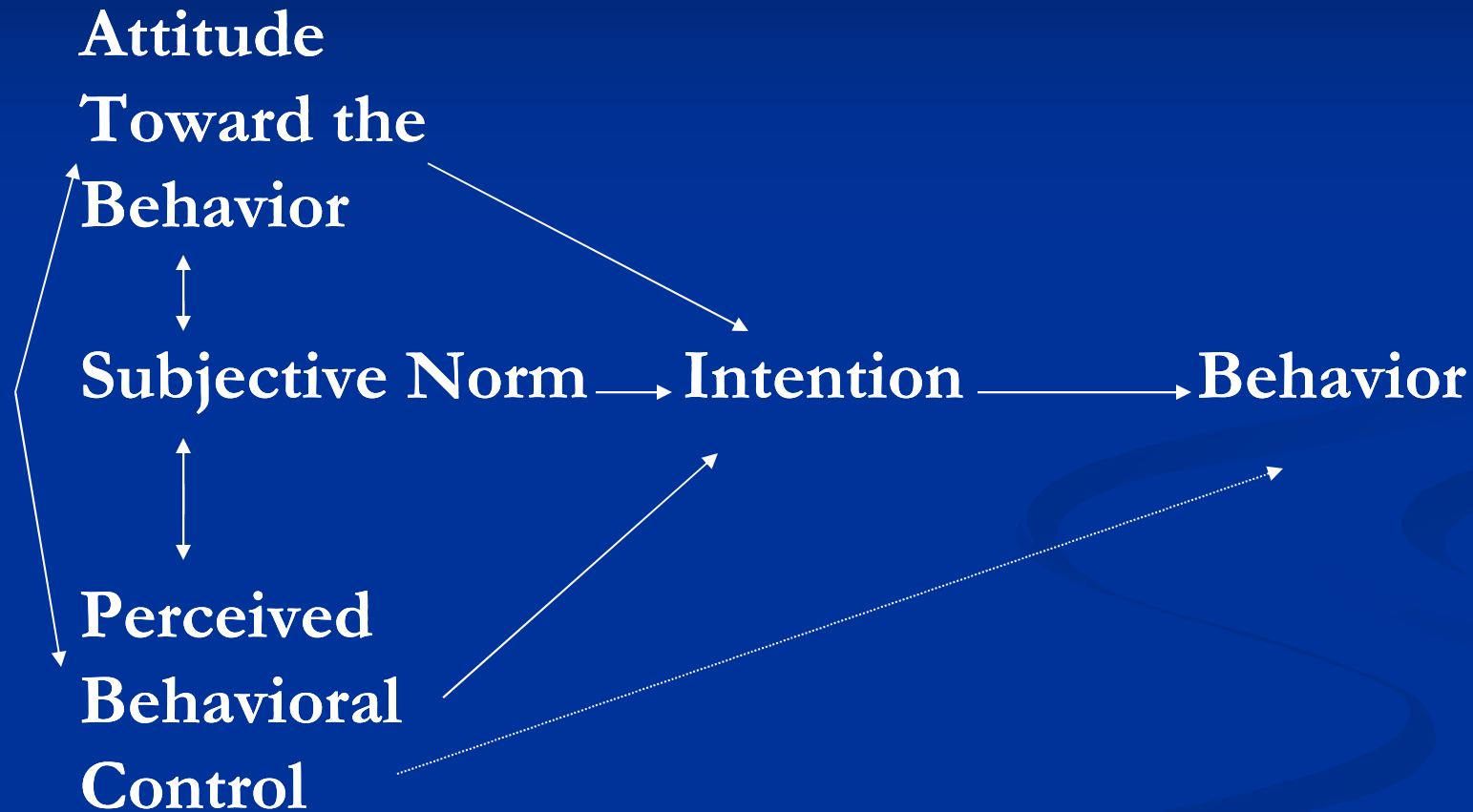
MOTIVATION OF MARATHON PARTICIPANTS

- Participation in a marathon involves an exceptional combination of the three states: intrinsic motivation, extrinsic motivation and amotivation.
- Intrinsic motivation requires an athlete to look at his or her personal gains in health and mastery.
- Extrinsic motivation involves the recognition that accompanies the completion of a marathon.
- Amotivation is the pain and monotony involved in the training that may cause an athlete to reconsider the merit of his or her other motivations.

PERFORMANCE GOALS

- ❑ The decision to participate in a marathon sets the intention of the athlete to perform a specific performance goal - walk or run 26.2 miles
- ❑ The positive attitude about the behavior that predicts success in the accomplishment of an intended goal includes:
 - a feeling that the behavior was within one's ability to achieve
 - the planned actions would win social approval combined to

Ajzen's Theory of Planned Behavior



SELF-EFFICACY

- Self-efficacy expectations have a powerful effect on behavioral change.
- Strong feelings of self-efficacy are increased when one's behavior has been molded by a graduated series of tasks that culminate in a mastery experiences.
- “Athletes with strong self-efficacy persist longer, generate more effort, stay focused and have better analytic strategies” Bandura

MARATHON RUNNERS

- Reasons most often cited for attempting a marathon were:
 - 24 % personal challenge
 - 14 % sense of achievement
 - 10 % personal satisfaction
- Primary Motivators by experience:
 - Master-level - social identity
 - Intermediate - personal performance & psychological rewards
 - Novice - health, weight concerns & personal goal achievements

MARATHON WALKERS

- The marathon walker is responsible for the fastest growing trend in marathoning
 - Over 77 million people have turned walking into the leading fitness activity in America
- Race directors have taken note of the increased number of people interested in walking marathons and realized that they could make more money by making marathons more walker-friendly

METHODOLOGY

PSYCHOMETRIC MEASURES

- Motivation of Marathoners Scales (MOMS)
- Sport Motivation Scale (SMS)
- Sport Orientation Questionnaire (SOQ)
- State - Sport Confidence Inventory (SSCI)
- Trait - Sport Confidence Inventory (TSCI)

QUASI-EXPERIMENTAL STUDY

- Pre –Training and Post – Marathon
- Administered via Internet www.262research.org

MOTIVATION OF MARATHONERS SCALES

- 56 Item scale
- 7 point ordinal scale
- 9 Subscales
 - Life meaning
 - Psychological Coping
 - Self-esteem
 - Health Orientation
 - Weight Concern
 - Personal Goal Achievement
 - Competition
 - Recognition
 - Affiliation

SPORT MOTIVATION SCALE

- 28 Item scale
- 7 point ordinal scale
- 7 Subscales
 - Intrinsic Motivation – Stimulation
 - Intrinsic Motivation – Accomplishment
 - Intrinsic Motivation – to Know
 - Extrinsic Motivation – Identified
 - Extrinsic Motivation – Introjected
 - Extrinsic Motivation – External Regulation
 - Amotivation

SPORT ORIENTATION QUESTIONNAIRE

- 25 Item questionnaire
- 5 point Likert format
- 3 Subscales
 - Competitiveness
 - Win Orientation
 - Goal Orientation

STATE SPORT CONFIDENCE INVENTORY & TRAIT SPORT CONFIDENCE INVENTORY

- ❑ 13 Item Inventory
- ❑ 9 point Likert scale
 - Self-efficacy

RESULTS

SUBJECT RETENTION

Participants	Pre-Test	Post-Test	Retention Rate
Runners	73	42	57%
Walkers	28	22	78 %

HYPOTHESIS 1

There will be no significant difference in motivation between runners and walkers of a marathon

- ❑ An F-ratio analysis of the interaction between marathon runners and walkers, and time pre-test and post-test of the MOMS data failed to reach statistical significance at the .05 level of probability.
- ❑ To address individual changes of runners and walkers across the 9 scales of the MOMS a Studentized Range Statistic was calculated which gave a value of 6.54 – any item which changed to that magnitude, pre-test to post-test, would be considered statistically significant at the .05 level of confidence.
- ❑ The only significant item at the .05 level was on “Health Orientation” for Runners moving from 16.3 to 28.4

HYPOTHESIS 1 Continued





POPULATION DEMOGRAPHICS

	American Sports Data	TNT	Current Study
Female walkers	66 %	74%	74%
Male walkers	33%	26%	26%
Average age of walkers	46	NA	47
Average Age of Runners	NA	35	34