Summer 2014

Commitment Types and Influence of Daily Deals Among Boot Camp Participants

Linda Lund
San Jose State University

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COMMITMENT TYPES AND INFLUENCE OF DAILY DEALS
AMONG BOOT CAMP PARTICIPANTS

A Thesis

Presented to

The Faculty of the Department of Kinesiology

San José State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Linda K. Lund

August 2014
The Designated Thesis Committee Approves the Thesis Titled

COMMITMENT TYPES AND INFLUENCE OF DAILY DEALS AMONG BOOT CAMP PARTICIPANTS

by

Linda K. Lund

APPROVED FOR THE DEPARTMENT OF KINESIOLOGY

SAN JOSE STATE UNIVERSITY

August 2014

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ABSTRACT

COMMITMENT TYPES AND INFLUENCE OF DAILY DEALS
AMONG BOOT CAMP PARTICIPANTS
by Linda K. Lund

The sedentary lifestyle that many Americans exhibit reinforces the need for continued research into the factors associated with the adoption and maintenance of regular physical activity. Internet-based daily deal websites, such as Groupon® and LivingSocial®, feature deals and discounts on many products and services, including fitness programs. The purpose of this study was to determine the relationship between “daily deals” usage and the types of commitment exhibited by fitness program participants. The targeted program studied was a fitness boot camp. Boot camp participants (N=150), recruited from an indoor boot camp company, completed a questionnaire that included basic demographic information, membership status, and the Exercise Commitment Scale (ECS). Contrary to the hypothesis, the results showed that all participants had a greater “want to” commitment than a “have to” commitment but that regular paying members reported more personal investment.
ACKNOWLEDGEMENTS

I would like to express my deepest appreciation to the many people who helped this study come to fruition. Here are just a few of the people whom I would like to thank:

My thesis chair, Dr. Tamar Semerjian, for your time, support, and guidance throughout graduate studies and thesis writing process, for your patience with my concise and succinct thinking and writing style, and for your confidence that I could meet your high standards;

My thesis committee, Drs. Ted Butryn and Peggy Plato, for also demanding the best, providing great insight, and offering constant support;

My study participants for your time, energy, and willingness to approach this study – thank you for taking the time to complete the questionnaire;

My family, for their continuous support, love, and extensive editing.
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CHAPTER 1: INTRODUCTION
 Approximately half of U.S. adults are sedentary and do not meet physical activity guidelines, which means that inactive adults are not engaging in the suggested 150 min per week of moderate-intensity, 75 min a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate and vigorous-intensity aerobic physical activity (United States Department of Health and Human Services [USDHHS], 2008). Academic theories, such as the Theory of Planned Behavior (Ajzen, 1991), Social Cognitive Theory (Bandura, 1986), and the Self-Determination Theory (Deci & Ryan, 1985), attempt to explain the behaviors related to the adoption of physical activity; however, these theories do not adequately explain the trends seen in exercise maintenance (Gabriele, Gill, & Adams, 2011). The current study examines aspects of the Investment Model (Rusbult, 1980) and the Sport Commitment Model (Gabriele et al., 2011; Wilson et al., 2004) to understand the dimensions of commitment by focusing on fitness boot camp as the primary form of exercise and daily deals as the main marketing method through which most members are recruited. This study is one of the first to examine fitness daily deals and motivation. These sections provide an outline of how the study was developed, how data were gathered and analyzed, and the meaning of the data.

The introduction provides the background information on which the study is based and guides the purpose of the study. The methods section outlines the characteristics of the participants, the procedure of the study, and the measurement tools used to gather information. The results section highlights key findings calculated using statistical analyses, which are further described and expanded upon in the discussion.
section. Lastly, the conclusion section provides final thoughts and key messages of the study.

Chapter 3, the Extended Support Material section, contains the revised thesis proposal material. It includes an introduction, a comprehensive literature review, and an outline of how the study was going to be conducted. Limitations, delimitations, assumptions, and definitions of terms are also included to clarify terminology and analyze all the factors of the study.
CHAPTER 2: JOURNAL ARTICLE
Commitment Types and Influence of Daily Deals Among  
Boot Camp Participants  

Linda K. Lund, Tamar Z. Semerjian, Ted M. Butryn, and Peggy A. Plato  
San José State University  

The sedentary lifestyle that many Americans exhibit reinforces the need for continued research into the factors associated with the adoption and maintenance of regular physical activity. Internet-based daily deal websites, such as Groupon® and LivingSocial®, feature deals and discounts on many products and services, including fitness programs. The purpose of this study was to determine the relationship between “daily deals” usage and the types of commitment exhibited by fitness program participants. The targeted program studied was a fitness boot camp. Boot camp participants (N=150), recruited from an indoor boot camp company, completed a questionnaire that included basic demographic information, membership status, and the Exercise Commitment Scale (ECS). Contrary to the hypothesis, the results showed that all participants had a greater “want to” commitment than a “have to” commitment but that regular paying members have more of a personal investment.  

*Keywords*: motivation, exercise, coupon  

Physical inactivity now rivals tobacco use as the leading modifiable cause of death in the United States (Mokdad, Marks, Stroup, & Gerberding, 2004) and, according to the Centers for Disease Control and Prevention (CDC, 2014), only 48% of adults meet the 2008 Physical Activity Guidelines. Current physical activity guidelines suggest that adults should engage in 150 minutes a week of moderate-intensity, or 75 minutes a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic physical activity (United States Department of Health and Human Services [USDHHS], 2008). Research into how to increase exercise maintenance has the potential to reduce low physical activity levels.  

The sedentary lifestyle of many Americans reinforces the need for continued research into the factors associated with the adoption and maintenance of regular exercise. Many theories and models seek to explain the complex factors that influence exercise behavior and may be applied to elucidate the most important factors governing exercise adherence. Academic theories, such as the Theory of Planned Behavior (TPB; Ajzen, 1991), Social Cognitive Theory (SCT; Bandura, 1986), and the Transtheoretical Model (TTM, Prochaska & Velicer, 1997), attempt to explain behaviors similar to those related to the adoption of exercise. For example, the Theory of Planned Behavior (Ajzen, 1991) speculates that personal attitudes toward the behavior, subjective norms (the degree to which others perceive the behavior), and perceived behavioral control influence an
individual’s intention to engage in the behavior, and this intention is the best predictor of behavior. The SCT (Bandura, 1986) hypothesizes that behavior is influenced by behavioral, environmental, and cognitive factors. The TTM (Prochaska & Velicer, 1997) posits that behavior change occurs through a sequence of stages, termed stages of behavior change, that lead to increased adherence to the target behavior.

In addition to these theories, the Self-Determination Theory (SDT, Deci & Ryan, 1985) proposes that motivation is a factor for the adoption and maintenance of exercise. The SDT highlights three main forms of motivation: intrinsic motivation (engaging in a behavior because it is innately interesting or enjoyable), extrinsic motivation (motivation driven by a force outside the individual, such as health benefits, social recognition, or money), and amotivation (absence of motivation or intention to engage in a behavior) (Ryan & Deci, 2000). Along the continuum of motivation, amotivation and intrinsic motivation reside on opposite ends with four types of extrinsic motivation, termed “regulations,” between them (Ryan & Deci, 2000). The least self-determined regulation is external regulation, which is the process of engaging in a behavior to avoid punishment or to obtain an external reward. Next in the continuum is introjected regulation, which is engaging in a behavior to avoid feelings of guilt. The next level is identified regulation, which occurs when the behavior is motivated by personal goals. The most self-determined regulation is integrated regulation, which refers the process of engaging in a behavior to confirm one’s sense of self.

Several studies have argued that long-term adherence to exercise requires intrinsic motivation, where individuals exercise for the enjoyment and satisfaction of the activity with no regard for the extrinsic motivations such as perceived health and fitness benefits (Dishman, 1987; Ingledeew, Markland, & Medley, 1998; McAuley, Wraith, & Duncan, 1991; Wankel, 1993). Similarly, studies have shown that self-determined motivation, especially intrinsic and identified forms of motivation, is associated with exercise adoption and maintenance (Teixeira, Carraca, Markland, Silva, & Ryan, 2012). External regulation and amotivation have shown either no or negative associations with exercise adoption and maintenance (Lewis & Sutton, 2011; Roberts & Treasure, 2012).

Motivation literature provides the foundation for the development of commitment models as another way to examine continued involvement in a behavior (Carpenter, Scanlan, Simons, & Lobel, 1993). The Investment Model (Rusbult, 1980), which was originally developed to predict commitment to interpersonal relationships, uses forms of intrinsic and extrinsic motivation from the SDT. Commitment, in this model, is determined by three factors: satisfaction, investment, and availability of alternatives. Satisfaction, closely related to intrinsic motivation, has been described as the "positive versus negative affect experienced in a relationship" (Fu, 2011, p. 281). Investment has been referred to as the "resources that are put into the activity which cannot be recovered if participation is discontinued" (Scanlan, Carpenter, Schmidt, Simons, & Keeler, 1993, p. 3). Availability of alternatives, a type of extrinsic motivation, has been characterized by "the attractiveness of the most preferred alternative(s) to continued participation in the current endeavor" (Scanlan et al., 1993, p. 3). Commitment has been shown to be strongest when satisfaction and investments are greater than perceived alternatives. The
Investment Model has been expanded to analyze commitment as a predictor of sustained exercise and sport participation.

Scanlan et al. (1993) extended the Investment Model to encompass commitment to sport performance, developing the Sport Commitment Model (SCM) to explain peoples’ “desire and resolve to continue participation in sport over time” (Scanlan et al., 1993, p. 6). Commitment, in the SCM, is determined by enjoyment, involvement opportunities, involvement alternatives, social constraints, and personal investment. It is strongest when there is greater enjoyment, personal investments, and involvement opportunities, and lower involvement alternatives. Wilson et al. (2004) examined the practicality of the SCM as a framework for predicting commitment in the exercise context. They concluded that the SCM and determinants of commitment adequately predict commitment to exercise and are thus appropriate to use when analyzing exercise maintenance.

The Exercise Commitment Scale (ECS), developed using the frameworks of the Investment Model and SCM, has been used to explore the relationship between commitment and exercise behavior (Gabriele, Gill, & Adams, 2011; Wilson et al., 2004). Wilson et al. (2004) developed a multi-dimensional method to analyze commitment by separating it into two dimensions: “want to” commitment and “have to” commitment. In their model, “want to” commitment refers to an enthusiastic commitment that is volitional and influenced by satisfaction, whereas “have to” commitment refers to commitment that is reluctant and obligatory. “Have to” commitment is also influenced by social pressure, low investment size, and lack of alternatives. Additionally, commitment is based on six factors, referred to as determinants: satisfaction, social constraints, personal investment, involvement alternatives, social support, and involvement opportunities. Satisfaction has been defined as the “positive versus negative affect experienced in a relationship” (Fu, 2011, p. 281). Social constraints have been described as “social expectations or norms, which create feelings of obligation to remain in the activity” (Scanlan et al., 1993, p. 3). Personal investment has been expressed as “personal resources that are put into the activity which cannot be recovered if participation is discontinued” (Scanlan et al., 1993, p. 3), such as time, effort, energy, and money. Involvement alternatives are characterized as “the attractiveness of the most preferred alternative(s) to continued participation in the current endeavor” (Scanlan et al., 1993, p. 3). Social support refers the degree of perceived support received from other people (Wilson et al., 2004). Lastly, involvement opportunities are described as “valued opportunities that are present only through continued involvement” (Scanlan et al., 1993, p. 4).

Wilson et al. (2004) initially analyzed how these two commitment dimensions, “want to” and “have to,” relate to exercise behavior using the SCM, utilizing measures of exercise commitment and frequency of exercise behavior. Gabriele et al. (2011) continued the exercise commitment research and assessed how well the two dimensions of exercise commitment (“want to” and “have to” commitment) and the determinants of the Investment Model (satisfaction, investments, and alternatives) predict physical activity behavior. Both studies found that satisfaction and personal investment were significant predictors of both “want to” and “have to” commitment. Alternatives were
positively correlated with “have to” commitment (Wilson et al., 2004) and negatively correlated with “want to” commitment (Gabriele et al., 2011). Gabriele et al. (2011) found that “want to” commitment increased as participants transitioned through the stages of exercise behavior change (SOC) (Prochaska & Velicer, 1997) from contemplation to maintenance. The trend was similar with “have to” commitment, yet did not show any increases in the action and maintenance stages. These trends suggest that individuals taking action to change a behavior or maintaining their behavior change have greater “want to” commitment than “have to” commitment. Both Wilson et al. (2004) and Gabriele et al. (2011) found that ‘want to” commitment was related to exercise behavior, exercise frequency, and the amount of time spent in physical activity. These findings further validate that “want to” commitment appears to be salient for predicting exercise and physical activity behavior maintenance.

This study focuses on fitness boot camps, which are one of the top current exercise trends and on the list of top 10 trends in 2009 (American Council on Exercise (ACE), 2008; Michaels, 2013). Fitness boot camp is a style of circuit training that removes exercise from the traditional gym environment and instead utilizes the outdoors, parks, or inside spaces to conduct training sessions. Boot camp incorporates running, interval training, and weight training as primary forms of exercise. The boot camp workout can be tailored to all ages and fitness levels, and modifications can be provided to those at lower fitness levels (Saremi, 2011). The boot camp company used in this study primarily uses daily deal websites to market its services and thus has two different participant sets. These two sets include daily deal members, whose memberships are limited, one-time offers, that last for 3 or 6 weeks, and regular paying members, whose memberships are renewable and last for 1, 3, 6, or 12 months.

The current study investigates the relationship between daily deals and exercise participation and adherence. Daily deals are the social media version of coupons, an advertising tool for businesses to attract new customers. Internet-based daily deal websites, such as Groupon® and LivingSocial®, feature deals on many products and services. Health and fitness deals are relatively popular, shown by profitability in 69.3% of the deals, as opposed to 44.2% for restaurants and bars (Odell, 2012). Even though it appears that less than 10% of deal customers become returning customers or members (Graham, 2012; Grant, 2012), businesses profit and grow and, therefore, continue to use daily deal services (Goldman, 2010). Daily deals appear to act as extrinsic motivators, influencing customers to redeem a service because of the reduce price instead of innate personal interest. This is consistent with the small percentage of initial daily-deal users who become returning customers. Because health and fitness deals are popular and appear to bring new customers to fitness programs, it is worthwhile to explore the potential influence of these deals on exercise behavior and maintenance.

The purpose of this study was to examine the relationship between the use of daily deals and types of commitment (“want to” and “have to”) outlined by the SCM. This study analyzed the proportion of “want to” versus “have to” commitment exhibited by participants by examining boot camp programs that use daily deals for marketing purposes. Assuming that daily deals are extrinsic motivators, as evidenced by the large number of participants who drop out at the end of their trial period, it was hypothesized
that individuals who have recently redeemed daily deals to participate in fitness boot camp would have lower “want to” commitment and greater “have to” commitment than regular paying participants. Because high “want to” commitment has been shown to correspond to greater exercise adherence and intrinsic motivation, it was also predicted that regular paying boot camp members would have a higher “want to” commitment compared to daily deal users.

Method

Participants

Participants were recruited from an indoor fitness boot camp company offering 14 boot camp classes in five California cities. In order to gain participants and members, this company primarily uses daily deals to market its services. The offers in daily deals are typically 1 month of boot camp for $25, which equates to a 90% savings from the standard monthly rate. The daily deals are distributed through Groupon®, LivingSocial®, AmazonLocal®, as well as other daily deal websites and are available approximately every 9 weeks on each website. The release of the deals rotates among the available daily deal websites in order to reach the largest number of potential customers. After the term of reduced price, individuals must either pay the regular prices or discontinue classes. Only one daily deal is allowed per person.

A total of 154 respondents completed the survey. Four participants were excluded due to incomplete questionnaires, resulting in 150 participants. The participants included regular paying members and those who had recently redeemed a daily deal or coupon. Overall, 67.3% of participants were regular paying members. Participants ranged in age from 19 to 65 years ($M = 36, SD = 10$). Seventy-eight percent were female. The ethnic makeup of the sample was 48.7% Non-Hispanic White, 32.0% Asian or Asian American, 10.0% Hispanic or Latino, 3.3% Hawaiian or other Pacific Islander, 2.0% Black or African American, 0.7% American Indian or Alaskan Native, 2.7% identified with more than one ethnicity, and 0.7% declined to state. Participants were informed prior to the study that their participation was voluntary and that all information provided would remain confidential.

Measures

Demographic and Membership Status Questionnaire. A questionnaire created by the researcher was used to gain demographic information, including age, gender, ethnicity, and membership status. Membership status assessed whether participants were regular paying members or customers using daily deals.

Exercise Commitment Scale (ECS). The 34-item Exercise Commitment Scale (Wilson et al., 2004) assesses two dimensions, “want to” and “have to” commitment, and six determinants of exercise commitment (satisfaction, social constraints, personal investment, involvement alternatives, social support, and involvement opportunities).
Items for this assessment were compiled from the work of Scanlan and colleagues (1993) and further implemented and modified by Wilson et al. (2004) and Gabriele et al. (2011). Commitment was measured using nine items: six items to assess “want to” commitment (e.g., “I am committed to keep exercising”) and three items to assess the “have to” dimension (e.g., I feel obligated to continue exercising). The determinants were assessed using specific items, such as personal investments (3 items; e.g., "I have invested a lot of time into exercising"), satisfaction (3 items; e.g., "I find exercise to be very rewarding"), and involvement alternatives (3 items; e.g., "Compared to exercise there are things I could do which would be more enjoyable") (Gabriele et al., 2011; Wilson et al., 2004). Participants responded to each item on a 10-point Likert scale anchored at the extremes of 1 (“Not at all true for me”) and 10 (“Completely true for me”). Scores for items were averaged to give a single score for each dimension and determinant. Additionally, a confirmatory factor analysis was conducted to validate the factor structure of this measurement tool.

**Procedure**

The University’s Institutional Review Board approved all measures and procedures. Permission was obtained from the boot camp owner and instructors to recruit participants from boot camp classes. Following an introduction by the instructors, the researcher made an announcement at the beginning of the boot camp session inviting the participants to join the study examining commitment to boot camp exercise and potential influences of daily deals. Questionnaires were distributed after the class, allowing participants time to make a decision about volunteering for the study. A majority of the participants at each boot camp session volunteered to participate. Following the boot camp sessions, those participants who opted to volunteer were given the informed consent form and asked to read it, acknowledging comprehension and voluntary participation. Once the informed consent was read and returned to the researcher, the participant completed a survey packet containing demographic questions, questions regarding boot camp membership, and the ECS. The survey packet took approximately 5-7 minutes to complete. Participants returned the packet to the researcher upon completion. In order to obtain the greatest number of participants, the researcher attended five boot camp sessions at each of the two locations and at each time slot the class was offered.

**Statistical Analyses**

All statistical analyses were calculated using IBM® SPSS Statistics 20. A confirmatory factor analysis was conducted to verify the multidimensional factor structure of commitment, want to commitment and have to commitment, and the commitment determinants measured in the ECS are consistent with the literature. Following this, a Pearson correlation analysis was conducted for all of the study variables (age, gender, membership status, commitment types, and commitment determinants) in order to identify relationships that might exist between the variables. A multiple regression
analysis was used to predict the relationship between membership status and age, and “want to” commitment. Finally, a discriminant function analysis was conducted to predict group membership from the study variables (age, “want to” commitment, “have to” commitment, satisfaction, social constraints, personal investment, involvement alternatives, social support, and involvement opportunities). The significance level was set at $p < 0.05$.

## Results

### Confirmatory Factor Analysis

The current study validated the factor structure of both commitment determinants (satisfaction, involvement alternatives, social support, social constraints, personal investments, and involvement opportunities) and commitment dimensions (“want to” and “have to”) from the ECS, based on a confirmatory factor analysis. The results were consistent with the factor analyses conducted by Gabriele et al. (2011) and Wilson et al. (2004) and thus support the use of the ECS as a reliable tool for measuring commitment.

### Pearson Correlation Analysis

Pearson product-moment correlation coefficients (Table 1) were computed to assess the relationships between age, gender, membership status, commitment type, and commitment determinants. The correlation results revealed that the determinants of satisfaction, personal investment, social support, and involvement opportunities were positively correlated with "want to" commitment. Involvement alternatives were negatively correlated with “want to” commitment. All determinants were positively correlated with “have to” commitment, except involvement alternatives. Additionally, membership status was positively correlated with age, “want to” commitment, personal investment, and social support. Personal investment, social support, and involvement opportunities were positively correlated with satisfaction, whereas involvement alternatives negatively correlated with satisfaction.
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<td>1. Age</td>
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<td>2. &quot;Want to&quot;</td>
<td></td>
<td>0.168*</td>
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<td>3. &quot;Have to&quot;</td>
<td>0.024</td>
<td>0.493**</td>
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<td>commitment</td>
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<td>4. Satisfaction</td>
<td>-0.011</td>
<td>0.578**</td>
<td>0.337**</td>
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<td>5. Social constraints</td>
<td>-0.081</td>
<td>0.070</td>
<td>0.280**</td>
<td>0.018</td>
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<td>6. Personal investment</td>
<td>0.095</td>
<td>0.499**</td>
<td>0.393**</td>
<td>0.364**</td>
<td>0.184*</td>
<td></td>
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<tr>
<td>7. Involvement alternatives</td>
<td>0.099</td>
<td>-0.189*</td>
<td>0.050</td>
<td>-0.278**</td>
<td>0.154</td>
<td>0.042</td>
<td></td>
<td></td>
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<td>8. Social support</td>
<td>-0.102</td>
<td>0.389**</td>
<td>0.295**</td>
<td>0.391**</td>
<td>0.398**</td>
<td>0.279**</td>
<td>-0.102</td>
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<tr>
<td>9. Involvement opportunities</td>
<td>-0.055</td>
<td>0.630**</td>
<td>0.306**</td>
<td>0.670**</td>
<td>0.080</td>
<td>0.451**</td>
<td>-0.228**</td>
<td>0.505**</td>
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<td>10. Gender</td>
<td>-0.084</td>
<td>0.047</td>
<td>0.084</td>
<td>0.023</td>
<td>0.028</td>
<td>0.074</td>
<td>0.008</td>
<td>-0.066</td>
<td>-0.004</td>
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<td>11. Membership type</td>
<td>0.197*</td>
<td>0.261**</td>
<td>0.099</td>
<td>0.119</td>
<td>0.111</td>
<td>0.442**</td>
<td>-0.056</td>
<td>0.166*</td>
<td>0.154</td>
<td>-0.095</td>
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*Note. The numbers along the top of the graph correspond with the numbered study variables

* p < 0.05

** p < 0.01
Multiple Regression Analysis

The multiple regression model analyzed the determinants of the ECS (satisfaction, social constraints, personal investment, involvement alternatives, social support, and involvement opportunities), membership status, and age as predictors of “want to” commitment, and yielded $R^2 = 0.53$, $F(8, 141) = 19.76, p < 0.01$. As seen in Table 2, involvement opportunities, satisfaction, and personal investment were the strongest predictors of “want to” commitment. All of the commitment determinants correlated with “want to” commitment except social constraints. Membership status and age also predicted “want to,” although age was not as strong a predictor.

Table 2 Summary Statistics, Correlations, and Regression Weights from the Regression Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Correlation with &quot;want to&quot; commitment</th>
<th>b</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Want to” commitment</td>
<td>8.45</td>
<td>1.31</td>
<td>0.58***</td>
<td>0.24</td>
<td>0.23</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>8.93</td>
<td>1.25</td>
<td>0.07</td>
<td>-0.01</td>
<td>-0.14</td>
</tr>
<tr>
<td>Social constraints</td>
<td>3.10</td>
<td>2.19</td>
<td>-0.19*</td>
<td>-0.05</td>
<td>-0.07</td>
</tr>
<tr>
<td>Personal investment</td>
<td>7.42</td>
<td>2.27</td>
<td>0.50***</td>
<td>0.13</td>
<td>0.22</td>
</tr>
<tr>
<td>Involvement alternatives</td>
<td>4.90</td>
<td>1.90</td>
<td>-0.19*</td>
<td>-0.05</td>
<td>-0.07</td>
</tr>
<tr>
<td>Social support</td>
<td>7.88</td>
<td>1.92</td>
<td>0.39***</td>
<td>0.06</td>
<td>0.09</td>
</tr>
<tr>
<td>Involvement opportunities</td>
<td>8.41</td>
<td>1.19</td>
<td>0.63***</td>
<td>0.36</td>
<td>0.33</td>
</tr>
<tr>
<td>Membership status</td>
<td>0.68</td>
<td>0.47</td>
<td>0.26**</td>
<td>0.67</td>
<td>0.24</td>
</tr>
<tr>
<td>Age</td>
<td>35.76</td>
<td>10.03</td>
<td>0.17*</td>
<td>0.02</td>
<td>0.12</td>
</tr>
</tbody>
</table>

Note. ^ coded as 0=daily deal member and 1=regular paying member
* $p < .05$ ** $p < .01$ ***$p < .001$

Discriminant Function Analysis

A discriminant function analysis (Table 3) was conducted to differentiate between membership status of boot camp participants. Predictor variables were age, “want to” commitment, “have to” commitment, satisfaction, social constraints, personal investment, involvement alternatives, social support, and involvement opportunities. The significant factor was personal investment (0.947), with smaller standardized coefficients shown for and age (0.346), “want to” commitment (0.248) and social support (0.214). Because personal investment showed the greatest contribution, further analysis was conducted to
investigate which individual personal investment item (time, effort, energy, and money) from the ECS had the greatest effect. This analysis suggested that money and time were strongest among the regular paying members. The discriminant function revealed a significant association between membership status and all predictors, accounting for 25.4% of between-group variability, although closer analysis of structure matrix revealed only one significant predictor, personal investment (standardized coefficient = 0.947). Overall, the cross-validated classification showed that 70.7% of participants were correctly classified.

Table 3  Standardized Canonical Coefficients and Structure Weights from the Discriminant Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized Coefficients</th>
<th>Structure Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.346</td>
<td>0.338</td>
</tr>
<tr>
<td>Want to Commitment</td>
<td>0.248</td>
<td>0.464</td>
</tr>
<tr>
<td>Have to Commitment</td>
<td>-0.28</td>
<td>0.17</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>-0.143</td>
<td>0.206</td>
</tr>
<tr>
<td>Social constraints</td>
<td>0.125</td>
<td>0.202</td>
</tr>
<tr>
<td>Personal investment</td>
<td>0.947</td>
<td>0.843</td>
</tr>
<tr>
<td>Invest time</td>
<td>0.553</td>
<td>0.788</td>
</tr>
<tr>
<td>Invest effort</td>
<td>0.255</td>
<td>0.491</td>
</tr>
<tr>
<td>Invest energy</td>
<td>-0.520</td>
<td>0.405</td>
</tr>
<tr>
<td>Invest own money</td>
<td>0.723</td>
<td>0.898</td>
</tr>
<tr>
<td>Involvement alternatives</td>
<td>-0.244</td>
<td>-0.108</td>
</tr>
<tr>
<td>Social support</td>
<td>0.214</td>
<td>0.294</td>
</tr>
<tr>
<td>Involvement opportunities</td>
<td>-0.252</td>
<td>0.268</td>
</tr>
</tbody>
</table>

Discussion

This study examined the relationship between daily deals and types of commitment exhibited by fitness boot camp participants. Daily deals offer a way for participants to exercise at a reduced price, to try fitness boot camps at a bargain, or to experiment with various forms of exercise with minimal investment. All of these could be considered ways to respond to extrinsic motivators in the exercise context. According to the SDT
(Deci & Ryan, 1985), extrinsic motivation corresponds to greater “have to” commitment among these participants. Since daily deal participants have a greater than 90% attrition rate (Goldman, 2010), it appears that they are not at the stage of exercise maintenance (Prochaska & Velicer, 1997). According to the SCM (Scanlan et al., 1993), it is expected that these participants will have a relatively low “want to” commitment.

In the current study, daily deals participants appeared to have less “want to” commitment than the regular paying members, which was expected. However, the “want to” commitment reported by daily deal participants was greater than anticipated given the low percentage of returning customers reported in the daily deal literature. Regardless of reduced priced coupons, daily deal participants appeared to have a functional and innate desire to participate in this form of exercise. It is plausible that participants used these deals as a form of identified regulation, which is a form of extrinsic motivation stimulated by personal goals. It did not appear that participants used external regulation, also a form of extrinsic motivation, which is motivation to participate in order to obtain a reward (Ryan & Deci, 2000). Along the extrinsic motivation continuum, identified regulation is a more self-determined regulation and is closer to intrinsic motivation than external regulation.

Correlation of Study Variables

Involvement alternatives were negatively correlated with “want to” commitment, which differed slightly from the findings of Gabriele et al. (2011) and Wilson et al. (2004) who showed that involvement alternatives were positively correlated with “have to” commitment. Involvement alternatives did not correlate with “have to” commitment in this study. These results indicated that boot camp participants with fewer appealing alternatives had slightly more "want to" commitment, which further suggested that individuals who did not have enticing alternative exercise opportunities were more likely to continue the activity in which they were currently engaged, in this case fitness boot camp.

Consistent with previous research (Gabriele et al., 2011; Wilson et al., 2004), personal investment, social support, and involvement opportunities positively correlated with satisfaction. Boot camp participants who perceived greater satisfaction with the activity were more likely to have invested more time, money, effort, or energy into the activity. These satisfied participants also reported feeling supported by people around them, such as family or friends. Furthermore, these individuals felt that the activity provided them with several opportunities to do something exciting, relieve stress, improve health and fitness, or improve physical skills. However, the participants who perceived more attractive alternatives to exercise were less satisfied with exercise. The positive correlation of satisfaction with “have to” and “want to” commitment confirms the role of satisfaction as a determinant of commitment.

There was a positive correlation between involvement opportunities and “want to” commitment. Participants indicated that this style of exercise had provided them with either an opportunity to do something exciting, an opportunity to relieve any potential stress, an opportunity to have a good time, an opportunity to spend time with friends, or
an opportunity to improve their health and fitness or physical skills. These opportunities, along with the style of exercise, kept these individuals feeling a desire to participate.

Satisfaction, social constraints, social support, personal investment, and involvement opportunities positively correlated with “have to” commitment. The weak correlation between satisfaction and “have to” commitment suggested that even though these participants feel a sense of obligation or duty to exercise, they still had feelings of satisfaction related to the exercise. The positive correlation between social constraints and “have to” commitment was anticipated. Those participants who feel as though they would be viewed as a quitter or feel pressured from others to exercise would be expected to feel obligated to exercise. Similarly, those who reported feeling supported by others have also reported exercising out of obligation (Wilson et al., 2004). It appears that regardless of individuals' feelings support or pressure from others, there was still a sense of responsibility to exercise. Furthermore, personal investment positively correlated with “have to” commitment, which suggested those individuals who felt as though they invested much of their money, time, effort, or energy were obligated to exercise. In particular, it is possible that those who reported spending money for membership fees felt as though they had to exercise since they had already paid for their daily deal or membership. Lastly, involvement opportunities were positively correlated with “have to” commitment, which was unexpected and suggested that regardless of additional opportunities provided by the exercise, it still felt like a duty and obligation.

There was a positive correlation between “want to” commitment and “have to” commitment. As seen through previous research, satisfaction and investments are positively correlated with both types of commitment (Gabriele et al., 2011). With this relationship between the two determinants and commitment type, it suggests that these two dimensions of commitment are not completely unrelated. It indicated that participants identified as having both forms of commitment, but in varying degrees.

“Want To” Commitment

A Pearson correlation analysis and a multiple regression analysis were used to explore the relationship between membership status, age, and the commitment determinants (satisfaction, social constraints, personal investment, involvement alternatives, social support, and involvement opportunities) and “want to” commitment. All of the commitment determinants correlated with “want to” commitment except social constraints. This finding is consistent with the previous literature highlighting the correlation of commitment determinants and “want to” commitment (Gabriele et al., 2011; Wilson et al., 2004). Individuals with greater satisfaction, personal investment, social support, and involvement opportunities reported having greater “want to” commitment. Additionally, participants with fewer exercise or personal alternatives reported having greater “want to” commitment. These results also showed that regular paying members tended to have greater “want to” commitment. In terms of predicting “want to” commitment, involvement opportunities, satisfaction, and personal investment were the strongest predictors. Membership status and age were also predictors of “want to” commitment, but not as strong as the commitment determinants.
Membership Status

The discriminant function analysis highlighted the factors that had greater weight in distinguishing between the two membership groups, regular paying members and daily deal members. The factors with the greatest weight were personal investment and age. The ECS defines personal investment in terms of time, effort, energy, and money, and upon further analysis, regular paying members reported investing more money and time into exercising. Daily deal customers purchased the coupons at a significantly lower price, so regular paying members had a greater financial investment, which may have been enough to explain the significance. The concept of time in the ECS was not clearly defined, and thus does not distinguish between time spent exercising per week or length of ongoing boot camp participation. Regular paying members in this study were slightly older, with an average age of 37.2 years, while the daily deal participants were 33.0 years. The study did not gather information that would explain why the regular paying members were older.

Theoretical and Practical Implications

This study supported the ECS as a measurement tool for understanding commitment to exercise. Findings were consistent with previous research indicating that satisfaction and personal investment were the greatest predictors of a volitional commitment (Gabriele et al., 2011; Wilson et al., 2004). Since Wilson et al. (2004) concluded that “want to” commitment is the only predictor of greater exercise frequency, it suggests that attracting people to an exercise program using daily deals can lead to continued exercise participation. From a business marketing perspective, the data showed that the majority of boot camp members, 82.6%, started out using a daily deal. It appears that the deals are beneficial for generating longer-term business and maintaining or improving commitment to this specific exercise program. However, it seems important to encourage participants to become regular paying members. In order to retain customers, exercise programs, such as boot camp, should continue to foster an enjoyable, energizing, and inclusive exercise environment. Participants who are influenced by this environment may feel more satisfied and invested in the program.

Limitations of the Study and Directions for Future Research

This study had several limitations. Less than 20% of respondents available for this study found the boot camp through means other than daily deals. Daily deals were hypothesized to act as extrinsic motivators, leading to “have to” commitment, which does not predict increased exercise frequency and behavior maintenance. The small sample size of non-daily deal users prevented the study from examining other motivators to exercise. Thus, an analysis of whether non-daily deal users had a commitment type distinct from daily deal users was not possible. Additionally, this study was designed as
a cross-sectional study, which by its nature cannot imply causal relationships. A longitudinal study analyzing the transition from daily deal customer to regular paying member could further examine a possible shift in commitment type. Further research is needed to examine whether the daily deals attract individuals who already have the personal investment and commitment to exercise, or whether the deals bring in individuals who then develop commitment through the introductory trial period. A longitudinal study could further analyze long-term exercise behavior as a measure of behavior maintenance. Analyzing “want to” commitment, including individual attendance data, could help quantify participation. Lastly, this study only focused on one fitness program advertised with daily deals. Daily deals are also available for other types of exercise, such as yoga, dance fitness and zumba, pilates, mixed martial arts (MMA) or Krav Maga, Jiu-Jitsu, kickboxing, and general fitness classes. It would be interesting to examine aspects of motivation, commitment, and adherence among those programs.

Conclusion

Daily deals, as an advertising tool, have been shown to encourage individuals to try new products or services, especially fitness deals. Inspired by the relatively high procurement rates of fitness deals and the need to convince more people to exercise on a regular basis, this study examined the relationship between fitness daily deals and motivation. As daily deal coupons are a recent phenomenon, this is the first study to explore the impact of daily deals on exercise behavior. As long as the deals bring in enough new customers to make businesses profitable, this marketing technique will continue to be used. As new customers redeem each round of deals, a few will decide to become paying members. It is apparent that a sense of personal investment and “want to” commitment are key for continued exercise participation and returning service. Further research is needed to examine whether the daily deals attract individuals who already have the personal investment and commitment, or if the deals bring in individuals who develop that commitment through the introductory trial period. Ultimately, if people using daily deals can be motivated to become frequent exercisers, then promoting daily deal use for fitness programs may reduce the percentage of people leading sedentary lifestyles.
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CHAPTER 3: EXTENDED SUPPORT MATERIAL
Introduction

Physical inactivity now rivals tobacco use as the leading modifiable cause of death in the United States (Mokdad, Marks, Stroup, & Gerberding, 2004) and, according to the 1997 National Health Interview Survey, 40% of U.S. adults are sedentary (Centers for Disease Control and Prevention (CDC), 2010). In accordance with these staggering statistics, data also show that Americans do not achieve the recommended physical activity guidelines (US Department of Health and Human Services (USDHHS), n.d.).

Current physical activity guidelines suggest that adults should engage in 150 minutes a week of moderate-intensity, or 75 minutes a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic physical activity (USDHHS, 2008).

The sedentary lifestyle of many Americans reinforces the need for continued research into the factors associated with the adoption and maintenance of regular exercise. Many theories and models seek to explain the complex factors that influence exercise behavior and may be applied to elucidate the most important factors governing exercise adherence. Academic theories, such as the Theory of Planned Behavior (TPB; Ajzen, 1991), Social Cognitive Theory (SCT; Bandura, 1986), and the Transtheoretical Model (TTM, Prochaska & Velicer, 1997), attempt to explain behaviors similar to those related to the adoption of exercise. For example, the Theory of Planned Behavior (Ajzen, 1991) speculates that personal attitudes toward the behavior, subjective norms (the degree to which others perceive the behavior), and perceived behavioral control influence an individual’s intention to engage in the behavior, and this intention is the best predictor of
behavior. The SCT (Bandura, 1986) hypothesizes that behavior is influenced by behavioral, environmental, and cognitive factors. The TTM (Prochaska & Velicer, 1997) posits that behavior change occurs through a sequence of stages, termed stages of behavior change (SOC): precontemplation (no intention of changing the behavior in the next 6 months), contemplation (intention to start behavior change in next 6 months), preparation (taking action to change the behavior), action (in the processing of changing the behavior), maintenance (sustaining behavior change for at least 6 months).

In addition to these theories, the Self-Determination Theory (SDT, Deci & Ryan, 1985) proposes that motivation is a factor for the adoption and maintenance of exercise. The SDT highlights three main forms of motivation: intrinsic motivation (engaging in a behavior because it is innately interesting or enjoyable), extrinsic motivation (motivation driven by a force outside the individual, such as health benefits, social recognition, or money), and amotivation (absence of motivation or intention to engage in a behavior) (Ryan & Deci, 2000). Along the continuum of motivation, amotivation and intrinsic motivation reside on opposite ends with four types of extrinsic motivation, termed “regulations,” between them (Ryan & Deci, 2000). The least self-determined regulation is external regulation, which is the process of engaging in a behavior to avoid punishment or to obtain an external reward. Next in the continuum is introjected regulation, which is engaging in a behavior to avoid feelings of guilt. The next level is identified regulation, which occurs when the behavior is motivated by personal goals. The most self-determined regulation is integrated regulation, which refers the process of engaging in a behavior to confirm one’s sense of self.
Several studies have argued that long-term adherence to exercise requires intrinsic motivation, where individuals exercise for the enjoyment and satisfaction of the activity with no regard for the extrinsic motivations such as perceived health and fitness benefits (Dishman, 1987; Ingledew, Markland, & Medley, 1998; McAuley, Wraith, & Duncan, 1991; Wankel, 1993). Similarly, studies have shown that self-determined motivation, especially intrinsic and identified forms of motivation, is associated with exercise adoption and maintenance (Teixeira, Carraca, Markland, Silva, & Ryan, 2012). External regulation and amotivation have shown either no or negative associations with exercise adoption and maintenance (Lewis & Sutton, 2011; Roberts & Treasure, 2012).

Motivation literature provides the foundation for the development of commitment models as another way to examine continued involvement in a behavior (Carpenter, Scanlan, Simons, & Lobel, 1993). The Investment Model (Rusbult, 1980), which was originally developed to predict commitment to interpersonal relationships, uses forms of intrinsic and extrinsic motivation from the SDT. Commitment, in this model, is determined by three factors: satisfaction, investment, and availability of alternatives. Satisfaction, closely related to intrinsic motivation, has been described as the “positive versus negative affect experienced in a relationship” (Fu, 2011, p. 281). Investment has been referred to as the “resources that are put into the activity which cannot be recovered if participation is discontinued” (Scanlan, Carpenter, Schmidt, Simons, & Keeler, 1993, p. 3). Availability of alternatives, a type of extrinsic motivation, has been characterized by “the attractiveness of the most preferred alternative(s) to continued participation in the current endeavor” (Scanlan et al., 1993, p. 3). Commitment has been shown to be
strongest when satisfaction and investments are greater than perceived alternatives. The Investment Model has been expanded to analyze commitment as a predictor of sustained exercise and sport participation.

Scanlan et al. (1993) extended the Investment Model to commitment to sport performance, developing the Sport Commitment Model (SCM) to explain peoples’ “desire and resolve to continue participation in sport over time” (Scanlan et al., 1993, p. 6). Commitment, in the SCM, is determined by enjoyment, involvement opportunities, social constraints, involvement alternatives, and personal investment. The SCM defines two type of commitment: “want to” and “have to” commitment. These types of commitment have been analyzed in both the exercise and physical activity setting (Gabriele, Gill, & Adams, 2011; Wilson Rodgers, Carpenter, Hall, Hardy, & Fraser, 2004). Gabriele et al. (2011) define “want to” commitment as an enthusiastic, volitional commitment, which is influenced by satisfaction level. They define “have to” commitment as reluctant and obligatory, and influenced by social pressure and lack of alternatives. Wilson et al. (2004) initially analyzed these two commitment types and exercise behavior using the SCM, utilizing measures of exercise commitment and frequency of exercise behavior. They showed that all of the Investment Model constructs were significant predictors of commitment. Gabriele et al. (2011) continued this research and assessed the two types of exercise commitment and the determinants of the Investment Model (satisfaction, investments, and alternatives) in predicting physical activity behavior. They aimed to “assess whether the Investment Model predicts time spent in leisure-time physical activity over a 7-day period as well as stage of exercise
behavior change (SOC)” (Gabriele et al., 2011, p. 421). They found that “want to” commitment was related to SOC and time spent in physical activity. The commitment determinants of satisfaction and investments were positively correlated with “want to” commitment, and all three determinants were also positively correlated with “have to” commitment. Both studies highlight the importance of “want to” commitment as a predictor of exercise and physical activity behavior. Ultimately, “want to” commitment appears to be salient for predicting physical activity behavior maintenance.

Internet-based daily deal websites, such as Groupon® and LivingSocial®, feature deals on local activities, restaurants, adventures, and gadgets. With these websites, merchants have an opportunity to reach a large number of customers. However, even with this large customer base, only a small percentage of those initial customers come back as returning customers (Graham, 2012; Grant, 2012). Survey data, collected between 2011-2012, indicated that the most popular deals were for products and services such as photography, tourism-related services, health and fitness services, doctor and dentistry services, and cleaning services (Odell, 2012; Smith, 2012). Since health and fitness deals are very popular, it is worthwhile to study whether daily deals influence exercise behavior and maintenance.

Fitness boot camps are one of the top exercise trends, and on the list of top 10 trends in 2009 (American Council on Exercise [ACE], 2008; Michaels, 2013). Fitness boot camp is a style of circuit training that removes exercise from the traditional gym environment and instead utilizes the outdoors, parks, or inside spaces to conduct exercise sessions. Boot camp incorporates running, interval training, and weight training as
primary forms of exercise. The boot camp workout caters to all ages and fitness levels. Modifications can be provided to those at lower fitness levels (Saremi, 2011).

Fit for Life Solutions is a fitness company that offers 14 boot camp classes in five California cities: Foster City, Fresno, San Jose, Redwood City, and Mountain View. To gain participants and members, Fit for Life Solutions uses daily deal websites to market its services. The offer provided by the daily deals for Fit for Life Solutions Boot Camp is 1 month of boot camp for $25, a 90% savings. The standard price for 1 month for this boot camp is $200. The daily deals are distributed through Groupon®, LivingSocial®, AmazonLocal®, along with other daily deal websites, and according to Roy Schuhmacher (R. Schuhmacher, personal communication, November 22, 2012), marketing specialist for Fit for Life Solutions, the daily deals are run approximately every 9 weeks (3 months) on the same daily deal website. The release of the deals is alternated among the available daily deal websites in order to reach the largest number of potential customers. Four to six hundred deals are typically purchased, and of those, 70% redeem the daily deal. Furthermore, from that 70% of new members trying out the service, 20% of participants who are introduced to the boot camp through daily deals continue and become paying members (R. Schuhmacher, personal communication, November 22, 2012).

Statement of Purpose

The purpose of this study is to determine the relationship of the daily deals and types of commitment exhibited by regular members and participants using daily deals in the boot camp context.
Significance of the Study

This study will determine the effect of the daily deals on types of commitment exhibited by regular members and participants using daily deals in the boot camp context. In terms of exercise adherence and physical activity behavior maintenance, “want to” commitment has been shown to be effective for predicting physical activity behavior (Gabriele et al., 2011). With this in mind, it is important to analyze the influence of daily deals on commitment type. Applying the SCM will help in analyzing commitment types of boot camp participants and the influence of daily deals.

Research Questions

1. What type of commitment do regular paying boot camp members exhibit?
2. What type of commitment do daily deal boot camp customers exhibit?
3. Do daily deals influence type of commitment among boot camp participants?

Delimitations

The study will be limited to the following participants:

1. Male and female participants who attend boot camp sessions at one of two Fit for Life Solutions locations in the San Francisco Bay Area (Mountain View and Foster City) between the ages of 20 and 60.

This study will use the following instruments:

1. Questionnaire assessing participants’ demographics and membership status.
2. Exercise Commitment Scale (Gabriele et al., 2011; Wilson et al., 2004).
Limitations

The limitations of this study will be as follows:

1. Only participants attending on at least one day that the questionnaire is distributed will be included.
2. The study sample will be limited to those who live close to the class location and can afford at least the discounted price of the boot camp program.
3. The study sample will be limited to those who are willing to complete the questionnaire.

Assumptions

1. The nature of the study will not influence respondents to try to bias their answers to indicate they have more commitment to exercise than they actually have.
2. Participants will give honest answers to questionnaires.

Definition of terms

1. *Boot camp* is a style of exercise including strength and cardiovascular training in a circuit-training format. It utilizes less equipment than the typical gym setting (Michaels, 2013; Porcari, Hendrickson, Foster, & Anders, 2008; Saremi, 2011).
2. *Daily deals*, also referred to as group buying websites, are one of the latest trends in Web commerce. Daily deals partner with local merchants to offer consumer products and services at a significantly reduced price on a condition
that a minimum number of buyers will make the purchase. Examples of daily deal websites include Groupon®, LivingSocial®, and AmazonLocal® (Wagdy, 2011).

3. “Have to” commitment refers to commitment that is reluctant, obligatory, and is influenced by social pressure and lack of alternatives (Gabriele et al., 2011).

4. *Involvement alternatives*, a component in the Investment Model and Sport Commitment model, are defined as “the attractiveness of the most preferred alternative(s) to continued participation in the current endeavor” (Scanlan et al., 1993, p. 3).

5. *Involvement opportunities*, a Sport Commitment Model component, are the “valued opportunities that are present only through continued involvement” (Scanlan et al., 1993, p. 4).

6. *Personal investments*, a component in the Investment Model and Sport Commitment model, are defined as “personal resources that are put into the activity which cannot be recovered if participation is discontinued” (Scanlan et al., 1993, p. 3).

7. *Physical activity* is defined as “any bodily movement produced by the contraction of skeletal muscles that results in a substantial increase over resting energy expenditure” (Thompson, Gordon, & Pescatello, 2010, p. 2).

8. *Satisfaction*, a component of the Investment Model, refers to the “positive versus negative affect experienced in a relationship” (Fu, 2011, p. 281).
9. *Sedentary* is the term used to describe individuals performing less than 25-30 minutes of physical activity per day (Pollock et al., 1998; World Health Organization [WHO], 1998).

10. *Social constraints*, a component of the Sport Commitment Model, are defined as “social expectations or norms, which create feelings of obligation to remain in the activity” (Scanlan et al., 1993, p. 3).

11. *Sport enjoyment*, a component of the Sport Commitment Model, is defined as “a positive affective response to the sport experience that reflects generalized feelings such as pleasure, liking, and fun” (Scanlan et al., 1993, p. 2).

12. “*Want to*” commitment is an enthusiastic commitment that is volitional and influenced by satisfaction (Gabriele et al., 2011).
Review of Literature

In order to better understand what has already been studied regarding commitment types and organized group exercise participation, a review of literature related to the subject of adoption and maintenance of physical activity was conducted. The topics were chosen because they include either a definition of commitment, apply to physical activity and/or sport performance, or utilize theories and models to assess commitment levels.

Commitment

Scanlan, Russell, Magyar, and Scanlan (2009) define commitment as “the psychological construct reflecting the desire and resolve to persist in an endeavor over time” (p. 686). This definition of commitment was developed through research on satisfaction in relationships and the interdependence theory (Kelley & Thibaut, 1978; Thibaut & Kelley, 1959). Rusbult and colleagues (1980; 1983) expanded the interdependence theory and study of relationships to formulate the Investment Model.

The Investment Model. Rusbult’s Investment Model (IM; Rusbult, 1980; 1983) is based on principles of interdependence theory (Kelley & Thibaut, 1978; Thibaut & Kelley, 1959). According to the interdependence theory, satisfaction with or attraction to a relationship is a function of outcome value of the relationship and comparison level (Thibaut & Kelley, 1959). The outcome value of the relationship is determined by the value and importance an individual associates with attributes, such as intelligence, sense of humor, and physical appearance, in the relationship (Rusbult, 1980). Comparison level refers to the standard that is expected in the relationship and is determined by past
experiences and comparison to other associations. In order to assess degree of satisfaction, individuals need to evaluate their present relationships in relation to the standard and the attraction to the association. An individual’s commitment to an association is partly “a function of the relationship outcome value and the outcome value of the individual’s best available alternative” (Rusbult, 1980, p. 174). Rusbult’s IM states that commitment is dependent on outcome values of the current relationship (satisfaction), alternatives, and investment.

Satisfaction is often interpreted as the degree to which a relationship is perceived as gratifying. Satisfaction is achieved when individuals feel that the benefits of being in the relationship outweigh the costs. Benefits in a relationship are factors that partners find enjoyable, such as social support, sense of humor, or sexual gratification. Costs refer to the attributes of either one’s partner or the relationship that are disliked. Some examples of costs include personality flaws, financial problems, or frequent conflicts (Impett, Beals, & Peplau, 2001).

Alternatives, another predictor of commitment, are “an individual’s subjective assessment of the rewards and costs that could be obtained outside the current relationship, including specific other partners, spending time with friends and family, or spending time alone” (Impett, et al., 2001, p. 313). Individuals who find appealing alternatives to their current relationship will leave and seek the alternative. However, if no alternatives are present, an individual will not feel as if there are better options and will continue in the current relationship.
The third predictor of commitment is investment size, which is “concrete or intangible resources attached to the partnership that would be lost or seriously diminished upon relationship dissolution” (Le & Agnew, 2003, p. 39). Examples of these resources include time, effort, money, emotions, and personal possessions.

According to the IM, commitment is greatest when an individual is satisfied and happy in a relationship, has no desirable alternatives, and has invested a great deal in the relationship. Conversely, a lack of commitment is a result of low satisfaction, appealing alternatives, and little investment in the current relationship.

**Investment Model and Relationship Commitment.** “The primary goal of the investment model is to predict the degree of commitment to and satisfaction with a variety of forms of ongoing association (e.g., romantic, friendship, business) with wide ranges of duration and involvement” (Rusbult, 1980, p. 173). Using a modified version of the IM and “the reconsideration of commitment subscale of the Utrecht–Management of Identity Commitments Scale” (Crocetti, Rubini, & Meeus, 2008; Meeus, 1996) for measuring relationship stability, Branje, Frijns, Finkenauer, Engels, and Meeus (2007) analyzed several aspects of commitment and stability in adolescent friendship. They used the IM (satisfaction, alternatives, and investments) to predict commitment in adolescents’ friendships. They assessed the change in determinants in concurrent relationships and relationships over time. Lastly, they considered possible age and gender differences in commitment and relationship stability. Branje et al. (2007) concluded that the IM determinants, satisfaction, quality of alternatives, and investments, predicted commitment in adolescent friendships. Furthermore, adolescents with fewer
alternatives were more likely to have a stable friendship as determined by naming the same best friend on a questionnaire one year after the initial questionnaire. Gender and age differences indicated that alternatives were more important for older adolescents (around 17 years old) and correlations of alternatives with satisfaction, commitment, and investments were stronger for girls than boys. Quality of alternatives was the only determinant of the IM that predicted friendship stability. One subscale of the Utrecht–Management of Identity Commitments Scale (Crocetti et al., 2008; Meeus, 1996) was used to measure the tendency to switch friends among adolescents who reported having a stable relationship. Adolescents who had higher levels of satisfaction, investments, and commitment, and who reported low quality of alternatives had a lower tendency to switch friends. Additionally, over time, higher quality of alternatives predicted stronger commitment, which, in turn, predicted a lower tendency to switch friends. This shows that quality of alternatives is an important variable among adolescents in predicting friendship stability.

Impett et al. (2001) used the IM (Rusbult, 1980; Rusbult, Martz, & Agnew, 1998) among married couples to predict commitment stability in martial relationships. Both partners in the relationship completed a questionnaire that assessed commitment, satisfaction, investment, and quality of alternatives. Satisfaction and quality of alternatives were both measured using a nine-point scale. Investment of money, time, and sharing personal relationships were assessed as investments. Commitment was captured using one question, “How likely is it that you and your partner will still be together five years from now?” (Impett et al., 2001, p. 317). Relationship stability was
assessed by asking if partners were still living together (full-time, part-time, or not). Consistent with Rusbult’s (1980; 1983) research, satisfaction, alternatives, and investments predicted commitment to the relationship and, according to Impett et al. (2001), there was no difference between husband and wife. In terms of relationship stability, initial commitment from both the husband and wife predicted couples staying together. These two studies show that satisfaction, alternatives, and investments are predictors of commitment in a variety of relationships. Furthermore, commitment to the relationship is a strong indicator of relationship stability.

**Investment Model and Career/Job Commitment.** In addition to its extensive use in understanding commitment and persistence in personal relationships (Branje et al., 2007; Impett et al., 2001; Rusbult et al., 1998), the IM has been used as the foundation in predicting commitment to medical regimens, careers (Fu, 2011; Putnam, Finney, Barkley, & Bonner, 1994; Rusbult & Farrell, 1983), and physical activity, exercise, and sport performance (Chu & Wang, 2012; Corbin, Nielson, Borsdorf, & Laurie, 1987; DeBate, Huberty, & Pettee, 2009; Gabriele et al., 2011; Wilson et al., 2004; Young & Medic, 2011).

Fu (2011) used the IM, along with the push-pull-mooring (PPM) framework (Bansal, Taylor, & James, 2005), to understand the precursors of career commitment of information technology (IT) professionals. Fu (2011) defined career commitment as “the extent to which someone identifies with and values his or her profession or vocation and the amount of time and effort spent acquiring relevant knowledge” (p. 279). The PPM framework is a central paradigm in migration literature (Bansal et al., 2005) and helps to
explain why people move from one geographic area to another. Push factors, also referred to as stressors, are the negative factors that make the original place less appealing (Bansal et al., 2005). Pull factors, also referred to as attractors, are positive factors that attract people (Bansal et al., 2005). Lastly, mooring variables refer to the personal and social factors that can either drive people away or keep them in their original place (Jackson, 1986; Lee, 1966). Linking the IM with the PPM, career satisfaction, attractive alternatives, and career investment act as push, pull, and mooring factors, respectively. Fu (2011) used a questionnaire to evaluate the following constructs: career commitment, career satisfaction, professional self-efficacy, availability of career alternatives, career investment, and threat of professional obsolescence. Push effects were found to be the strongest predictors of career commitment. Thus, IT professionals who reported greater satisfaction with their career had greater career commitment. Mooring factors were the second strongest predictors of career commitment. IT professionals who reported higher professional self-efficacy also reported higher career commitment. Pull factors, however, did not significantly predict career commitment. When comparing career attitudes of senior and junior IT professionals, Fu (2011) found that senior IT professionals were more driven by push factors, while junior IT professionals were driven by push effects and mooring effects. Thus, the most important determinant of career commitment was career satisfaction, followed by professional self-efficacy, threat of professional obsolescence, and career investment (Fu, 2011).

Rusbult and Farrell (1983) used the IM and its determinants to analyze job satisfaction, job commitment, and turnover. Specifically, Rusbult and Farrell (1983) had
four main foci: the use of IM model determinants in predicting job satisfaction and job
commitment for employees who stay and employees who leave their jobs; the changes in
IM determinants over time in being able to predict satisfaction and commitment; the
ways in which the IM determinants change over time for employees who stay or those
who leave; and the impact of changes in job commitment on job turnover. During the
longitudinal study, junior staff accountants and nurses were surveyed four times over one
year. They found that job costs and investment size had greater impact on job
commitment over time. For employees who stayed with their current job, job satisfaction
significantly correlated with reward value and cost value at each of the four time periods.
Investment size and cost value did not initially influence job commitment for these
employees, but it did show impact over time. Reward value and quality of alternatives
were significant influences on job commitment over time. For employees who left their
job, reward value, cost value, quality of alternatives, and investment size significantly
changed over time. Furthermore, these employees experienced a decrease in job rewards
and investment size while indicating increases in job costs and quality of alternatives.
These changes in commitment play an important role in influencing decisions to stay
with or leave current jobs. A decline in job commitment over time appeared to be the
primary mediator of job turnover.

These studies found that the satisfaction in the current environment was the single
most important predictor of career (or job) commitment. Without career (or job)
satisfaction, employees are more likely to leave their current position, increasing job
turnover.
Commitment to Sport Performance

Scanlan and colleagues (1993) define sport commitment as the desire and resolve to continue sport participation. The IM was expanded to include predicting commitment and continued participation in sport. Scanlan et al. (1993) extended the Investment Model to pertain to commitment to sport performance by developing the Sport Commitment Model (SCM). The six constructs of the SCM include commitment, enjoyment, involvement alternatives, involvement opportunities, personal investments, and social constraints. Enjoyment is a central construct and is the primary participation motive used in the formulation of this model. Sport commitment has been analyzed in swimming (Young & Medic, 2011), dance (Chu and Wang, 2012), and tennis performance (Casper & Stellino, 2008).

Young and Medic (2011) used the SCM to examine social influences and specific social sources related to sustained sport performance among Masters swimmers. The first aim of their study was to examine the relationships between social influence constructs of the SCM (social support and social constraints) and the two types of commitment (functional and obligatory). In addition, they focused on identifying the types of social influence (spouses, children, other family members; peers; exercise instructors/coaches; physicians; training mates; and sport club peers) and determined which of these social influences significantly predicted functional and obligatory commitment. Five of the eight social influences, listed above, were found to influence type of commitment. Perceived constraints from children significantly predicted both functional and obligatory commitment. Perceived constraints and pressure sources
(spouses and training mates) predicted obligatory commitment. With regard to social support, perceived support from coaches was related to higher levels of commitment. Lastly, lower levels of pressure and higher levels of support from a health professional were slightly associated with lower obligatory commitment levels. The second aim of their study was to carry over the social influences from the first analysis (children, spouse, training partners, coach, and health professionals) and examine their direct role in the models for functional and obligatory commitment. They found that enjoyment, personal investments, social constraints from Masters swimmers’ children, and investment alternatives predicted functional commitment. Involvement opportunities; involvement alternatives; social constraints from the swimmers’ spouse, their own children, and training partners; and social support from health professionals predicted obligatory commitment. The researchers suggested that since functional commitment is the best predictor of continued sport performance, interventions designed toward retaining participants should focus on ways to increase support from health professionals and reduce social pressures from family members and training partners.

Chu and Wang (2012) analyzed factors relating to continued sport performance among dancers. Sport commitment and related factors such as sport experience, participation level, and method of participation were the focus of their study among college-aged ballroom dance competitors. Using the Sport Commitment Scale for Adult Dance Sport Competitors, the researchers aimed to understand any potential differences in reported sport commitment and the associated precursors with regard to sport experience, level of participation, and participation method. All SCM determinants, as
well as overall sport commitment, were significant for dance sport experience. Overall commitment, social support, and enjoyment were significant for the level of participation. Chu and Wang (2012) ultimately concluded that the dancers continued dance participation because of commitment, rather than solely for enjoyment. Involvement opportunities and social support were reported to be key factors in continued performance.

Casper and Stellino (2008) assessed the commitment of recreational tennis participants using the sport commitment model, specifically the relationship between demographic segments, such as age, sex, income, and skill level, and the determinants of the sport commitment model. They used a SCM-based questionnaire, which related to tennis performance and pertained to adult participants. In different age groups, there were different levels of commitment, involvement alternatives, and social constraints. The two youngest groups (19-34 years and 35-44 years) reported lower commitment and higher involvement alternatives. The youngest group reported significantly more social constraints than the older age groups. All age groups reported enjoyment, involvement opportunities, and personal investments as significant predictors of commitment. There was no significant difference in sport commitment among males and females. Females reported significantly higher levels of enjoyment and personal investments, while male tennis participants reported higher levels of social support. No differences were found between the SCM constructs and income categories or skill level. Lastly, enjoyment was the strongest predictor of commitment across all respondents.
Commitment, specifically “want to” commitment, is the most salient predictor of continued performance in a particular sport. Even with varying levels of commitment determinants reported by athletes of different ages and sex, involvement opportunities, personal investment, social support, and enjoyment are key factors influencing commitment. Depending on the sport and age of participants, it is suggested that sport programs focus on ways to increase commitment, whether it is to increase social support among participants or increase involvement opportunities within the sport.

**Commitment to Physical Activity**

Corbin and colleagues (1987) described commitment to physical activity as the individual's dedication to begin and continue to be involved in regular physical activity. The IM (Rusbult, 1980; 1983), Exercise Commitment Scale (ECS; Gabriele et al., 2011; Wilson et al., 2004), and Commitment to Physical Activity Scale (CPAS; Corbin et al., 1987) have been used to assess commitment within the physical activity context.

**Exercise Commitment Scale.** Wilson et al. (2004) developed a multi-dimensional method to analyze commitment. The two dimensions of commitment include “want to” and “have to” commitment. “Want to” commitment refers to an enthusiastic commitment that is volitional and influenced by satisfaction. “Have to” commitment refers to commitment that is reluctant, obligatory, and is influenced by social pressure, low investment size, and lack of alternatives. These dimensions, along with the determinants from the SCM (satisfaction, social constraints, personal investment, involvement alternatives, social support, and involvement opportunities), comprise the Exercise Commitment Scale (ECS).
Wilson et al. (2004) examined the practicality of the SCM as a framework for predicting commitment to exercise and explored the relationship between commitment and exercise behavior. University students, who were enrolled in group-based exercise classes emphasizing conditioning as the primary mode of exercise, completed the ECS and the Godin Leisure Time Exercise Questionnaire (GLTEQ; Godin, Jobin, & Boullon, 1986). GLTEQ is “a 3-item self-report measure that assesses the frequency of mild, moderate, and strenuous exercise done for at least 20 min per session during a typical week” (Wilson et al., 2004, p. 409). Through statistical analysis, they found that the multi-dimensional structure of the determinants and the dimensions predicted commitment. Personal investment and satisfaction were the strongest predictors of exercise commitment. The analysis also suggested that “want to” commitment is the only predictor of greater exercise frequency.

Gabriele et al. (2011) also conducted a study in which they used the IM to predict physical activity behavior. They assessed two types of exercise commitment (“want to” or enthusiastic commitment, and “have to” commitment), three determinants of commitment (satisfaction, investments, and alternatives), and two assessments of physical activity (minutes of physical activity and stage of behavior change). The researchers used three measurements: the Stages of Exercise Behavior Change (SEBC), which assessed participants’ current stage of exercise behavior; the ECS, which assessed type and determinants of commitment; and the Physical Activity Recall Questionnaire (PAR), which assessed the amount of time participants spent being physically active in the previous week. The researchers found that “want to” commitment was positively
correlated to minutes of leisure time physical activity and SEBC; however, “have to”
commitment was not related to these variables. Satisfaction and investments predicted
“want to” commitment; whereas, satisfaction, investments, and alternatives predicted
“have to” commitment. They concluded that “want to” commitment might be
instrumental in predicting physical activity behavior and maintenance.

**Commitment to Physical Activity Scale.** The Commitment to Physical Activity
Scale (CPAS) (Corbin et al., 1987) was modified from the Commitment to Running (CR)
Scale (Carmack & Martens, 1979) to understand the components of commitment to
physical activity, which is defined as the individual’s dedication to begin and continue
involvement in physical activity. Corbin and colleagues analyzed CPAS scores of
participants who reported varying levels of physical activity. They found that
participants who reported being involved in moderately high and high levels of physical
activity had higher CPAS scores compared to participants reporting low to moderately
low physical activity.

Research in the field of commitment to physical activity is limited; however,
analyzing properties of the CPAS using a younger population can be a stepping-stone for
future research. DeBate et al. (2009) examined the psychometric properties of the CPAS
in a sample of third-to fifth-grade girls. They felt that there was a gap in the research
relating to young girls’ participation in physical activity as a way to decrease the risk of
being overweight/obese and for chronic disease, and to increase psychological health.
Because levels of physical activity begin to decline among this age group, they wanted to
examine commitment to physical activity as an indicator of long-term physical activity
participation. Using the CPAS and the Youth Risk Behavior Survey (physical activity section), they were able to validate the use and utility of the CPAS among third- to fifth-grade girls when evaluating commitment to physical activity.

Demonstrated by the consistent results from Branje et al. (2007), Fu (2011), Impett et al., (2001), and Rusbult and Farrell (1983), the IM has high reliability and successfully predicts commitment and, furthermore, stability and persistence to participate. The IM has become the foundation for the development of scales and models, the SCM and ECS, and are used within the exercise and sport literature. These models expand the IM and indicate that commitment is predicted by six determinants (enjoyment, involvement opportunities, social support, social constraints, personal investment, and involvement alternatives). Furthermore, a multi-dimensional view of commitment was developed to distinguish between “want to” commitment and “have to” commitment. Studies show that “want to” commitment is salient in predicting continued exercise and sport performance. Studies using these theories and models indicate that satisfaction is the salient determinant of commitment, and overall commitment predicts maintenance of the behavior.

**Fitness Boot Camp**

Fitness boot camps are one of the top exercise trends and on the list of top 10 trends in 2009 (ACE, 2008; Michaels, 2013). “The term boot camp has become synonymous with more intense training, designed to push people just a bit further outside their comfort zone than a regular fitness class may” (Michaels, 2013, p. 25). Since it is a
recent phenomenon, most of the information regarding fitness boot camps is published in fitness magazines, such as American Fitness Magazine and Fitness Matters.

Boot camps provide workouts that are varied, fun, and challenging (ACE, 2008). Fitness boot camps differ from traditional physical training by utilizing high-intensity exercises that focus on losing body fat, increasing strength and endurance, developing cardiovascular efficiency, and increasing flexibility and agility (Michaels, 2013). Most of the exercises incorporate functional training, or exercises that use one’s own body weight, and mimic everyday exercises, such as carrying groceries, lifting or playing with children, or getting up from a chair. Using exercises such as these decreases the cost of running the program.

Along with teaching exercises, such as burpees, push-ups, and squats, fitness boot camps encourage support and teamwork. There is a sense of camaraderie among the members. Members support each other in the overall goal of becoming healthy and continuing that healthy lifestyle.

Porcari et al. (2008) analyzed the benefits of a boot camp-style workout. Using a 40-minute boot camp video, participants performed both aerobic exercise and strength training. After participants familiarized themselves with the exercises, a portable metabolic system was fitted to the participant to examine physiological factors during the boot camp-style exercise. The researchers highlight increased energy expenditure during the exercise, reporting an average of 9.8 calories burned in a minute during this type of workout (Porcari et al., 2008).
**Daily Deals**

Much of the research regarding daily deals is found in business literature and newspapers. Daily deals, essentially electronic coupons, are one of the latest trends in Web commerce. They are not well studied because they are a recent phenomenon. Daily deals partner with local merchants to offer consumer products and services at a significantly reduced price on a condition that a minimum number of buyers will make the purchase. They have an extended expiration date where individuals can redeem the deal any time before the expiration. Examples of daily deal websites include Groupon®, LivingSocial®, and AmazonLocal®.

Groupon® grew out of a website called ThePoint.com, which was based on the concept of group buying, or co-buying, where people are brought together to shop as a collective group. Friends would commonly buy deals together or share deals with their friends, which increased the success of the deal of the day. Groupon® is most closely related to e-couponing (Boon, Wiid, & DesAutels, 2012). E-couponing provides not only advantages to the consumer, but also to the marketer. E-coupons allow the consumer to reduce the time they spend searching, sorting, and organizing their coupons; and makes it profitable for the business to extend the expiration date on the coupons. In a similar way, e-coupons allow marketers to have greater flexibility, greater convenience, a broader range of products, and an enhanced consumer base. The unique benefit of daily deals is that while the deal itself must be purchased that day, the product or service may be redeemed any time before an expiration date which is usually several weeks in the future.
Boon et al. (2012) conducted a content analysis on “deal of the day” (DOD), especially Groupon®, to understand how marketers were using this form of consumer advertising, how it compared to other forms of electronic advertising, and how public policy was affected, if at all, by this emerging phenomenon. Groupon® deals in 44 cities across the US were followed for 21 days. Screen shots of the email deals from Groupon® were taken and saved each day. At the end of 21 days, the deals where coded and themes, phrases, words, and numbers were extracted. After analyzing the themes, they were able to group similar deals into categories. The categories with the most deals were food and drink; beauty, spa, and massage; sports and recreation; and arts and entertainment. The price of the deal, the amount of discount it provided, the target population, and time the deal could be redeemed were comparable among the deals within each category. When comparing Groupon® DOD advertising and other forms of electronic advertising, they found that Groupon® had no specific advertising program, such as directing deals based on demographic data or purchase history. As another suggestion for improvement, they recommended better use of the hurdle, which is defined as having a minimum number of deals required for the deal to trigger (Boon et al. 2012).

Even with the potential advantages of using daily deals, businesses need to be careful when designing their deals to prevent loss of profits. Kumar and Rajan (2012) analyzed three businesses for one year following the launch of their coupons and were provided with information on revenue, acquisition, and retention rates. Their goal was to determine coupon initiatives that could lead to increased profits, the factors influencing acquisition and retention of customers, and the opportunities for program design changes.
Upon analysis, each business had a significant number of new customers, but all three businesses saw significant losses during the month in which the coupons were launched. Kumar and Rajan (2012) offered some suggestions aimed at helping businesses identify and avoid pitfalls associated with daily deals. Their first guideline was to up-sell (offering a high value/higher priced option) or cross-sell other related products or services to broaden the relationship with a new customer. Their second guideline suggested that businesses limit the number of coupons offered, restrict who is eligible for the coupon to certain customer categories, or reduce the amount of discount. Lastly, they suggested that businesses provide daily deals to new customers only, which would allow businesses to keep existing clientele and revenue, while having the benefit of increased customer visits.

Fitness facilities, in particular, have been skeptical of using daily deals for fear of a loss of profits. Membership fees and specialty fitness packages range from $100 to $200 or more depending on the service. Offering these services for between $30 and $50 make fitness facilities owners fearful of losing their profits. However, some facilities have partnered with Groupon® and offered their services at a significantly discounted price. These facilities not only saw an increase in new customers, but were also able to keep some of those customers as members (Goldman, 2010).

With the staggering statistics that reveal approximately 50% of U.S. adults are sedentary (Centers for Disease Control and Prevention (CDC), 2014), it is important to understand contributing factors for the initiation and continued participation in an exercise program. As seen throughout the presented literature, the IM successfully
predicts commitment and, furthermore, stability and persistence to participate. The IM has become the foundation for the development of scales and models, such as the SCM and ECS, which are used within the exercise and sport literature. Daily deals provide a way for customers to experience a service for a reduced price. Health and fitness deals are relatively popular, shown by profitability in 69.3% of the deals, as opposed to 44.2% for restaurants and bars (Odell, 2012). Even though it appears that less than 10% of deal customers become returning customers or members (Graham, 2012; Grant, 2012), businesses profit and grow and, therefore, continue to use daily deal services (Goldman, 2010). Due to the popularity of these deals, it is worthwhile to study whether daily deals influence exercise behavior and maintenance.

**Method**

The purpose of this study is to determine the relationship between types of commitment exhibited by regular members and participants using daily deals in the boot camp context. This chapter will outline the participants of the study and will detail the procedures and instruments that will be used to collect data on commitment and boot camp participation.

**Participants**

Participants will be recruited from Fit for Life Solutions boot camp in two San Francisco Bay Area locations (Mountain View and Foster City). Participants will include regular paying members and those who redeemed a daily deal or coupon. Participants will be informed prior to the study that their participation is voluntary and all information provided will remain confidential.
Measures

Demographic and Membership Status Questionnaire. A demographic questionnaire created by the researcher will be used to gain information including age, gender, ethnicity, and membership status. Membership status will assess whether participants are regular paying members or customers using daily deals.

Exercise Commitment Scale (ECS). A 34-item ECS assesses both dimensions and determinants of exercise commitment. Items for this assessment were compiled from the work of Scanlan and colleagues (1993) and further implemented by Wilson et al. (2004) and Gabriele et al. (2011). Commitment is measured using nine items that reflect both “want to” and “have to” dimensions to continue exercising. The determinants are assessed using specific items, such as personal investments (3 items; e.g., "I have invested a lot of time into exercising"), satisfaction (3 items; e.g., "I find exercise to be very rewarding"), and involvement alternatives (3 items; e.g., "Compared to exercise there are things I could do which would be more enjoyable") (Wilson et al, 2004; Gabriele et al., 2011). Participants will respond to each item on a 10-point Likert scale anchored at the extremes of 1 (“Not at all true for me”) and 10 (“Completely true for me”).

Procedure

Permission will be obtained from Fit for Life Solutions boot camp instructors to recruit participants of boot camp classes. With consent of the instructors, the researcher will make an announcement at the beginning of the boot camp session to invite participants to join the study examining commitment to boot camp exercise and potential
influences of daily deals. At the end of the class, the researcher will give a brief explanation of the study purpose. Participants will be given the informed consent (Appendix B) and asked to read it, acknowledging comprehension and voluntary participation. Once the informed consent is read and returned to the researcher, the participant will complete a survey packet containing demographic questions, questions regarding boot camp membership, and the ECS (Appendix C). The questionnaire will take approximately 5-7 minutes to complete. Participants will return the questionnaire to the researcher upon completion. The San José State University Institutional Review Board has approved all procedures.

Statistical Analyses

All statistical analyses will be calculated using IBM® SPSS Statistics 20. Pearson correlation analysis will be conducted for all of the study variables (age, gender, membership status, commitment types of “want to” and “have to,” and commitment determinants of satisfaction, social constraints, personal investment, involvement alternatives, social support, and involvement opportunities) to identify relationships that might exist between the variables. A multiple regression analysis will used to predict the relationship between membership status and age, and “want to” commitment. Finally, a discriminant function analysis will be conducted to predict group membership from the study variables (age, “want to” commitment, “have to” commitment, satisfaction, social constraints, personal investment, involvement alternatives, social support, and involvement opportunities). The significance level will be set at p < 0.05.
References


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APPENDICES
Appendix A

Human-Subjects Institutional Review Board Approval

To: Linda Lund

From: Pamela Stacks, Ph.D.
Associate Vice President
Graduate Studies and Research

Date: May 23, 2013

The Human Subjects-Institutional Review Board has registered your study
entitled:

"Commitment Types and Influence of Daily Deals among Boot
Camp Participants"

This registration, which provides exempt status under Exemption
Category 2, of SJSU Policy S08-7, is contingent upon the subjects
participating in your research project being appropriately protected from
risk. This includes the protection of the confidentiality of the subjects’
identity when they participate in your research project, and with regard to
all data that may be collected from the subjects. The approval includes
continued monitoring of your research by the Board to assure that the
subjects are being adequately and properly protected from such risks. If
at any time a subject becomes injured or complains of injury, you must
notify Dr. Pamela Stacks, Ph.D. immediately. Injury includes but is not
limited to bodily harm, psychological trauma, and release of potentially
damaging personal information. This approval for the human subject’s
portion of your project is in effect for one year, and data collection beyond
May 23, 2014 requires an extension request.

Please also be advised that all subjects need to be fully informed and
aware that their participation in your research project is voluntary, and that
he or she may withdraw from the project at any time. Further, a subject’s
participation, refusal to participate, or withdrawal will not affect any
services that the subject is receiving or will receive at the institution in
which the research is being conducted.

If you have any questions, please contact me at (408) 924-2427.

Protocol #: S1302137

cc. Tamar Semerjian 0054
Appendix B

Informed Consent Form for MA Major Research Paper

Agreement to Participate in Research

Date: May 28, 2013

Study Title or Topic: Commitment Types and Influence of Daily Deals Among Boot Camp Participants

Researcher: Linda Lund, MA candidate, Graduate Program in Exercise Physiology, San Jose State University

Purpose of the Research: The purpose of this study is to determine the effect of the daily deals on types of commitment exhibited by regular members and participants using daily deals in the boot camp context.

What You Will Be Asked to Do in the Research: As a participant, you will be asked to complete one questionnaire which will include the following: a basic demographic questionnaire, questions regarding membership status, and the Exercise Commitment Scale.

Risks and Discomforts: There are no foreseeable risks or discomforts from your participation in the research study.

Benefits of the Research and Benefits to You: The benefits of this study are to analyze the influence of daily deals on commitment type and determine whether daily deal purchases should be encouraged for health and fitness services.

Voluntary Participation: Your participation in the study is completely voluntary and you may refuse to answer any question or choose to stop participating at any time. Your decision not to volunteer will not influence the nature of your relationship with the researcher or Fit for Life Solutions Boot Camp either now, or in the future.

Withdrawal from the Study: You can stop participating in the study at any time, for any reason, if you so decide. Your decision to stop participating, or to refuse to answer particular questions, will not affect your relationship with the researcher, San Jose State University, or Fit for Life Solutions. Should you decide to withdraw from the study, all data generated as a consequence of your participation will be destroyed.

Confidentiality: All information you supply during the research will be held in confidence and, unless you specifically indicate your consent, your name will not appear in any report or publication of the research. Your data will be safely stored in a locked facility and only the researcher will have access to this information. Confidentiality will be provided to the fullest extent possible by law.

Questions about the Research: Questions about this research may be addressed to Linda Lund, or Complaints about the research may be presented to Dr. Shirley Reekie, Department Chair, Kinesiology, (408) 924-3010. Questions about a research subjects’ rights, or research-related injury may be presented to Pamela Stacks, Ph.D., Associate Vice President, Graduate Studies and Research, at (408) 924-2427.

Please keep a copy of this form for your own records. By agreeing to participate in the study, it is implied that you have read and understand the above information. Please do not write any identifying information on the survey/questionnaire.

Signature

Researcher

Date
Appendix C

Questionnaire: Demographic and Membership Information

Age
What is your age? _________

Sex
What is your sex?
- Male
- Female

Race/ethnicity
How do you describe yourself? (please check the one option that best describes you)
- American Indian or Alaska Native
- Hawaiian or Other Pacific Islander
- Asian or Asian American
- Black or African American
- Hispanic or Latino
- Non-Hispanic White

Membership
- Current membership status?
  - Paying member
  - Daily deal customer
- How did you learn about the program?
  - Daily deals
  - Friend or relative
  - Other advertisement
  - Other: (briefly explain) ___________________________________
- How long have you been participating in this boot camp?
- Less than 6 months
- 6 months to a year
- 1 - 3 years
- over 3 years_________________________
Appendix D

Exercise Commitment Scale

Please read the questions carefully and circle the response that best describes how you usually feel about exercise.

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<thead>
<tr>
<th>Question</th>
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<tbody>
<tr>
<td>1. I am committed to keep exercising</td>
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<td>2. I am determined to keep exercising</td>
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<td>3. I am dedicated to keep exercising</td>
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<td>4. I am willing to do almost anything to keep exercising</td>
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<td>5. I want to keep exercising</td>
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<td>6. It would be hard for me to quit exercising</td>
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<td>7. I feel obligated to continue exercising</td>
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<td>8. I feel exercise is a duty</td>
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<td>9. I feel it is necessary for me to continue exercising</td>
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<td>10. I would like to do something else instead of exercising</td>
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<td>11. I have invested a lot of time into exercising</td>
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<td>12. I have invested a lot of effort into exercising</td>
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<td>13. I have invested a lot of energy into exercising</td>
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<td>14. I have invested a lot of my own money into exercising</td>
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<td>15. Exercising gives me the opportunity to have a good time</td>
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<td>16. Exercising gives me the opportunity to be with my friends</td>
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<td>17. Exercising gives me the opportunity to improve my health</td>
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and fitness

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<tbody>
<tr>
<td>18. Exercising gives me the opportunity to improve my physical skills</td>
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<td>19. Exercising gives me the opportunity to relieve any stress I am feeling</td>
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<td>20. Exercising gives me the opportunity to do something exciting</td>
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<td>21. People important to me encourage me to exercise</td>
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<td>22. People important to me think it is okay if I exercise</td>
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<td>23. People important to me support my exercising</td>
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<td>24. People will think I am a quitter if I stop exercising</td>
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<td>25. I have to keep exercising to please others</td>
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<td>26. People will be disappointed with me if I quit exercising</td>
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<td>27. I feel pressure from other people to exercise</td>
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<td>28. All things considered, exercising is very satisfying</td>
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<td>29. Because I exercise, I feel satisfied</td>
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<td>30. I find exercising to be very rewarding</td>
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<td>31. Compared to exercising, there are other things I could do which would be more enjoyable</td>
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<td>32. I would be happier doing something else instead of exercising</td>
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<td>33. Compared to exercising, there are other things I could do that would be more fun</td>
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Compared to exercising, there are other things I could do that would be more worthwhile.

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<th>Exercise Commitment Scale Scoring</th>
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<tbody>
<tr>
<td><strong>Factor</strong></td>
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<tr>
<td><strong>Determinant</strong></td>
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<td>“Want to” commitment</td>
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<td>“Have to” commitment</td>
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<td><strong>Dimension</strong></td>
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<td>Satisfaction</td>
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<td>Social constraints</td>
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<td>Involvement alternatives</td>
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<td>Social support</td>
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<td>Involvement opportunities</td>
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