Recreation at Work: More than Fun and Games?

Andrew Lacanienta

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Master of Science

Mat D. Duerden, Chair
Mark A. Widmer
Stephen H. Courtright

Department of Recreation Management
Brigham Young University

June 2016

Copyright © 2016 Andrew Lacanienta
All Rights Reserved
ABSTRACT

Recreation at Work: More than Fun and Games?

Andrew Lacanienta
Department of Recreation Management, BYU
Master of Science

The purpose of this study was to examine the efficacy of Duerden, Courtright, and Widmer’s (n.d.) Recreation at Work (RAW) Model and explore the relationship between RAW and employee flourishing (i.e., resilience, work engagement, organizational identification). This study explored the unique contribution from RAW and work activities in relation to employee flourishing. Structural equation modeling revealed RAW and leisure as a state of mind (LSM) perceptions (i.e., intrinsic motivation, perceived freedom, positive affect) had positive relationships with personal expressiveness ($\beta = .704, p < .001$) and organizational identification ($\beta = .164, p = .002$). Additionally, RAW had a positive relationship with resilience mediated by personal expressiveness ($\beta = .157, p = .001$). Results suggest RAW provides added value to the workplace by facilitating personal expressiveness, resilience, and organizational identification. Comparisons are discussed around the benefits of LSM perceptions during work and RAW activities. Practical applications and suggestions for future research are discussed.

Keywords: recreation at work, recreation, work, organizational behavior, leisure perceptions
ACKNOWLEDGEMENTS

Working on my master’s thesis has been an incredible experience of learning, endurance, and joy. For that, I have many to thank and acknowledge. Above all, I thank my Father in Heaven for blessing me with the opportunity to participate in higher education at Brigham Young University. I acknowledge that He has blessed me with patience and understanding, both of which have helped me stay sane. He has also blessed me physically with good health and financially with the ability to make it through graduate school with little debt. Secondly, I would like to thank my family, Camille, Eva, and Ellie. They were incredibly supportive and patient with me as I worked on this project. Camille revised countless papers, provided endless encouragement, and plenty of congratulations for my accomplishments. My parents and siblings have also been very supportive, helping in any way they could. My beloved grandparents also deserve mention for their emotional support, kind uplifting words, and financial help.

My hat goes off to the outstanding faculty in the Department of Recreation Management. Never have I received the amount of support, love, kindness, and friendship from another group of people. My thesis committee has been there through thick and thin to support me in accomplishing this difficult task. Dr. Mat Duerden has been my guide and mentor since early on in my undergraduate degree. Fueling my desire to learn and reach my potential, he has always been at my side to answer questions, instruct, and guide me along my journey. I could write ten pages of acknowledgements to him alone. Academically, I am who I am today because of him and his influence. I would like to thank Dr. Mark Widmer for serving on my committee, providing me with learning opportunities, teaching me to apply recreation in consulting situations, and for helping me obtain an internship with Slide the City. I would like to acknowledge Dr. Stephen Courtright at Texas A&M. His insight into business and organizational behavior literature has been priceless. This project would not have been possible
without his expertise. He has been a kind guide and a help to me on countless occasions and I hope we continue working together in the future. Dr. Ward, Dr. Hill, Dr. Freeman, Dr. Taniguchi, Dr. Zabriskie, Dr. Lundberg, and Paula Franck were also all great contributors to my success and I appreciate the one-on-one learning experiences with each of them. I owe each of them an incredible amount of thanks and appreciation.

For all the knowledge I gained concerning structural equation modeling, I have to give a million thanks to Dr. Jeremy Yorgason and Dr. James Gaskin. Dr. Yorgason taught me all the basics I needed and helped me feel proficient in the art of SEM. Almost everything I know in this regard I learned from him. I am grateful for his patience with me and for spending countless office hours helping me with my models. Dr. Gaskin provided me with my initial experience with SEM during his SEM boot camp. He spent many hours with me trying to untangle the spider web that was my model and helped me come to the final path model used in my thesis. I am ever grateful for his patience with me and for facilitating my learning.

I would also like to acknowledge and thank the companies who allowed us to gather data from their employees. Allowing us access to their employees was absolutely crucial to the success of this project and my gratitude to them for that is endless.
<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>ii</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vii</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Literature Review</td>
<td>4</td>
</tr>
<tr>
<td>Methods</td>
<td>12</td>
</tr>
<tr>
<td>Results</td>
<td>22</td>
</tr>
<tr>
<td>Discussion</td>
<td>33</td>
</tr>
<tr>
<td>References</td>
<td>49</td>
</tr>
<tr>
<td>APPENDIX A.1: Prospectus</td>
<td>58</td>
</tr>
<tr>
<td>Introduction</td>
<td>59</td>
</tr>
<tr>
<td>Literature Review</td>
<td>68</td>
</tr>
<tr>
<td>Methods</td>
<td>76</td>
</tr>
<tr>
<td>References</td>
<td>89</td>
</tr>
<tr>
<td>Appendix A.2: Consent Form</td>
<td>96</td>
</tr>
<tr>
<td>Appendix A.3: Implied Consent Form</td>
<td>97</td>
</tr>
<tr>
<td>APPENDIX B.1: Questionnaire</td>
<td>98</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Tables

1. Descriptive Statistics .........................................................23
2. Composite Scales and Cronbach’s Alpha.....................................24
3. Pearson’s Correlations ............................................................25
4. Model Fit Metrics .................................................................26
5. Mediation ............................................................................29
6. Value Added to Organizational Identification..............................32
7. Value Added to Work Engagement...........................................32
8. Value Added to Resilience.......................................................33
LIST OF FIGURES

Figures

1. Recreation at Work Model  ................................................................. 2
2. Original SEM Model  ................................................................. 27
3. Path Model  ................................................................. 28
4. Direct Effects Between LSM During Work  ......................................... 34
5. Direct and Mediated Effects from LSM During Work  ......................... 35
6. Direct Effects from LSM During RAW  ............................................ 36
7. Direct and Mediated Effects from LSM During RAW  ......................... 37
Introduction

Many companies throughout the world offer recreation amenities in the workplace. This phenomenon ranges from features as simple as a break room with a foosball table to offerings as extravagant as yoga studios, basketball courts, rock climbing walls, and 24-hour gyms. Such facilities do not come cheap, so why are some companies spending enormous amounts of time and money on recreation offerings in the workplace? A podcast titled *Perk place: The benefits offered by Google and others may be grand, but they’re all business* (Wharton Business School, 2007) discussed the various reasons organizations offer recreation in the workplace. These reasons include: to attract the best employees, keep employees working long hours, to show appreciation, and to retain employees. In the same podcast, Dr. Nancy Rothbard mentioned additional motives for providing recreation amenities including providing an appealing environment and increasing productivity by alleviating worries (e.g., childcare, exercising, cooking; Wharton Business School, 2007).

In addition, other organizations may offer recreation amenities to build a company culture of fun and creativity (Writer, 2011) or to stand out as the best company to work for (Wharton Business School, 2007). Motivations are many and vary from company to company. Interestingly, little empirical research has explored the relationship between recreation in the workplace and individual level outcomes. Many organizations offer recreation at work, but is there a return on their investment? Although a theoretical relationship between play and creativity exists (Mainemelis & Ronson, 2006), does recreation at work provide any real, measurable benefits?

In order to answer this question, Duerden, Courtright, and Widmer. (n.d.) recently proposed a model for recreation at work. This recreation at work (RAW) model infers a positive relationship between RAW and personal expressiveness moderated by Leisure as a State-of-
Mind (LSM), which consists of perceptions of (a) intrinsic motivation, (b) perceived freedom, and (c) positive affect. While some perceive RAW as a leisure activity, others do not; therefore, it is important to measure LSM to gauge participants’ perceptions of RAW as leisure. Personal expressiveness then serves as a mediator between RAW and employee flourishing. Employee flourishing is collectively made up of three categories, (a) organizational identification and commitment, (b) work engagement, and (c) employee resilience (Cameron & Spreitzer, 2011).

Duerden et al.’s (n.d.) RAW Model is a timely contribution to both leisure and management literature with implications for both research and practical application. Their conceptual model is one of the first to explore the integration of recreation and work domains while looking at individual level outcomes. Their paper is the start of a new line of research studying the implications, both positive and negative, of RAW. Therefore, the purpose of this study is to examine the efficacy of Duerden et al.’s (n.d.) RAW Model (see Figure 1) and explore the relationship between RAW and employee flourishing.

![Figure 1. Duerden et al.’s (n.d.) model of recreation at work.](image-url)
Work and recreation are often seen by society as two separate domains of life (Kabanoff, 1980). Yet as the world changes, more positive and negative spillover occurs (Wilensky, 1960) between the two. As technology improves, individuals now have the ability to bring work and play with them everywhere. Answering emails via mobile device on the train or via computer at home now means office hours do not end when leaving the office. Likewise, recreation spills into our work domain by way of social media, work socializing, and off-site retreats. On the side of negative spillover, employers might experience employees cyber loafing, planning an upcoming vacation, using the phone, engaging in extended social conversations, leisurely reading, participating in betting, or daydreaming while on the clock (D’Abate, 2005). More positively, recreation spillover into work can consist of company mixers where networking can occur (Ingram & Morris, 2007), socialization among teams (Cooper-Thomas & Anderson, 2006), and stress relieving workplace recreation (Mokaya & Gitari, 2012).

A culture of play in the workplace is becoming more and more prevalent in large organizations such as Google and Facebook as well as in smaller companies. The idea of recreation amenities at work has come a long way since its inception in the mid 1800s. In 1854, Peacedale Manufacturing Company developed a community library in Peacedale, Rhode Island and is recognized as “the starting point in the industrial recreation movement” (Guadagnolo, 1978, p. 176). Since then, employees have experienced industrial recreation in the form of annual employee excursions, organization sponsored competition sports, and even the formation of the National Industrial Recreation Association (NIRA; Guadagnolo, 1978).

While some organizations have RAW consisting of a break room containing a fridge, a microwave, and maybe a Ping-Pong table, RAW in the 21st century can be considerably more extravagant than your everyday rec room. One example is Google, a company well known for
offering on-site amenities such as nap pods, lap pools, and rock climbing walls. Another example is LibSoft’s Lehi, Utah office. LibSoft offers pool tables, foosball, Ping-Pong tables, video game consoles, board games, card tables, a Zen room with massage chairs, and a large variety of fresh, pantry, and frozen food available for purchase. Clearly, industrial recreation has progressed since its inception with the community library in Rhode Island in 1854. It is easy to see from these examples that providing recreation activities is not a cheap ordeal, so why are companies and organizations spending any money at all on industrial recreation?

Guadagnolo (1978), quoting former Executive Secretary of NIRA, Don Neer, claimed industrial recreation offers the benefits of “improvement of physical health; reduction of tension and fatigue . . . leadership development; reduced absenteeism and job turnover; development of good community relations; . . . increase in employee involvement; . . . and improvement of employee morale” (p. 177). Are these benefits the reason organizations provide industrial recreation activities? Or is it simply because the organizational culture is to have fun at work? Is industrial recreation an actual employee benefit providing added value by employers? Or looking at the dark side, are companies using industrial recreation to keep their employees at work longer by enticing them with activities? Regardless of the reason, “little data support[s] the value of employee recreation” (Guadagnolo, 1978, p. 177). This then begs the question, are there real, measurable benefits for employees related to recreation activities in the workplace? This study sought to address and provide initial answers to this question.

**Literature Review**

Work can be defined as a set of monetarily compensated tasks an individual performs for another person or organization (Kabanoff, 1980; Haworth & Veal, 2004). Although Haworth and Veal (2004) defined work as paid employment, it is also important to recognize unpaid childcare and community volunteering as work. On the flipside, leisure is a little more difficult
to define. De Grazia (1962) and Pieper (2009) defined leisure in a more classical way as a state of being, while Roberts (2006) defined it as free time or time not occupied by work or other obligations. Although work and non-work are defined separately, we believe there is a long lasting relationship between the two, spanning over thousands of years.

The Bible presents perhaps the first recorded mention of work and non-work periods as it outlines six days of work followed by a seventh day of rest during *The Creation* (Genesis 2:2, King James Version). Since then, the relationship of work and non-work has been the cause of much intellectual debate ranging from definitions of the concepts to their boundaries (Kabanoff, 1980). With the ideals of work and leisure constantly changing, it continues to be difficult to define and identify work and non-work.

**The Progression of Work and Non-Work**

The relationship between work and non-work has been changing and developing for thousands of years, but Stanner (1979) claims human culture did not begin with work, but with non-work in the form of self-expression and play as evidenced in hunter-gatherer societies. Although they worked to survive, they still found many hours in the day to experience freedom and leisure (Goodale & Godbey, 1988). Moving forward in history toward the era of the Greeks and the Romans, an enormous shift in the roles of work and non-work took place. Not only was work no longer necessary for survival, but it was even looked down upon. Work was thought of as valueless and for the non-citizens and the slaves, while philosophers enjoyed a life of learning and leisure (Goodale & Godbey, 1988).

During the Protestant reformation, work again gained value as service to others was seen as a virtue. One interesting trait about the relationship of work and non-work during this time was, regardless of its domain, all activities were meant for one purpose—a calling to serve God
(Applebaum, 1992). The Renaissance and the Modern Era brought a surge in leisure as the world enveloped itself in the arts. “The aim of work was not economic progress . . . but was aimed at improvement of human conditions” (Le Goff, 1988, p. 222).

This then changed rather abruptly as the age of industrialization arrived. Leisure almost disappeared with the average employee working up to 70 hours a week. The average work hours per week decreased from 70 hours to about 40, but began to rise shortly thereafter (Goodale & Godbey, 1988). The 21st century is not much different than the industrial revolution. Even though great leaps in technology allow us to work faster and more efficiently, there are surprisingly still many who live a life focused on work simply for the sake of working. On the other hand, many work in order to not be at work (i.e., to be at leisure; Pieper, 2009). This mindset of working in order to not be at work may have a relationship with the recent shift in organizational culture as companies try to meet this need.

**Paradigm shift.** A shift in the work and non-work paradigm occurred as organizations began to blend work and non-work domains in an effort to provide greater *work life balance.* This may relate to the mass amount of millennials entering the workforce and their exceedingly complicated checklist of workplace necessities (Roberts, 2015). Many organizations now offer initiatives such as flextime, a compressed workweek, telecommuting, onsite childcare, and a family friendly climate (Baltes et al., 2010). Some of these initiatives bring family into work and facilitate bringing work home. Regardless of the situation, work and non-work boundaries are becoming less distinct (Gant & Kiesler, 2002). Additionally, organizations now offer, more than ever, non-work activities at work. One example, Google’s Venice Beach campus provides employees free access to “pool and shuffleboard tables, company surfboards and bicycles, yoga
studies, as well as basketball courts, rock climbing walls, 24-hour gyms and gourmet dining options” (Duerden et al., n.d., p. 2).

**Research.** Unfortunately, little research has been conducted concerning the blurred lines between work and non-work in the form of industrial recreation (Guadagnolo, 1978). Mainemelis and Ronson (2006) propose a theoretical relationship between play and creativity, but Mokaya and Gitari (2012) may be the only correlational study thus far to examine the relationship between industrial recreation and positive individual outcomes. Their study concluded that recreation is a significant factor of individual employee performance, including increased levels of commitment and productivity (Mokaya & Gitari, 2012). Mokaya and Gitari’s study may be the only research currently bridging the gap between management and leisure literature. Not only does a void exist concerning research on recreation in the workplace, but the research previously conducted has been largely atheoretical. Researchers have, however, produced theoretical models pertaining to organizational settings that may help explore the phenomenon of recreation in the workplace.

**Self-determination theory and work motivation.** One potential outcome of industrial recreation is its impact on motivations and behaviors in the workplace. A theory especially pertinent to motivations and behaviors, applied in the workplace, is Self-Determination Theory (SDT; Deci & Ryan, 1985).

Deci and Ryan’s (1985) SDT has been well established among theories of motivation. SDT distinguishes between amotivation and motivation (Gagne & Deci, 2005). Amotivation is having no intent to act, while motivation involves intentionality. Gagne and Deci (2005) discuss two types of motivation, autonomous and controlled. Autonomous motivation includes intrinsic motivation or being motivated by one’s interests in an activity. Controlled motivation, on the
other hand, deals with the degree one feels coerced by external forces or counterparts. SDT has been empirically tested in many settings including healthcare, education, and sports.

Gagne and Deci (2005) also described SDT as a theory of work motivation and discussed its relevance in organizational behavior. They reported several studies supporting SDT as an approach to work motivation. Studies reported relationships between “managers’ autonomy support and greater satisfaction of the needs for competence, relatedness, autonomy, and, in turn, more job satisfaction, higher performance evaluations, greater persistence, greater acceptance of organizational change, and better psychological adjustment” (Gagne & Deci, 2005, p. 345).

Blais and Briere (1992) found a positive relationship between managerial autonomy support and the quality of subordinates’ performance. Furthermore, Gagne and Koestner (2002) found autonomous motivation to be positively related to organizational commitment. Because relatively few studies tested SDT in organizational settings, Gagne and Deci (2005) presented six propositions to be examined in work organizations. For example, “employees’ autonomous causality orientations and autonomy-supportive work climates will have additive, independent positive effects on employees’ autonomous motivation and positive work outcomes” (Gagne & Deci, 2005, p. 350).

SDT in the workplace discusses the impact of the social environment and individual differences with the most proximal outcome being autonomy. Autonomy then promotes performance, wellbeing, organizational trust, organizational commitment, and job satisfaction. This framework could potentially be used to study RAW by exploring the relationship between RAW and autonomy. If employees feel autonomy support during RAW activities, this autonomy may promote the previously discussed outcomes.
A theory of play in organizational settings. Recreation and play are terms often used together (Caldwell & Witt, 2011). Although previous literature has not empirically tested a relationship between RAW and creativity, Mainemelis and Ronson (2006) proposed a theory concerning the relationship between play and creativity in organizational settings. While not yet empirically tested, creativity could have a possible relationship with RAW.

In Mainemelis and Ronson’s (2006) theory concerning play and its relationship with creativity in organizational settings, they defined play “as a behavioral orientation consisting of five interdependent and circularly interrelated elements: a threshold experience; boundaries in time and space; uncertainty-freedom-constraint; a loose and flexible association between means and ends; and positive affect” (p. 84). Creativity was defined as “the generation of ideas that are novel and potentially useful” (Mainemelis & Ronson, 2006, p. 92). The dichotomy between play as engagement and play as diversion provides an array of creative benefits. Play as engagement facilitates cognitive, affective, motivational, and skill dimensions of the creative process while play as a diversion facilitates a psychological and social-relational climate more conducive to creativity. Job complexity, environmental threats, individual differences, and lack of time and space can inhibit play, thereby inhibiting opportunities for creativity.

While this theory has not yet been empirically tested, it is a notable contribution to the literature concerning recreation in the workplace because it provides a useful theory to justify the salience of play in organizational settings, which is in close relation to recreation in organizational settings, thereby providing an appropriate theory for exploring RAW. Unfortunately, no formal theoretical framework or model is provided leaving the concept difficult to test in an empirical setting.
**Recreation at work model.** The Recreation at work (RAW) Model (Duerden et al., n.d.) provides a theoretical approach to understanding the relationship between recreation in the workplace and individual level outcomes. The RAW Model is different from other theories of work and non-work combinations such as Wilensky’s (1960) spillover theory and Neulinger’s (1974) paradigm of work and leisure. While these two theories discuss domains spilling over into one another (Wilensky, 1960) and activities consisting of different degrees of work and non-work, the RAW Model refers solely to recreation activities sanctioned and provided by work organizations occurring in the workplace (Duerden et al., n.d.).

The RAW Model infers a positive relationship between RAW and personal expressiveness moderated by Leisure as a State-of-Mind (LSM) consisting of perceptions of (a) intrinsic motivation, (b) perceived freedom, and (c) positive affect. LSM is important because RAW activities alone may not facilitate benefits. While some may perceive RAW as a leisure activity, others may not. Therefore, it is important to measure LSM to gauge participants’ perceptions of RAW as leisure. Personal expressiveness then serves as a mediator between RAW and employee flourishing. Employee flourishing (Cameron, Dutton, & Quinn, 2003) includes but is not limited to the following three dependent variables, the main focus of the RAW Model: (a) organizational identification and commitment (Mael & Ashforth, 1992; Mowday, Steers, & Porter 1979), (b) work engagement (Rich, LePine, & Crawford, 2010), and (c) employee resilience (Block & Kremen, 1996).

Duerden et al.’s (n.d.) RAW Model provides an appropriate framework for studying the phenomenon of recreation in the workplace. It takes into account the actual RAW activities and whether or not those activities are perceived as leisure through the LSM measures. It is also theoretically grounded in the theory of personal expressiveness (Waterman, 1990) and accounts
for possible mediation through this construct. While some outcomes such as creativity or productivity may be difficult to quantify, the outcomes of Duerden et al.’s model are easily measurable by existing valid and reliable measures. The RAW Model combines many positive aspects from the previously discussed models. It measures perceptions, motivations, and behaviors through LSM similar to Self-Determination Theory (Gagne & Deci, 2005). It also builds on the assumptions in Mainemelis and Ronson’s (2006) theory of play and its relationship with creativity in organizational settings in the sense Duerden et al. are exploring a relationship between RAW (play) and individual level outcomes. Duerden et al.’s model may be more appropriate than Mainemelis and Ronson’s (2006) solely because it identifies specific, measurable outcomes and provides a theoretical model for testing. This is meaningful because without measurable outcomes and a testable model it is difficult to examine the efficacy of a model. Hence, the RAW Model is the most appropriate framework to study the phenomenon of RAW.

Work and non-work may forever be a part of human existence. Until recently, there have been very few models and theories concerning RAW funded by the organization. Duerden et al.’s (n.d.) RAW Model is a large contribution to both management and leisure literature. Examining the efficacy of their model will be another large step, theoretically, to the literature and will fill the gap between theory and empirical evidence. Therefore, the purpose of this study is to examine the efficacy of Duerden et al.’s (n.d.) RAW Model by exploring the relationship between RAW and employee flourishing. In order to study this relationship, the following hypotheses were tested:

$H_1$: LSM during RAW has a significant ($p < .05$) positive relationship with personal expressiveness.
H₂: LSM during RAW has significant \((p < .05)\) positive relationship with organizational identification and organizational commitment through the mediating effect of personal expressiveness.

H₃: LSM during RAW has significant \((p < .05)\) positive relationship with work engagement through the mediating effect of personal expressiveness.

H₄: LSM during RAW has significant \((p < .05)\) positive relationship with resilience through the mediating effect of personal expressiveness.

H₅: RAW activities will provide added value above and beyond normal everyday work activities in terms of increased organizational identification, work engagement, and resilience among employees.

**Methods**

In order to control for industry characteristics, our target population was limited to software companies. Software companies are often leaders when it comes to a creative, fun, and pro-recreation culture (e.g., Google, Facebook, Twitter; Patel, 2015). Sample companies were chosen due to established contacts within the organizations from previous research. Therefore, a convenience sample was taken from three software companies who provided RAW. The study consisted of a convenience sample totaling 471 employees. This included 280 complete responses and 191 partial, unfinished responses. Of the partial, unfinished responses only four were valid providing a final sample \((N = 266)\) for analysis. Klein (2005) suggested a sample size over 200 an appropriate sample size for structural equation modeling (SEM). At the time of the study Company 1 had 630 employees, Company 2 had 223 employees and Company 3 had 650 employees. Company 1 provided 161 (62.4%) responses, company 2 provided 52 (19.5%) responses, and company 3 provided 44 (16.5%) responses. Employee age ranged from 18 to 67 \((M = 33.3, SD = 10.10)\). Participants were predominately male (77.1%) and married (79.7%).
The number of children of participants ranged from 0 to 7 or more ($M = 1.84$, $SD = 1.83$) and was predominately 0 (35.3%) with the remaining 64.7% distributed between one child (10.9%), two children (17.7%), three children (11.3%), four children (13.9%), five children (4.1%), six children (1.9%), and seven children or more (1.5%). Employees’ education level was predominately a bachelor’s degree (62.8%) with the remaining 37.2% distributed between high school (.8%), some college (13.5%), associates degree (7.5%), master’s degree (12.4%), and doctorate degree (1.5%).

**Procedures**

The researcher contacted Human Resource departments to explain the study and discuss the organization’s participation. The researcher discussed the importance of the study, study procedures, participant involvement, items to expect on the questionnaire, any risks involved, incentives offered and sought permission to conduct the study. The Human Resources contact was tasked with distributing the online questionnaire to employees throughout the organization. Company 1 distributed the questionnaire in two phases. They first distributed the questionnaire via e-mail to 380 employees who were on their “healthy employee” mailing list. For those who were not on this list, Company 1 also placed the questionnaire link on their company intranet. Approximately 630 employees had access to the questionnaire via intranet for 15 days.

Company 2 distributed the questionnaire via email to 223 employees. Company 3 distributed the questionnaire by placing it on the company intranet. Approximately 650 employees had access to the questionnaire for 15 days. Response rates were 16, 23, and 7 percent respectively, providing an overall response rate of 14 percent.
Measures

Six measures were used in the RAW questionnaire. Each of the six instruments will be discussed in depth by describing the instrument, its validity and reliability, as well as why the particular instrument and questions were chosen for this study. For the purpose of this study, all of the instruments were scaled to the same Likert scale of 1 (very untrue) to 5 (very true). Additionally, because all scales were established in the literature and produced a strong alpha, they were modeled in our analysis as composite observed variable instead of latent variables. This decision was also influenced by the smaller sample size in comparison to the large number of variables in the model. The instruments will be presented beginning with dependent variables: (a) organizational identification, (b) organizational commitment, (c) work engagement, and (d) resilience; followed by the independent and control variables: (e) personal expressiveness, (f) intrinsic motivation, (g) perceived freedom, (h) positive affect, and (i) demographic information.

Organizational identification. Mael and Ashforth (1992) tested a reformulated model of organizational identification. Their measure has been widely used and validated (Riketta, 2005; Van Knippenberg & Sleebos, 2006; Wiesenfeld, Raguram, & Garud, 1998), making it an appropriate measure to examine the efficacy of the RAW Model. For the purpose of this study, Mael and Ashforth’s (1992) measure was used in its entirety.

The original measure consists of six questions on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questions represent certain feelings an individual might have about a company he or she works for. An example question is, “When someone criticizes (name of company), it feels like a personal insult.” (Mael & Ashforth, 1992, p. 122). Results from the
six questions are summed up and divided by six, producing a mean score ranging between 1 and 36, indicating the level of organizational identification.

The measure was applied to a variety of situations, including university faculty (Van Knippenberg & Sleebos, 2006) and an all male college student sample attending a religious university (Mael & Ashforth, 1992). Additionally, the measure was used in a sample of computer professionals (Wiesenfeld et al., 1998), making it especially appropriate for the current study considering our sample. In a sample of employed business and psychology students, Mael (1988) reported a coefficient alpha of .81. Additionally, Ashforth (1994) reported a similar figure of .83 in a sample of managers in a variety of organizations. Because the measure is already established with strong reliability, it was used in the SEM analysis as composite observed variable.

Organizational commitment. Duerden et al.’s (n.d.) definition of organizational commitment as a strong affective bond with an organization comes from O’Reilly and Chatman (1986), who operationalized organizational commitment using Mowday et al.’s (1979) Organizational Commitment Questionnaire (OCQ). For this reason, the OCQ is an appropriate measure to examine the efficacy of the RAW Model. For the purpose of this study, we used the OCQ in its entirety.

The OCQ consists of 15 questions on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Five of the questions on the OCQ are marked with an \( R \), indicating a negatively phrased and reversed scored item. The questions represent certain feelings an individual might have about the company they work for. An example question is, “I feel very little loyalty to this organization” (Mowday et al., 1979, p. 228). Results from the 15 questions
are summed up and divided by 15, producing a figure between 1 and 105, indicating the level of employee commitment for most populations.

The OCQ was used by a variety of samples including bus drivers (Angle & Perry, 1981), hospital staff, and bank tellers (Shore & Martin, 1989). Additionally, the OCQ was used in a sample of software professionals (Paul & Anantharaman, 2004), making it especially appropriate for the current study. In a sample of public, bank, and telephone employees, among others, the internal consistency alpha coefficient was high and ranged from .82 to .93 (Mowday et al., 1979). In order to examine stability over time, test-retest reliability for a sample of psychiatric technicians was $r = .53, .63, \text{ and } .75$ over 2, 3, and 4 month periods respectively (Mowday et al., 1979). Additionally, a sample of 104 sales supervisors from multiple organizations in Hong Kong completed the OCQ twice with 10 weeks in between tests, producing alpha coefficients for test and retest of .82 and .84 respectively (Lam, 1998).

**Work engagement.** Duerden et al. (n.d.) describes work engagement as reflecting Kahn’s (1990) framework of engagement. Rich et al.’s (2010) measurement perfectly captures Kahn’s conceptualization of work engagement by measuring engagement on cognitive, physical, and emotional levels, making it a suitable instrument to test the RAW Model. For the purpose of this study, we used Rich et al.’s measure in its entirety. We did not change the order or wording of the items outlined in Rich et al.’s original study.

Rich et al.’s (2010) scale consists of 18 questions on a scale of 1 (strongly disagree) to 5 (strongly agree). The 18 questions are broken up into three sections: physical, emotional, and cognitive, with six questions in each section. Representative examples from each of the three sections are, “I work with intensity on my job,” “I am enthusiastic in my job,” and “At work, my mind is focused on my job” (Rich et al., 2010, p. 634). Among the original sample of fire
fighters, internal consistency was reliable at .95, while an additional study of UK Business Solutions employees produced an internal consistency of .88 (Alfes, Shantz, Truss, & Soane, 2013).

**Resilience.** Duerden et al.’s (n.d.) definition of resilience as “the ability to bounce back from negative emotional experiences, setbacks, and failures” (p. 15) is derived from Block and Kremen’s (1996) study to operationalize resilience. This makes Block and Kremen’s measure, the ER-89, an acceptable instrument to measure resilience in the RAW Model. For the purpose of this study, we used the ER-89 in its entirety and all of the questions were used verbatim.

The ER-89 scale consists of 14 questions answered on a 4-point scale ranging from 1 (does not apply at all) to 4 (applies very strongly), indicating how resilient participants are in situations concerning friends, unusual situations, personality, etc. For example, “I quickly get over and recover from being startled” (Block & Kremen, 1996, p. 352).

The original study produced an alpha coefficient of .76 in a sample of 18 and 23 year olds. In a sample of 72 participants, test-retest reliability (unknown timeframe) was $r = .78$ with internal reliability of .72 (Waugh, Fredrickson, & Taylor, 2008). A study among African American senior citizens yielded a Cronbach’s alpha coefficient of .77 (Baldwin, Jackson, Okoh, & Cannon, 2010). Additional studies of psychology students (Genet & Siemer, 2011) and students in Kuwait (Al-Naser & Ma, 2000) were performed using this instrument.

**Personal expressiveness.** Duerden et al.’s (n.d.) idea of personal expressiveness comes from Waterman (1990). Waterman is the founder of the concept of personal expressiveness; therefore, his Personal Expressiveness Activities Questionnaire (PEAQ) scale is an appropriate instrument for this study. The original instrument begins by asking, “If you wanted another person to know about who you are and what you are like as a person, what five (5) activities of
importance to you would you describe?” (Waterman, 1993, p. 681). After listing five activities, participants then respond to a series of 30 questions about each activity. The set of 30 questions contains a variation of different scales all ranging from one to seven. An example of one of these questions is, “This activity gives me my strongest feeling that this is who I really am,” and is scored on a scale of 1 (strongly disagree) to 7 (strongly agree) (Waterman, 1993, p. 682). Possible scores for the expanded version range from 6 to 42.

In this study, we measured personal expressiveness using an adaptation of the PEAQ (Waterman, 1993). At the beginning of the questionnaire, we explicitly defined RAW activities as “recreation activities for employees made possible through the allocation of organizational resources” (Duerden et al., n.d., p. 7). After defining RAW activities, we asked participants to think about the every day work duties and tasks they participated in over the past 6 months. As participants pondered on their work duties, we asked questions 29, 32, 34, 35, 38, and 40. Participants were then asked to ponder about their RAW activities they participated in over the past six months and answer the same six questions. This contrast provides a look into the added value of RAW activities above and beyond normal, everyday work activities. An example of a PEAQ item is question 34, “This activity gives me my greatest feeling of really being alive” (Waterman, 1993, p. 682). We chose these six specific questions because they focus on personal expressiveness while other items focus on interest, flow, effort, etc. These other variables are not pertinent to the current study; hence, we only used the questions specifically asking about personal expressiveness.

Waterman’s (1991) original study produced one-week test-retest reliability of .84 as well as an average alpha coefficient of .90. A study of 173 undergraduate psychology students used a modified version of the PEAQ. Participants identified six activities constrained by crossing high
and low levels of effort with three levels of affect (Waterman, 1991). The Cronbach’s alpha for this scale was .91 (Waterman, 1991). In another study with college students, the PEAQ showed one-week test-retest reliability and internal consistency at an alpha level of .90 (Waterman, 1993). The PEAQ was used among a variety of different samples, including high school and college aged students (Sharp, Coatsworth, Draling, Cumsille, & Ranieri, 2007), as well as older adults in Japan (Zhang & Umemuro, 2012). The PEAQ is highly adaptable and many variations of the instrument have been successfully used (Waterman et al., 2003).

The six items from the PEAQ measuring personal expressiveness were used to measure personal expressiveness in work settings ($\alpha = .92$) and in RAW settings ($\alpha = .94$). Because the scale was already established in the literature and produced a strong alpha, we decided to use it as a composite observed variable as opposed to a latent variable.

**Leisure as a State-of-Mind (LSM).** LSM measures assess whether or not activities are perceived as leisure. Perceived leisure or LSM is defined by Duerden et al. (n.d.) as “a psychological state in which an individual experiences freedom, intrinsic motivation, and positive affect during the recreation activity” (p. 6). In order to determine whether or not our participants perceived RAW or work duties as leisure, we measured their levels of intrinsic motivation, perceived freedom, and positive affect using the following scales.

**Intrinsic motivation.** We measured intrinsic motivation using a scale created by Esteve, Martin, & Lopez (1999). The scale contains four questions on a 6-point scale measuring the extent to which the activity was defined by each item. For the purpose of this study, participants thought of their RAW participation over the last six months. With these activities in mind, they were prompted to rate the extent to which the activity is defined by each item. For example, if the participant thought of basketball, they rated the extent to which basketball enabled them “to
enjoy [it] because [he] like[s] it, with no other reward” (p. 85). Alpha reliability for this construct in the original study was .66 in a sample of 335 students at a university in Spain (Esteve et al., 1999).

**Perceived freedom.** We measured perceived freedom using the previously mentioned scale created by Esteve et al., (1999). The perceived freedom scale contains five questions on a 6-point scale. For the purpose of this study, participants thought of their participation in RAW activities over the last six months. With these activities in mind they were prompted to rate the extent to which each item defines the activities. For example, if the participant thought of using the on-site gym, they rated the extent to which going to the gym enabled them “to feel [they] own[s] [their] time” (p. 85). Alpha reliability for this construct in the original study was .75 in the sample of 335 students at a university in Spain (Esteve, Martin, & Lopez, 1999).

**Positive affect.** Positive affect was measured using items from the previously mentioned PEAQ (Waterman, 1993). Included in the PEAQ is a subscale measuring hedonic enjoyment, used in this study as the measurement for positive affect. The scale for positive affect includes six items on a scale of 1 (strongly disagree) to 7 (strongly agree). The original study produced test re-test reliability of .80 and a coefficient alpha of .90 (Waterman, 1993).

LSM was modeled as a composite variable composed of the averages of three items, intrinsic motivation, perceived freedom, and positive affect. This composite observed variable appears twice in the model, once representing perceptions of work responsibilities and again representing perceptions RAW.
**Demographics.** Demographic information including, age, sex, level of education, marital status, and number of children provide potential controlling factors. These demographic variables were used due to their possible relationships with either the independent or dependent variables.

**Data Collection**

After contact with Human Resources (HR) representatives was established as previously mentioned, permission was obtained from potential participants by way of reading and agreeing with an online consent form. The survey method used to collect data was an online questionnaire using the Qualtrics platform. We used the previously mentioned instruments to create a measure for RAW perceptions, personal expressiveness, organizational commitment, organizational identification, work engagement, and resilience. Data collection began in September 2015. The researcher contacted HR personnel and provided them with a copy of an electronic link to the Qualtrics questionnaire. The HR contacts were then instructed to distribute the questionnaire to employees throughout the company through the previously discussed methods. The original email with attached questionnaire link was sent to participants and placed on company intranet on September 19, 2015. A reminder email was sent 3-5 days after the original questionnaire was delivered. The questionnaire was closed on October 5, 2015.

The flow of the questionnaire is as follows (see Appendix B.1). Data for intrinsic motivation, perceived freedom, positive affect, and personal expressiveness were gathered twice, once in the context of work responsibilities and again in the context of RAW responsibilities. Data were then gathered on individual level dependent variables and demographic controls.
Analysis

Using AMOS 23 statistical software, structural equation modeling (SEM) was used to address our hypotheses. Specifically, we measured relationships between LSM during work and LSM during RAW and personal expressiveness, organizational identification, work engagement, and resilience, while controlling for age, gender, marital status, level of education, number of children in the family, and company. Direct and indirect structural paths were examined and bootstrapping confirmed the statistical significance of indirect paths.

Kline (2005) recommended examining multiple, conservative model fit indices to evaluate the overall model fit. First, a chi-squared test was used. It was unlikely the test would produce a non-significant chi-square, but a significant chi-squared test can be attributed to a large sample size and is not typically used in rejecting a model. We examined absolute fit indices and the comparative fit index (CFI) was considered to evaluate model fit. An index score of .95 or greater was desired. The root mean square error of approximation (RMSEA) assessed fit based on the magnitude of the residuals. An index score of .08 or less was desired. The RMSEA is often considered one of the most valuable fit indices in SEM (Martin et al., 2005). We anticipated a Jöreskog-Sörbom Goodness of Fit Index (GFI) ≥ .90 and a Standardized Root Mean Square Residual (SRMR) ≤ .08 (Klein, 2005).

Results

Rows with more than 10 percent missing data, unengaged responses (e.g., answering 3 for every question), and outliers were removed providing a final analyzed sample (N = 266). As all independent variables were Likert scales, we focused on kurtosis (an indication of insufficient variance) rather than focusing on skewness. All variables produced acceptable kurtosis values between 1 and -1 (Sposito, Hand, & Skarpness, 1983). Continuous demographic variables such as age were checked for skewness. Variables came back with reasonably small skewness values
between 2 and -2. All variables besides demographic variables were on a 5-point ordinal Likert scale, thus extreme or spurious value outliers did not exist. All descriptive variables varied significantly between companies as determined by Levene’s test of homogeneity of variance (p < .05). See Table 1 for descriptive statistics.

Table 1

Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>153</td>
<td>19</td>
<td>64</td>
<td>34.30</td>
<td>9.55</td>
</tr>
<tr>
<td>Male</td>
<td>160</td>
<td>0</td>
<td>1</td>
<td>0.83</td>
<td>0.38</td>
</tr>
<tr>
<td>Education</td>
<td>161</td>
<td>1</td>
<td>6</td>
<td>3.73</td>
<td>0.94</td>
</tr>
<tr>
<td>Married</td>
<td>161</td>
<td>1</td>
<td>5</td>
<td>1.89</td>
<td>0.44</td>
</tr>
<tr>
<td>Number of kids</td>
<td>158</td>
<td>0</td>
<td>7</td>
<td>2.11</td>
<td>1.75</td>
</tr>
<tr>
<td><strong>Company 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>52</td>
<td>18</td>
<td>67</td>
<td>36.58</td>
<td>11.63</td>
</tr>
<tr>
<td>Male</td>
<td>52</td>
<td>0</td>
<td>1</td>
<td>0.75</td>
<td>0.44</td>
</tr>
<tr>
<td>Education</td>
<td>51</td>
<td>1</td>
<td>5</td>
<td>3.76</td>
<td>1.01</td>
</tr>
<tr>
<td>Married</td>
<td>52</td>
<td>1</td>
<td>3</td>
<td>1.92</td>
<td>0.48</td>
</tr>
<tr>
<td>Number of kids</td>
<td>51</td>
<td>0</td>
<td>7</td>
<td>2.00</td>
<td>2.09</td>
</tr>
<tr>
<td><strong>Company 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>44</td>
<td>21</td>
<td>59</td>
<td>26.82</td>
<td>6.83</td>
</tr>
<tr>
<td>Male</td>
<td>44</td>
<td>0</td>
<td>1</td>
<td>0.70</td>
<td>0.46</td>
</tr>
<tr>
<td>Education</td>
<td>44</td>
<td>2</td>
<td>6</td>
<td>3.98</td>
<td>0.76</td>
</tr>
<tr>
<td>Married</td>
<td>43</td>
<td>1</td>
<td>3</td>
<td>1.79</td>
<td>0.47</td>
</tr>
<tr>
<td>Number of kids</td>
<td>44</td>
<td>0</td>
<td>5</td>
<td>0.86</td>
<td>1.42</td>
</tr>
</tbody>
</table>

After screening the data, the data was imported into SPSS Statistical Software. Scores on all independent and dependent variables were summed and averaged to create composite scores for each measure. LSM perceptions of intrinsic motivation, perceived freedom, and positive affect during work duties and RAW produced Cronbach’s alphas of .79 and .84 respectively. Personal expressiveness during RAW and personal expressiveness during work duties produced Cronbach’s alphas of .94 and .92 respectively. Organizational identification, organizational
commitment, work engagement, and resilience were also turned into composite scores with Cronbach’s alphas of .85, .90, .97, and .83 respectively (see Table 2).

Table 2

*Composite Scales and Respective Cronbach's Alpha*

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Composite Scale</th>
<th>Scales included in Composite Scale</th>
<th>Cronbach's alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>WLSM</td>
<td>Work perceptions</td>
<td>Esteve et al., 1999 (intrinsic motivation subscale), Esteve et al., 1999 (perceived freedom subscale) &amp; Waterman, 1993 (hedonic enjoyment)</td>
<td>.79</td>
</tr>
<tr>
<td>RLSM</td>
<td>RAW perceptions</td>
<td>Esteve et al., 1999 (intrinsic motivation subscale), Esteve et al., 1999 (perceived freedom subscale) &amp; Waterman, 1993 (hedonic enjoyment)</td>
<td>.84</td>
</tr>
<tr>
<td>WPE</td>
<td>Work Personal Expressiveness</td>
<td>Waterman, 1993</td>
<td>.92</td>
</tr>
<tr>
<td>RPE</td>
<td>RAW Personal Expressiveness</td>
<td>Waterman, 1993</td>
<td>.94</td>
</tr>
<tr>
<td>OrgId</td>
<td>Organizational Identification</td>
<td>Mael &amp; Ashforth 1992</td>
<td>.85</td>
</tr>
<tr>
<td>WoEng</td>
<td>Work Engagement</td>
<td>Rich et al. 2010</td>
<td>.97</td>
</tr>
<tr>
<td>Res</td>
<td>Resilience</td>
<td>Block &amp; Kremen 1996</td>
<td>.83</td>
</tr>
</tbody>
</table>

*Note.* The measurement model categories were collapsed into the following categories: Leisure as a state of mind during work (WLSM), leisure as a state of mind during RAW (RLSM), organizational identification (OrgId), work engagement (WoEng), resilience (Res), personal expressiveness during work (WPE), and personal expressiveness during RAW (RPE).

**Measurement Model**

No latent variables were used in this model. Therefore, an exploratory (EFA) and confirmatory factor analysis (CFA) were not necessary. Variables were instead collapsed into composite scores. We checked reliability on these composite scales before collapsing them, then checked for normality after collapsing them. Skewness and kurtosis levels were acceptable as noted. This was done due to the fact we tested sets of extremely similar variables in different settings (i.e., asking six questions about personal expressiveness in a work setting, then asking...
the exact same six questions about a RAW setting.) This created measurement error correlation purely artifact of the way the questions are worded. It would be impossible to obtain discriminant validity in this case, so in order to avoid this issue we considered composite scores instead of latent factors. Zero-order correlations were calculated for all composite scores (see Table 3). All correlations were significant (p < .001).

Table 3

Pearson's Correlations (n=266)

<table>
<thead>
<tr>
<th></th>
<th>WLSM</th>
<th>RLSM</th>
<th>OrgId</th>
<th>WoEng</th>
<th>Res</th>
<th>WPE</th>
<th>RPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WLSM</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RLSM</td>
<td>.37**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OrgId</td>
<td>.51**</td>
<td>.32**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WoEng</td>
<td>.49**</td>
<td>.18**</td>
<td>.52**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Res</td>
<td>.30**</td>
<td>.31**</td>
<td>.31**</td>
<td>.40**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WPE</td>
<td>.77**</td>
<td>.22**</td>
<td>.51**</td>
<td>.59**</td>
<td>.20**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>RPE</td>
<td>.42**</td>
<td>.77**</td>
<td>.29**</td>
<td>.16**</td>
<td>.32**</td>
<td>.27**</td>
<td>1</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level, two-tailed.

Note. The measurement model categories were collapsed into the following categories: Leisure as a state of mind during work (WLSM), leisure as a state of mind during RAW (RLSM), organizational identification (OrgId), work engagement (WoEng), resilience (Res), personal expressiveness during work (WPE), and personal expressiveness during RAW (RPE).

Model Fit

The structural model demonstrated adequate model fit. In order to achieve appropriate model fit, we were required to add a direct path between WLSM and RPE not originally theorized. We felt this addition theoretically sound because LSM perceptions during work responsibilities hypothetically affect personal expressiveness during RAW activities. For example, if an employee felt intrinsic motivation towards work responsibilities, perceived freedom to do what they wanted, and enjoyed or felt positive affect during work we theorize they would feel that much more personally expressive during their RAW activities than during their
work responsibilities due to the theoretical increased feelings of LSM during RAW. RAW may generally be more freely chosen and enjoyable. Therefore, a direct path between LSM perceptions during work and personal expressiveness during RAW activities was necessary. Additionally, we covaried the error terms of organizational identification, work engagement, and resilience because they are conceptually strongly correlated constructs. We also covaried our independent and control variables (WLSM, married, and RLSM) as an assumption of covariance-based methods employed by AMOS. All model fit metrics were within an adequate range (see Table 4).

Table 4

<table>
<thead>
<tr>
<th>Metric</th>
<th>Observed value</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFI</td>
<td>0.99</td>
<td>&gt;.95</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.06</td>
<td>&lt;.08</td>
</tr>
<tr>
<td>PCLOSE</td>
<td>0.24</td>
<td>&gt;.05</td>
</tr>
<tr>
<td>SRMR</td>
<td>0.04</td>
<td>&lt;.09</td>
</tr>
<tr>
<td>GFI</td>
<td>0.98</td>
<td>&gt;.90</td>
</tr>
</tbody>
</table>

Controls

The majority of controls (age, gender, number of kids, and education level) had no significant impact on any of the dependent variables or mediators. However, marital status significantly related to resilience (i.e., being married had a slight negative effect on employee resilience ($\beta = -.156, p = .004$)).

Structural Model

The original model (see Figure 2) included direct and indirect effects from each independent and control variable to every mediator and dependent variable (nearly a just-identified model; i.e., zero degrees of freedom). We tested for potential effects from control
variables, but found no significant effect. We, therefore, deleted these controls. This then provided us with a more parsimonious model.

Figure 2. Original SEM model

During the path analysis we tested for potential direct effects and removed non-significant paths in order to increase degrees of freedom. In a normal SEM model with latent variables, this is unconventional and unnecessary, but in a path analysis—due to limited degrees
of freedom and to avoid overparameterization—one is justified in removing non-significant paths to increase the degrees of freedom, thereby improving parsimony (Mitchell, 1992; Scott & Bruce, 1994). As shown above in the model fit section, we were able to obtain adequate model fit without these paths—ergo, by definition, these deleted paths were not critical to the model and would not confound the effects we did observe. The model can be seen in its entirety in Figure 3.

![Path model for RAW model](image)

**Figure 3.** Path model for RAW model.

**Mediation.** Personal expressiveness is an important mediator in the hypothesized model. Therefore, mediation was tested using 5000 bias corrected bootstrapping resamples in AMOS (Hair, Ringle, & Sarstedt, 2011). All indirect paths were unique (i.e., only one indirect route between each IV and DV). Therefore, no inflation of mediation effects occurred. The results indicated all four of the mediated paths were significant (see Table 5).
RECREATION AT WORK

Table 5

Mediation

<table>
<thead>
<tr>
<th>Path</th>
<th>β</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLSM -&gt; RPE -&gt; Res</td>
<td>0.157</td>
<td>0.001</td>
</tr>
<tr>
<td>WLSM -&gt; RPE -&gt; Res</td>
<td>0.035</td>
<td>0.001</td>
</tr>
<tr>
<td>WLSM -&gt; WPE -&gt; WoEng</td>
<td>0.452</td>
<td>0.001</td>
</tr>
<tr>
<td>WLSM -&gt; WPE -&gt; OrgId</td>
<td>0.266</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Note. β is for standardized indirect effects. P-values are calculated based on standardized indirect effects and two-tailed significance.

Personal Expressiveness

The final model produced multiple significant direct paths in regard to the relationship between LSM and personal expressiveness. LSM during work responsibilities had a strong direct effect on personal expressiveness during work responsibilities (β = .766, p < .001) and a weaker direct effect on personal expressiveness during RAW (β = .157, p < .001). Additionally, LSM during RAW activities had a strong direct effect on personal expressiveness during RAW activities (β = .704, p < .001). In this model, the variance of personal expressiveness during RAW activities and personal expressiveness during work duties accounted for 60.2 percent and 58.7 percent respectively.

Organizational identification

The final model only included organizational identification. Organizational commitment was removed due to multicollinearity issues. Significant direct paths from both LSM during work (β = .169, p = .029) and LSM during RAW (β = .164, p = .002) to organizational identification existed. A significant path from personal expressiveness during work to organizational identification was also present (β = .347, p < .001). Significant partial mediation occurred from LSM during work to organizational identification through personal expressiveness.
during work responsibilities ($\beta = .266, p < .001$). Additionally, organizational identification accounted for 33.2 percent of the variance in the model.

**Work engagement**

While there were no significant direct paths from LSM during work or LSM during RAW to work engagement, the final model did produce a significant direct path from personal expressiveness during work duties to work engagement ($\beta = .590, p < .001$). Significant full mediation also occurred from LSM during work to work engagement mediated by personal expressiveness during work responsibilities ($\beta = .452, p = .001$). Work engagement accounted for 34.8 percent of the variance in the model.

**Resilience at Work**

The final model produced two significant direct paths to resilience. The first path was a direct effect from LSM during work to resilience ($\beta = .189, p = .002$). The second path was a direct effect from personal expressiveness during RAW to resilience ($\beta = .22, p < .001$). Significant full mediation occurred from LSM during RAW to resilience through personal expressiveness during RAW activities ($\beta = .157, p = .001$). Significant partial mediation occurred from LSM during work to resilience mediated by personal expressiveness during RAW ($\beta = .04, p = .001$). Resilience accounted for 15 percent of the variance in the model.

**Marital status and resilience.** As previously mentioned, all control variables were non-significant except for marital status. Being married had a significant negative relationship with resilience ($\beta = -.198, p = .001$). Because marital status was the only significant control variable additional analysis took place posthoc to further explore the results. When investigated further by separating gender, males ($\beta = -.209, p = .003$) experienced less resilience than females.
Females ($\beta = -146, p = .283$) also reported a negative relationship between resilience and being married, but the results did not reach significance.

**RAW and Added Value**

In order to identify a positive relationship between RAW activities and organizational identification, work engagement, or resilience we looked at direct and indirect paths from LSM during RAW. LSM during RAW produced two significant paths. The first was a direct path from LSM during RAW to organizational identification ($\beta = .164, p = .002$). The second path was from LSM during RAW to resilience mediated by personal expressiveness during RAW activities ($\beta = .157, p = .001$).

Additionally, in order to identify exactly how much variance was accounted for by LSM perceptions during RAW and personal expressiveness during RAW, while controlling for demographic and work variables, we analyzed the data by performing hierarchical regression analyses (HRA). Separate HRA were performed for organizational identification (see Table 6), work engagement (see Table 7), and resilience (see Table 8). Although effect sizes were small, there was significant ($p < .05$) additional variance accounted for by RAW variables.
Table 6

Hierarchical regression results for prediction of organizational identification

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>$B$</th>
<th>SE</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age</td>
<td>0.01</td>
<td>0.01</td>
<td>0.66</td>
<td>0.00</td>
<td>0.01</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td></td>
<td>-0.09</td>
<td>1.01</td>
<td>-0.09</td>
<td>0.10</td>
<td>-0.05</td>
</tr>
<tr>
<td></td>
<td>Level of education</td>
<td></td>
<td>-0.01</td>
<td>0.04</td>
<td>-0.01</td>
<td>0.04</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>Marital status</td>
<td></td>
<td>0.09</td>
<td>0.09</td>
<td>0.09</td>
<td>0.09</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>Number of children</td>
<td></td>
<td>0.00</td>
<td>0.03</td>
<td>0.00</td>
<td>0.03</td>
<td>0.00</td>
</tr>
<tr>
<td>2</td>
<td>Work - LSM perceptions</td>
<td>0.30</td>
<td>0.28</td>
<td>51.66**</td>
<td>0.23</td>
<td>0.09</td>
<td>0.22**</td>
</tr>
<tr>
<td></td>
<td>Work - Personal expressiveness</td>
<td></td>
<td></td>
<td></td>
<td>0.25</td>
<td>0.07</td>
<td>0.30**</td>
</tr>
<tr>
<td>3</td>
<td>RAW - LSM perceptions</td>
<td>0.33</td>
<td>0.03</td>
<td>5.86**</td>
<td>0.21</td>
<td>0.08</td>
<td>0.23**</td>
</tr>
<tr>
<td></td>
<td>RAW - Personal expressiveness</td>
<td></td>
<td></td>
<td></td>
<td>-0.04</td>
<td>0.07</td>
<td>-0.05</td>
</tr>
</tbody>
</table>

Note. Step 1 includes number of children, level of education, gender, marriage status, and age. Step 2 includes LSM perceptions at work and personal expressiveness at work. Step 3 includes LSM perceptions during RAW and personal expressiveness during RAW. Significant values and unstandardized and standardized regression coefficients reflect the results of the final regression equation. *p < .05. ** p < .01

Table 7

Hierarchical regression results for prediction of work engagement

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>$B$</th>
<th>SE</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age</td>
<td>0.04</td>
<td>0.04</td>
<td>2.36*</td>
<td>0.00</td>
<td>0.01</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td></td>
<td>-0.06</td>
<td>0.09</td>
<td>-0.06</td>
<td>0.09</td>
<td>-0.03</td>
</tr>
<tr>
<td></td>
<td>Level of education</td>
<td></td>
<td>-0.01</td>
<td>0.04</td>
<td>-0.01</td>
<td>0.04</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>Marital status</td>
<td></td>
<td>0.00</td>
<td>0.08</td>
<td>0.00</td>
<td>0.08</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Number of children</td>
<td></td>
<td>0.04</td>
<td>0.03</td>
<td>0.04</td>
<td>0.03</td>
<td>0.10</td>
</tr>
<tr>
<td>2</td>
<td>Work - LSM perceptions</td>
<td>0.36</td>
<td>0.32</td>
<td>63.26**</td>
<td>0.10</td>
<td>0.08</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>Work - Personal expressiveness</td>
<td></td>
<td></td>
<td></td>
<td>0.39</td>
<td>0.06</td>
<td>0.49**</td>
</tr>
<tr>
<td>3</td>
<td>RAW - LSM perceptions</td>
<td>0.37</td>
<td>0.01</td>
<td>1.46</td>
<td>0.12</td>
<td>0.07</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>RAW - Personal expressiveness</td>
<td></td>
<td></td>
<td></td>
<td>-0.08</td>
<td>0.06</td>
<td>-0.10</td>
</tr>
</tbody>
</table>

Note. Step 1 includes number of children, level of education, gender, marriage status, and age. Step 2 includes LSM perceptions at work and personal expressiveness at work. Step 3 includes LSM perceptions during RAW and personal expressiveness during RAW. Significant values and unstandardized and standardized regression coefficients reflect the results of the final regression equation. *p < .05. ** p < .01
Table 8

Hierarchical regression results for prediction of resilience

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>$B$</th>
<th>SE</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>0.01</td>
<td>0.01</td>
<td>0.68</td>
<td>0.00</td>
<td>0.00</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td>-0.01</td>
<td>0.07</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td>0.00</td>
<td>0.03</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>Level of education</td>
<td></td>
<td></td>
<td></td>
<td>0.02</td>
<td>0.07</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
<td>-0.03</td>
<td>0.02</td>
<td>-0.09</td>
</tr>
<tr>
<td></td>
<td>Number of children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Work - LSM perceptions</td>
<td>0.10</td>
<td>0.09</td>
<td>13.05**</td>
<td>0.16</td>
<td>0.07</td>
<td>0.22*</td>
</tr>
<tr>
<td></td>
<td>Work - Personal expressiveness</td>
<td></td>
<td></td>
<td></td>
<td>-0.01</td>
<td>0.05</td>
<td>-0.02</td>
</tr>
<tr>
<td>3</td>
<td>RAW - LSM perceptions</td>
<td>0.15</td>
<td>0.05</td>
<td>6.70**</td>
<td>0.07</td>
<td>0.06</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>RAW - Personal expressiveness</td>
<td></td>
<td></td>
<td></td>
<td>0.08</td>
<td>0.05</td>
<td>0.14</td>
</tr>
</tbody>
</table>

Note. Step 1 includes number of children, level of education, gender, marriage status, and age. Step 2 includes LSM perceptions at work and personal expressiveness at work. Step 3 includes LSM perceptions during RAW and personal expressiveness during RAW. Significant values and unstandardized and standardized regression coefficients reflect the results of the final regression equation. *$p < .05$. **$p < .01$

Discussion

This study provides initial evidence of the ability of RAW to produce positive outcomes at the individual level. Real, measurable benefits may include more resilient employees and increased identification with the organization and may also equate to increased employee retention (Kreiner & Ashforth, 2004). Specifically, this study investigated an empirical relationship between RAW and employee flourishing (i.e., organizational identification, work engagement, resilience) mediated by personal expressiveness. Additionally, we investigated employees’ perceptions of RAW as leisure and how perceptions relate to the previously mentioned outcomes by measuring LSM. Although literature pertaining to outcomes of RAW is sparse, this study provides initial evidence of a positive relationship between RAW and individual level outcomes. This study demonstrated that LSM perceptions of intrinsic motivation, perceived freedom, and positive affect have a strong positive relationship with personal expressiveness.
It also provided evidence of positive relationships between LSM perceptions during RAW, resilience, and organizational identification.

This brings us back to our original question, *why are companies spending money on RAW?* And *are there any real, measureable benefits as a result of providing RAW?* As the results were interpreted, we noticed four distinct areas of contribution: (a) contributions related to LSM during work duties, (b) contributions related to LSM during work duties mediated by personal expressiveness, (c) contributions related to LSM during RAW, and (d) contributions related to LSM during RAW mediated by personal expressiveness.

**Work Contributions**

Perceptions of LSM during work duties had a variety of significant relationships including personal expressiveness during RAW, personal expressiveness during work, resilience, and organizational identification (see Figure 4). It seems if employees experience LSM perceptions during work responsibilities, it is likely they will also experience greater personal expressiveness during RAW, personal expressiveness during work, resilience, and organizational identification.

*Figure 4.* Direct effects between LSM during work duties and related variables
Additionally, when feelings of LSM perceptions during work activities lead to personal expressiveness we see additional benefits (see Figure 5). Personal expressiveness during work mediates significant relationships between LSM perceptions during work, work engagement, and organizational identification. So not only do we see relationships with resilience and organizational identification, but when employees feel more personally expressive during work, we also see a positive relationship with increased work engagement.

![Figure 5](image)

*Figure 5.* Direct and mediated effects from LSM during work duties mediated by personal expressiveness.

**RAW Contributions**

Raw appears to provide added value to the workplace in similar ways. Feelings of LSM during RAW have a significant relationship with personal expressiveness during RAW and organizational identification (see Figure 6). When LSM perceptions have a positive relationship with personal expressiveness during RAW, we see additional relationships with resilience appear
(see Figure 7). LSM during RAW has a positive relationship with resilience as mediated by personal expressiveness during RAW.

We do not assume RAW is good and work is bad or RAW provides certain benefits that work duties alone cannot. What we learn from testing the efficacy of this model is that RAW works hand in hand with work duties to provide additional benefit to employees within an organization. While employees who experience LSM during work have positive relationships with resilience, work engagement, and organizational identification, RAW may add to these benefits by way of increased feelings of resilience and organizational identification.

*Figure 6.* Direct effects between LSM during RAW and related variables.
This also sheds interesting light into LSM. Future research might investigate how organizations facilitate these feelings of intrinsic motivation, perceived freedom, and positive affect in the workplace. This study did not measure the presence or absence of RAW or work duties in relation to resilience, work engagement, or organizational identification. It measured LSM perceptions (intrinsic motivation, perceived freedom, and positive affect) during both RAW and work situations and how perceptions related to the previously stated individual outcomes. LSM perceptions seem to play a large role in whether or not the outcomes are reached. Further research might explore these relationships in more depth.

**Implications of Non-Findings – Work Engagement**

Duerden et al. (n.d.) theorized a relationship between RAW activities and all three components of employee flourishing (i.e., organizational identification, work engagement, resilience) mediated by personal expressiveness. Interestingly, this study did not report a
significant relationship, directly or indirectly, between RAW and work engagement. These findings are surprising because when employees experience recovery gained from leisure like RAW there should be an effect on how engaged employees feel at work (Sonnentag, 2003). Recovered employees should also have enough resources available to become more engaged with their work. Additionally, it is curious that no relationship existed with work engagement due to the fact there was a direct relationship between RAW and organizational identification. Sonnentag (2003) claims organizational identification and work engagement are positively related, leading one to assume a positive relationship with RAW and work engagement.

**Work engagement.** The basic components of work engagement are vigor, dedication, and absorption (Sonnentag, 2003). Daily leisure activities have a positive relationship with these three work engagement concepts; therefore, we assume a RAW activity would also relate. In Sonnentag’s (2003) study, she explored perceptions of leisure behavior in the evening after work and how it related to work engagement. Based on her study we would expect RAW during the workday to play a similar role of leisure activities in the evening after work. When compared with employees who do not participate in leisure, RAW, or recovery, recovered employees feel more able and willing to invest effort. Recovered employees are also equipped with adequate resources to engage in their daily work duties. Lastly, if employees experience recovery through leisure or RAW, they should experience increased concentration on work tasks and ignore irrelevant tasks (Sonnentag, 2003).

**Possible reasons.** There are a variety of reasons why RAW may not have had a positive relationship with work engagement. Research shows that employees who are not sufficiently recovered from a heavy workload may feel less vigorous and devote less effort to ensuing tasks (Sonnentag, 2003). Inadequate recovery can also be linked to employees being reluctant to
dedicate themselves to work and greater difficulty concentrating on current work tasks (Sonnentag, 2003). In the case of this study, it is possible employees did not experience sufficient recovery from participating in RAW activities to facilitate work engagement. It is possible that leaving the workplace and participating in a leisure activity may facilitate recovery better than leaving your desk to play Ping-Pong. Based upon Sonnentag’s (2003) research RAW doesn’t seem to provide enough recovery to facilitate work engagement.

**Moving forward.** Work engagement is important for employee wellbeing, positive work behaviors and creating a competitive advantage. Therefore, it is imperative to explore ways to customize RAW in order to better facilitate work engagement (Sonnentag, 2003). Management literature outlines a variety of ways to facilitate work engagement including providing job resources and increasing self-efficacy (Salanova & Schaufeli, 2008), providing authentic leaders in management (Giallonardo, Wong, & Iwasiw, 2010), establishing trust among management, supervisors, and frontline employees (Chughtai & Buckley, 2008), and empowering employees (Laschinger, Wilk, Cho, & Greco, 2009). These practices are generally offered for application in the realm of work. So as RAW continues to integrate into the workspace, it is important that researchers and practitioners explore how to integrate these principles into RAW practices as well.

The most transferable way to facilitate work engagement is self-efficacy (Bandura, 1994; Salanova & Schaufeli, 2008). Recreation experiences provide a great arena for building self-efficacy (Widmer, Dueren & Taniguchi, 2014). RAW would theoretically provide similar experiences for building self-efficacy and in turn facilitating work engagement. One example of this could be RAW in the form of classes such as yoga or dance. These experiences create an arena where employees can learn new skills, improve, and increase their self-efficacy.
This increase in self-efficacy during RAW activities may then increase work engagement (Salanova & Schaufeli, 2008).

Another common theme of engagement best practices offered by management scholars concerns upper management. Employees experienced greater work engagement when they felt their leaders were authentic (Giallonardo et al., 2010), trustworthy (Chughtai & Buckley, 2008), and empowering (Laschinger et al., 2009). This can relate to RAW practices and policies in a variety of ways. RAW practices seem to be embedded in company culture and come from upper management. It is possible that if management is trustworthy (i.e., when they say it is appropriate to participate in RAW activities on the clock, then it really is appropriate), authentic (i.e., they provide RAW as a benefit to increase job satisfaction or simply because they love their employees), and empowering (i.e., management gives employees the power to decide when to participate, how long to participate, and in what activities to participate), in relation to RAW, employees may attain the recovery necessary and experience greater work engagement after participating.

**Antecedents to RAW**

It is important to recognize possible work (e.g., work stress, hours worked, supervisor’s perceptions of RAW) and non-work (e.g., marital status, number of children, home-based recreation habits) antecedents to participation in RAW.

**Work antecedents.** It is possible employees view RAW in two different ways, either as a reward for diligent work or a break during a long string of assignments. One employee might work diligently through his current project with the thought of a Ping-Pong game as the *light at the end of the tunnel*. Another mindset might use RAW as a needed break before finishing. In
order to have the brainpower to finish a project, one employee might need a quick game of pool to refresh his mind and abilities.

The number of hours worked in a day or week may also play a role in RAW participation on both ends of the spectrum. Employees overworking themselves may see a decrease in RAW participation as their time is swallowed up in work. On the other hand, overworked employees may log a large amount of hours one week and spend more than average time participating in RAW the next week to help bounce back. The same can be said for employees who log less hours in a week. Less time logged on projects and other work duties may lead to more time spent participating in RAW. Conversely, less hours logged in a week could relate to less hours spent in the office and equate to less RAW participation.

Lastly, the perceptions of supervisors may play a role in how much employees participate in RAW. On one side, a supervisor with very strict rules or negative perceptions about RAW may deter employees from participating. Rebellious employees may act out by participating more if their immediate supervisor disagrees with RAW practices. On the other hand, if an immediate supervisor is excited about RAW initiatives and always inviting you to play pool, your RAW participation may be much higher than employees with a direct supervisor with negative attitudes towards RAW initiatives.

**Non-work antecedents.** Having children in the home may play a role in RAW participation. Some parents, in an effort to escape their parental duties, may spend extra hours at work participating in RAW with coworkers. Other employees may be quick to finish work in order to get home to their family as swiftly as possible.

Home-based recreation habits may also be an antecedent to RAW participation. If any given employee spends the majority of his leisure time trail running, kayaking, mountaineering,
or participating in other outdoor leisure pursuits not offered at work, he may be more inclined to come to work, finish their project, and go home to pursue other recreation hobbies.

As exemplified in this study, marital status can also play a role in outcomes related to RAW. Being married meant employees experienced less resilience from work or RAW activities. Interestingly, males experienced less resilience than females. It is possible that employees experience the greatest sense of resilience when returning home to their family. On the other hand, being married might cause increased stresses eliminating the resilience otherwise achieved by participating in RAW activities.

**Theoretical Contributions**

In addition to initial empirical evidence of the positive benefits of RAW, this study also provides several theoretical contributions. First, this study has provided initial evidence of a model for measuring RAW. With continued application and further development, this model and instrument might be used by organizations to measure the relationships of their RAW initiatives against resilience, work engagement, organizational identification, and a variety of other dependent variables. Additionally, this study adds to the literature pertaining to blurred boundaries between work and non-work (Gant & Kiesler, 2002). It provides initial empirical evidence of positive benefits of blurring the boundaries between work and play in organizational settings. While some believe bringing recreational activities (generally thought of as a non-work activities) into the workplace causes distraction and produces negative side effects, this study provides evidence of positive benefits related to RAW. Additionally, this study adds to a branch of research concerning work life balance (Baltes et al., 2010). While work life balance research proposes balancing one’s life by taking time off of responsibilities at work to participate in activities outside of work (Guest, 2002) this study proposes the possibility of achieving work life
balance while still at work. This is accomplished by participating in freely chosen, intrinsically motivated, and enjoyable RAW activities, which may provide greater feelings of resilience and improved work life balance during the workday.

**Self-Determination theory.** This study also supports the literature concerning Self-determination Theory in organizational settings (Gagne & Deci, 2005). Past studies reported relationships between autonomy, and, in turn, more job satisfaction, higher performance evaluations, greater persistence, greater acceptance of organizational change, better psychological adjustment, quality of employee performance, and organizational commitment (Blais & Briere, 1992; Gagne & Deci, 2005; Gagne & Koestner, 2002). While autonomy and perceived freedom are not identical, it may be argued they are similar constructs (Neulinger, 1974; Ryan & Deci, 2006). This study provides evidence in both work and RAW settings of a relationship between perceived freedom and individual outcomes such as organizational identification, resilience, and work engagement.

**Flow theory.** Csikszentmihályi and LeFevre (1989) argued that we more often experience flow during work activities than we do during leisure activities. This is not to say work is better than leisure or leisure is better than work, but more so that they can both contribute in their own way. As we experienced in this study, perceptions of work duties alone evidenced positive relationships with personal expressiveness, resilience, work engagement, and organizational identification. In addition to these relationships, there were also positive relationships pertaining to LSM during RAW. LSM during RAW also had positive relationships with resilience and organizational identification. So although LSM during work may provide increased personal expressiveness, resilience, work engagement, and organizational
RECREATION AT WORK

identification, LSM during RAW may also provide added value to personal expressiveness, resilience, and organizational identification.

**The Dark Side of RAW**

While there are hypothesized benefits from RAW, it is also important to recognize the possible dark side of RAW. Recreation is often a mechanism for disengaging and relaxing (Sonnentag & Zilstra, 2006). Therefore, RAW may be inherently distracting to employees causing them to spend more time on the clock playing video games and shooting pool than actually accomplishing work tasks. In addition to the physical distraction, RAW may come with certain negative perceptions about those who participate. *Hard working* employees may look at coworkers who participate in RAW as lazy members of the team leading to unhealthy team conflict or missed deadlines. This could also bring about constraints because employees may not want to participate due to fear of what their coworkers may think about them. Additionally, while healthy competition can be enjoyable, team based or competitive recreation might unconsciously facilitate anger, fighting, or confrontation that could in turn lead to negative outcomes among teams or coworkers. So while this study provides initial evidence of positive individual benefits, many unknowns concerning the negative side of RAW are still present.

**Modifications to the Model**

The final model included modifications from the original RAW model (Duerden et al., n.d.) in a variety of ways. First, it was hypothesized that LSM during RAW would have a positive relationship with resilience, work engagement, and organizational identification. All of these relationships were hypothetically mediated by personal expressiveness. This did not end up being the case. Perceptions of LSM during RAW only had relationships with organizational identification and personal expressiveness. An additional relationship with resilience existed
mediated by personal expressiveness. Additionally, while LSM during RAW had no relationship with work engagement a relationship between LSM during work and work engagement was present mediated by personal expressiveness during work responsibilities.

Furthermore, while modifying the path model we discovered a previously unidentified path between LSM perceptions during work and how personally expressive employees felt while participating in RAW activities. Although this was not a previously hypothesized relationship in hindsight it is a quite clear connection. If employees felt their work activities to be a form of leisure they may also feel more personally expressive during experiences generally facilitating more LSM.

**Implications and Future Research**

The results of this study provide initial evidence of a positive relationship between RAW and positive level outcomes. This study addresses the gap between leisure and management literature. RAW may be the realm where scholars from both leisure and management can contribute to one another. Additionally, this study lays an empirical groundwork and foundation for future RAW research. Building upon the framework and ideas in this study, scholars can continue exploring the phenomenon of RAW.

This initial evidence potentially supports the organizational practice of using resources to provide RAW. This study has provided initial evidence of measureable benefits; therefore, organizations can use this information to begin to intentionally design RAW experiences for organizations. Instead of installing a rock wall because the CEO likes to rock climb or a basketball court because the head of Human Resources played basketball in college, organizations can intentionally program RAW experiences to facilitate feelings of intrinsic motivation, perceived freedom, and positive affect among employees. This, in turn, may provide
specific individual or organizational outcomes. Future research will allow researchers to explore what kinds of activities are related to specific perceptions and outcomes. This will provide a basis for RAW programming and more intentional RAW experiences. Lastly, for years leisure scholars have been using recreation as a means to improve people’s lives (Duerden, Widmer, Taniguchi, & McCoy, 2009; Wells, Widmer, McCoy, 2004; Widmer, Duerden, & Taniguchi, 2014; Zabriskie & McCormick, 2003). This study continues to support the notion that recreation can in fact facilitate creating and experiencing a good life in family, outdoor, or work contexts.

Future research may look at a variety of additional outcomes. RAW outcomes might not only occur on the individual level, but on the organizational level as well. Future research might explore organizational level outcomes such as relatedness, teamwork, and interdepartmental collaboration. Because recreation activities provide a liminal space where everyone is essentially equal, we might see employees’ guards come down as they participate in RAW activities (Turner, 1982). This may, in turn, facilitate work relationships and project collaboration that would not naturally occur.

Another area of future research concerns structured and unstructured RAW activities. Unstructured activities might be defined as on-site and can be done whenever employees please (e.g., Ping-Pong, attending the on-site gym). Structured activities on the other hand may refer to experiences off-campus (e.g., happy hour, team parties, work retreats). Are all RAW activities considered equal? Or do structured activities provide benefits unstructured activities do not? Structured activities may also be an appropriate setting to explore intentional RAW programming by creating RAW experiences geared towards specific outcomes.

Constraints are also an interesting area of future research to consider. As mentioned earlier, recreation often facilitates a liminal space where people can be themselves (Turner,
1982). This may play a role in the integration of minority groups in the workplace. Exploring whether RAW is an equalizer or a discriminator in the workplace may provide helpful insights to both researchers and practitioners. Lastly, research might address whether or not RAW initiatives play a role for the up and coming generation as they begin to search for their careers.

**Limitations**

Although the sample size was sufficient for the SEM path model, a larger sample would have allowed for a more in depth analysis with more latent variables. Fortunately, we were able to aggregate scores into composite observed variables and find significant results. Another limitation of this study was selection bias. We did not select individuals in a properly randomized way; therefore, the sample was not representative of the population. This study was also limited to self-report data. Future research might address this limitation by conducting an experimental design with a control group without access to RAW amenities and a test group with access to RAW amenities. Participants were also all from software related companies; therefore, results are not generalizable to the other types of companies. For this study we purposefully chose only software companies in order to control for industry characteristics. Limitations also exist concerning response rates. The overall response rate was only 14 percent. This was due to the fact the questionnaire was made available to employees over a company intranet. Therefore, the questionnaire was available to a large amount of employees, but only a small amount decided to participate in the survey. Our initial methodology included sending the questionnaire to all employees via email, which may have increased our response rate, but due to restrictions within the companies we were constrained to use the company intranet.
Conclusion

RAW is an ever increasing phenomenon. With incredible growth since its inception in the 1800s, RAW may play a role in facilitating resilience and organizational identification. Although there are those who hypothesize why organizations provide RAW, this study provides initial evidence of reasons employers may want to begin or continue RAW initiatives. RAW activities may be the missing piece in the puzzle of productivity. Providing RAW may give employees just what they need to get the job done more efficiently, thereby adding to the bottom line.
References


APPENDIX A.1 Prospectus
Introduction

Many companies throughout the world offer recreation amenities in the workplace. This phenomenon ranges from amenities as simple as a break room with a foosball table to offerings as extravagant as yoga studios, basketball courts, rock climbing walls, and 24-hour gyms. Such facilities do not come cheap, so why are companies spending enormous amounts of time and money on recreation offerings in the workplace? A podcast titled Perk place: The benefits offered by Google and others may be grand, but they’re all business (Wharton Business School, 2007) discussed the various reasons organizations offer recreation in the workplace. Among these were to attract the best employees, keep employees working long hours, to show appreciation to employees, and to retain employees. In the same podcast, Dr. Nancy Rothbard mentioned additional motives for providing recreation amenities including providing an appealing environment and increasing productivity by alleviating worries (e.g., childcare, exercising, and cooking; Wharton Business School, 2007).

In addition, other organizations may offer recreation amenities to build a company culture of fun and creativity (Writer, 2011) or to stand out as the best company to work for (Wharton Business School, 2007). Motivations are many and vary from company to company. Unfortunately, very little empirical research has explored the relationship between recreation in the workplace and individual level outcomes such as organizational commitment, job satisfaction, resilience, or job efficiency. Many organizations are offering recreation in the workplace, but are they actually seeing a return on their investment? Although a relationship between play and creativity has been theorized (Mainemelis & Ronson, 2006), do real, measurable organizational benefits result from recreation in the workplace?

Work and recreation have long been seen by society as two very separate domains of life (Kabanoff, 1980). Yet as the world changes, we see more positive and negative spillover
(Wilensky, 1960) between work and recreation. As technology increases, individuals now have the ability to bring work and play with them everywhere. Answering emails via cellular device on the train or via computer at home now means office hours do not end when we leave the office. Likewise, recreation spills into our work domains by way of social media, work socializing, and off-site retreats. On the side of negative spillover, employers might experience employees cyber loafing, planning an upcoming vacation, using the phone, engaging in extended social conversations, leisurely reading, participating in betting, or daydreaming while on the clock (D'Abate, 2005). More positively, recreation spillover into work can consist of company mixers where networking can occur (Ingram & Morris, 2007), socialization among employees (Cooper-Thomas & Anderson, 2006), and stress relieving workplace recreation (Mokaya & Gitari, 2012).

A culture of leisure and recreation is becoming more and more prevalent in large organizations such as Google and Facebook, as well as smaller companies such as SirsiDynix and Clear Satellite. The idea of recreation amenities at work has come a long way since its inception in the mid 1800s. In 1854, Peacedale Manufacturing Company developed a community library in Peacedale, Rhode Island, which is recognized as “the starting point in the industrial recreation movement” (Godbey, 1978, p. 176). Since then, employees have experienced industrial recreation in the form of annual employee excursions, organization sponsored competition sports, and even the formation of the National Industrial Recreation Association (NIRA; Godbey, 1978).

At first thought, recreation at work seems to consist of a break room containing a fridge, a microwave, and maybe a Ping-Pong table. In the 21st century, industrial recreation can be considerably more extravagant than your everyday rec room. One example is Google’s Venice
Beach campus where employees have free access to “pool and shuffleboard tables, company surfboards and bicycles, yoga studios, as well as basketball courts, rock climbing walls, 24-hour gyms and gourmet dining options” (Duerden, Courtright, & Widmer, n.d., p. 2). Another example is SirsiDynix’s Lehi, Utah office, which includes a Zen room with massage chairs, pool, foosball, Ping-Pong tables, video game consoles, board games, card tables, and a large variety of fresh and frozen food choices available for purchase. Clearly industrial recreation has progressed since its inception with the community library in Rhode Island. It is easy to see from these examples that providing recreation activities is not a cheap ordeal, so why are companies and organizations spending any money at all on industrial recreation?

Godbey (1978), quoting former Executive Secretary of NIRA, Don Neer, listed industrial recreation benefits such as “improvement of physical health; reduction of tension and fatigue . . . leadership development; reduced absenteeism and job turnover; development of good community relations; . . . increase in employee involvement; . . . and improvement of employee morale” (p. 177). Are these benefits the reason organizations provide industrial recreation activities? Or do they do it simply because it is engrained in the organizational culture to constantly have fun? Is it an employee benefit to be seen as added value to employment? Or looking at the dark side, maybe companies are using industrial recreation to keep their employees at work longer by enticing them with activities. Regardless of the reason, “little data to support[s] the values of employee recreation” (Godbey, 1978, p. 177). This then begs the question, are there real, measurable organizational benefits related to recreation type activities in the workplace?

In order to answer this question, Duerden et al. (n.d.) recently proposed a model for industrial recreation. This model of recreation at work (RAW) infers a positive relationship
between RAW synergy and organizational flourishing through the mediation of personal expressiveness. RAW synergy consists of a relationship between (a) recreation at work activities and (b) recreation at work perceptions. The most proximal outcome of RAW synergy is personal expressiveness (Waterman, 1990). “Personal expressiveness then serves as a mediating factor between recreation at work synergy and key individual-level outcomes reflective of employee flourishing” (Duerden et al., n.d. p. 8). Employee flourishing is collectively made up of three categories, (a) organizational identification and commitment, (b) work engagement, and (c) employee resilience.

Duerden et al.’s (n.d.) RAW Model is a timely contribution to both leisure and management literature with implications for both research and practical application. Their conceptualized model was one of the first to explore the integration of recreation and work domains while looking at individual level outcomes. Their paper is the start of a new line of research studying the implications, both positive and negative, of RAW. Therefore, the intent of this study is to examine the efficacy of Duerden et al.’s (n.d.) RAW Model and empirically test if there is a relationship between recreation at work synergy and organizational flourishing.

**Statement of the Problem**

The problem of the study is to examine the efficacy of Duerden et al.’s (n.d.) RAW Model (see Figure 1) by examining the relationship between recreation at work synergy and organizational flourishing. Specifically, the study will be an attempt to answer the following research questions:

1. Does RAW synergy have a positive relationship with personal expressiveness?
2. Does RAW synergy, through the mediating effects of personal expressiveness, have a positive relationship with organizational identification and organizational commitment?

3. Does RAW synergy, through the mediating effects of personal expressiveness, have a positive relationship with employee work engagement?

4. Does RAW synergy, through the mediating effects of personal expressiveness, have a positive relationship with employee resilience?

5. Do RAW activities provide added value above and beyond that of normal everyday work activities in terms of increased organizational commitment, work engagement, and resilience among employees

![Flourishing](image)

Figure 1. Recreation at Work Model by Duerden et al. (n.d.).

**Purpose of the Study**

Leisure research has clearly established a positive relationship between leisure and a variety of positive outcomes. Unfortunately, aside from Duerden et al.'s (n.d.) recently proposed
RAW Model, little research (Mainemelis & Ronson, 2006) to date concerning the relationship between recreation activities in the workplace and positive organizational outcomes. The proposed research will be a step toward filling this gap in both leisure and management literature. Testing the RAW Model will provide theoretical contributions by way of (a) a reliable and valid approach for measuring RAW and (b) empirical evidence of the positive relationship between recreation at work synergy and organizational flourishing.

**Delimitations**

This study will be delimited to the following:

1. A convenience sample of 800 employees from four different software companies (e.g., Adobe, Novell, SirsiDynix, and Property Solutions).
2. The sample will include full-time, part-time, male, and female employees across all job types.
3. Organizational outcomes (organizational commitment, work engagement, and resilience) will be measured using the following instruments:
   a. Organizational commitment (Mowday, Steers, & Porter, 1979)
   b. Organizational identification (Mael & Ashforth, 1992)
   c. Work engagement (Rich et al., 2010)
   d. Resilience (Block & Kremen, 1996)
4. Synergy variables (intrinsic motivation, perceived freedom, and positive affect) and personal expressiveness will be measured using the following instruments respectively:
   a. Intrinsic motivation scale (Esteve, Martin, & Lopez, 1999)
   b. Perceived freedom scale (Esteve et al., 1999)
   c. Hedonic enjoyment – PEAQ (Waterman, 1993)
d. Personal expressiveness activities scale – PEAQ (Waterman, 1993)

5. The data collection will be conducted over a period of three months (July – September 2015).

Limitations

The study will be limited by the following factors:

1. Representativeness of subjects – Sample will be obtained from four different software companies (e.g., Adobe, Novell, SirsiDynix, Property Solutions), which cannot be deemed representative of all software companies.

Assumptions

The study will be based upon the following assumptions:

1. The five different instruments pulled together to form the RAW questionnaire are all valid and reliable.
2. Companies are, in fact, providing recreation at work opportunities.

Hypotheses

The study will test the following hypotheses:

1. $H_1$: A positive relationship between RAW synergy and personal expressiveness.
2. $H_{01}$: No relationship between RAW synergy and personal expressiveness.
3. $H_2$: A positive relationship between RAW synergy through the mediating effects of personal expressiveness and organizational identification and organizational commitment.
4. $H_{02}$: No relationship between RAW synergy through the mediating effects of personal expressiveness and organizational identification and organizational commitment.
5. H₃: A positive relationship between RAW synergy through the mediating effects of personal expressiveness and positive employee work engagement.

6. H₀₃: No relationship between RAW synergy through the mediating effects of personal expressiveness and positive employee work engagement.

7. H₄: A positive relationship between RAW synergy through the mediating effects of personal expressiveness and employee resilience.

8. H₀₄: No relationship between RAW synergy through the mediating effects of personal expressiveness and employee resilience.

9. H₅: RAW activities will provide added value above and beyond that of normal everyday work activities in terms of increased organizational commitment, work engagement, and resilience among employees.

10. H₀₅: RAW activities will not provide added value above and beyond that of normal everyday work activities in terms of increased organizational commitment, work engagement, and resilience among employees.

Definition of Terms

1. *Organizational commitment.* “The extent to which employees develop a strong affective bond with the organization” (Duerden et al., n.d., p. 12; O’Reilly & Chatman, 1986).

2. *Organizational identification.* “The degree to which employees view the organization as self-referential (i.e., similar to one's self)” (Ashforth & Mael, 1989; Duerden et al., n.d., p. 12; Pratt, 1998).
3. Perceived leisure. “A psychological state in which an individual experiences freedom, intrinsic motivation, and positive affect during a recreation activity” (Duerden et al., n.d., p. 6; Neulinger, 1974).

4. Personal expressiveness. “A feeling of completeness or fulfillment. When participating in an activity that makes us feel intensely alive and authentic, the activity becomes a reflection of who one really is” (Duerden et al., n.d., p. 9; Waterman, 1990).

5. Recreation activities. “Activities individuals choose to engage in during discretionary time for the purposes of relaxation, diversion, learning, or social participation” (Duerden et al., n.d., p. 9; Kelly, 2009).

6. Recreation at work activities. “Recreation activities for employees made possible through the allocation of organizational resources” (Duerden et al., n.d., p. 7).

7. Recreation at work perceptions. “An individual's interpretation of his or her participation during a recreation at work activity” (Duerden et al., n.d., p. 7).

8. RAW synergy. “The interactive relationship between recreation at work activities and recreation at work perceptions” (Duerden et al., n.d., p. 8).

9. Work. “Compensated activities an individual performs in an official position as a good or service to the organization and its stakeholders” (Duerden et al., n.d., p. 6; Kabanoff, 1980).

Literature Review

The purpose of this study is to examine the efficacy of Duerden et al.’s (n.d.) RAW Model by examining the relationship between recreation at work synergy and organizational flourishing. The literature related to recreation at work is reported in this chapter. For organizational purposes, the literature is presented in the following topics: (a) Work and non-work, (b) Related theories, and (c) Summary.

Work and Non-Work

One such definition of work is a set of monetarily compensated tasks an individual performs for another person or organization (Kabanoff, 1980; Haworth & Veal, 2004). Although Haworth and Veal (2004) defined work as paid employment, it is also important to recognize unpaid childcare and community volunteering as work. On the flipside, leisure is a little more difficult to define. De Grazia (1962) and Pieper (2009) defined leisure in a more classical way as a state of being, while Roberts (2006) defined it as free time or time not occupied by work or other obligations. Leisure will be synonymously termed as recreation, which, for the purpose of this study, will be defined as "activities individuals choose to engage in during discretionary time for the purposes of relaxation, diversion, learning, or social participation” (Duerden et al., n.d. p. 9). Although we have defined work and non-work separately, we believe there is a long lasting relationship between work and non-work, which has spanned over thousands of years.

We have seen work and non-work domains since the very beginning of time, even before Adam and Eve. In the first book of the Holy Bible, Genesis, The Creation took place. There were six days of work followed by the seventh day (Genesis 2:2, King James Version), a day of rest—the very first recorded instance of work and non-work. Since that time, the relationship of work and non-work has been the cause of much intellectual debate ranging from the definitions
of the concepts to their boundaries (Kabanoff, 1980). With the ideals of work and leisure constantly changing, it continues to be difficult to define and identify work and non-work.

The progression of work and non-work. The relationship between work and non-work has been studied for thousands of years, but Stanner (1979) claims human culture did not begin with work, but with non-work in the form of self-expression and play. We see evidence of this in hunter-gatherer societies. Although they had to work to survive, they still found many hours in the day to experience freedom and leisure (Goodale & Godbey, 1988). Moving forward in history toward the era of the Greeks and the Romans, we see an enormous shift in the roles of work and non-work. Not only is work no longer necessary for survival, but it is even looked down upon. Work was thought of as valueless and for the non-citizens and the slaves, while philosophers enjoyed a life of learning and leisure (Goodale & Godbey, 1988). During the Christian Era, work again gained value as service to others and was seen as a virtue. One interesting trait about the relationship of work and non-work during this time was, regardless of its domain, all activities were meant for one purpose—a calling to serve God (Applebaum, 1992). The Renaissance and the Modern Era brought a surge in leisure as the world enveloped itself in the arts. “The aim of work was not economic progress . . . but was aimed at improvement of human conditions” (Le Goff, 1988, p. 222). This then changed rather abruptly as the age of industrialization arrived. Leisure was swallowed up in the 58 hours of work per week. That number eventually fell to an average of 40 hours a week, but began to rise shortly thereafter, leaving the idea of a leisure society to blow away in the wind of a work-focused world. Our world today is not much different than that of the industrial revolution. Even though we have experienced great leaps in technology that allow us to work faster and more efficiently, there are surprisingly still many who live a life focused on work simply for the sake of
working. On the other hand, there are many who work in order to not be at work (i.e., to be at leisure) (Pieper, 2009). This mindset of working in order to not be working may have a relationship with the recent shift in organizational structure as companies have tried to meet this need.

**Paradigm shift.** We have seen a shift in the work and non-work paradigm as organizations have begun to blend work and non-work domains in an effort to provide greater work life balance. This may be related to the mass amount of millennials entering the workforce and their exceedingly complicated checklist of workplace necessities (Roberts, 2015). Many organizations now offer initiatives such as flextime, a compressed workweek, telecommuting, onsite childcare, and a family friendly climate (Baltes et al., 2010). Some of these initiatives bring family into work and facilitate bringing work home. Regardless of the situation, work and non-work boundaries are becoming less distinct (Gant & Keisler, 2002). Additionally, organizations now offer, more than ever, non-work activities at work. For example, Google’s Venice Beach campus provides employees free access to “pool and shuffleboard tables, company surfboards and bicycles, yoga studios, as well as basketball courts, rock climbing walls, 24-hour gyms and gourmet dining options” (Duerden et al., n.d., p. 2).

**Research.** Unfortunately, little research has been conducted concerning the blurred lines between work and non-work in the form of industrial recreation (Godbey, 1978). Mainemelis and Ronson (2006) propose a theoretical relationship between play and creativity, but Mokaya and Gitari (2012) may be the only correlational study thus far to examine the relationship between industrial recreation and positive individual outcomes. Their study concluded that recreation is a significant factor of individual employee performance, including increased levels of commitment and productivity (Mokaya & Gitari, 2012). Mokaya and Gitari’s study may be
the only research bridging the gap between business management and leisure literature. Not only has there been a void concerning research on recreation in the workplace, the research conducted is largely atheoretical. Researchers have produced theoretical models regarding organizational settings that may explain the phenomenon of recreation in the workplace.

**Relevant Theories and Models**

There have been theoretical attempts to explain this phenomenon of recreation at work. This section will outline three different theoretical models and describe how they might be used to study recreation at work.

**Self-determination theory and work motivation.** One potential outcome of industrial recreation is its impact on motivations and behaviors in the workplace. A theory especially pertinent to motivations and behaviors, which has been applied in the workplace, is Self-Determination Theory (SDT; Deci & Ryan, 1985).

Deci and Ryan’s (1985) theory of self-determination has been well established among theories of motivation. SDT distinguishes between amotivation and motivation (see Appendix A-3) (Gagne & Deci, 2005). Amotivation is having no intent to act, while motivation involves intentionality. There are two types of motivation, autonomous and controlled. Autonomous motivation includes intrinsic motivation or being motivated by one’s interests in an activity. Controlled motivation, on the other hand, deals with the degree to which one feels coerced by external forces or counterparts. SDT has been empirically tested in many settings including healthcare, education, and sports.

Gagne and Deci (2005) described SDT as a theory of work motivation (see Figure 2) and discussed its relevance to theories in organizational behavior. They reported several studies that supported SDT as an approach to work motivation. Studies have reported relationships between
“managers’ autonomy support and greater satisfaction of the needs for competence, relatedness, autonomy, and, in turn, more job satisfaction, higher performance evaluations, greater persistence, greater acceptance of organizational change, and better psychological adjustment” (Gagne & Deci, 2005, p. 345). Blais and Briere (1992) found a relationship between managerial autonomy support and the quality of subordinates’ performance. Lastly, Gagne and Koestner (2002) found autonomous motivation to be related to organizational commitment. Because relatively few studies have tested SDT in organizational settings, Gagne and Deci (2005) presented six propositions to be examined in work organizations. For example, “employees’ autonomous causality orientations and autonomy-supportive work climates will have additive, independent positive effects on employees’ autonomous motivation and positive work outcomes” (Gagne & Deci, 2005, p. 350).

SDT in the workplace discusses the impact of the social environment and individual differences with the most proximal outcome being autonomy. Autonomy then promotes performance, wellbeing, organizational trust, organizational commitment, and job satisfaction. This framework could potentially be used to study recreation at work by exploring the relationship between recreation at work and autonomy. If employees feel as though they are being given autonomy in their recreation at work activities, this autonomy may promote the previously discussed outcomes.

**A theory of play in organizational settings.** Recreation and play are terms often used together (Caldwell & Witt, 2011). Although previous literature has not empirically tested a relationship between recreation at work and creativity, Mainemelis and Ronson (2006) proposed a theory concerning the relationship between play and creativity in an organizational setting.
While not yet empirically tested, creativity could have a possible relationship with recreation at work.

In Mainemelis and Ronson’s (2006) theory concerning play and its relationship with creativity in organizational settings, they defined play “as a behavioral orientation consisting of five interdependent and circularly interrelated elements: a threshold experience; boundaries in time and space; uncertainty-freedom-constraint; a loose and flexible association between means and ends; and positive affect” (p. 84). Creativity was defined as “the generation of ideas that are novel and potentially useful” (Mainemelis & Ronson, 2006, p. 92). The dichotomy between play as engagement and play as diversion provides an array of creative benefits. Play as engagement facilitates cognitive, affective, motivational, and skill dimensions of the creative process while play as a diversion facilitates a psychological and social-relational climate more conducive to creativity. Job complexity, environmental threats, individual differences, and lack of time and space can inhibit play, thereby inhibiting opportunities for creativity.

While this theory has not yet been empirically tested, it is a notable contribution to the literature concerning recreation in the workplace because it provides a useful theoretical framework to justify the salience of play in organizational settings, which is in very close relation to recreation in organizational settings, thereby providing a great framework for empirically studying recreation at work. Unfortunately no formal theoretical framework is provided leaving the concept difficult to test in an empirical setting.

**Recreation at work model.** The Recreation at work (RAW) Model (Duerden et al., n.d.) provides a theoretical approach to understanding the relationship between recreation in the workplace and individual level outcomes. RAW is different from other theories of work and non-work combination such as Wilensky’s (1960) spillover theory and Neulinger’s (1974)
paradigm of work and leisure. While these two theories discuss domains spilling over into one another (Wilensky, 1960) and activities consisting of different degrees of work and non-work, RAW refers solely to recreation activities sanctioned and provided by work organizations that occur in the workplace (Duerden et al., n.d.).

The RAW Model infers a positive relationship between recreation at work synergy and organizational flourishing through the mediation of personal expressiveness. Recreation at work synergy consists of a relationship between recreation at work activities and recreation at work perceptions. It is important that activities are not only provided by the organization, but are also perceived as recreation and not work. When activities sponsored by organizations facilitate feelings of perceived freedom, intrinsic motivation, and positive affect, employees are more likely to perceive them as a recreation activity (Duerden et al., n.d.). The most proximal outcome of recreation at work synergy is personal expressiveness (Waterman, 1990). “Personal expressiveness then serves as a mediating factor between recreation at work synergy and key individual-level outcomes reflective of employee flourishing” (Duerden et al., n.d., p. 8). Employee flourishing in organizations (Cameron, Dutton, & Quinn, 2003) includes but is not limited to the following three dependent variables, which are the main focus of the RAW Model: (a) organizational identification and commitment (Mael & Ashforth, 1992; Mowday et al., 1979), (b) work engagement (Rich et al., 2010), and (c) employee resilience (Block & Kremen, 1996).

Duerden et al.’s (n.d.) RAW Model provides a perfect framework for studying the phenomenon of recreation in the workplace. It measures perceptions of activities as recreation and is theoretically grounded in the theory of personal expressiveness (Waterman, 1990). The outcomes of Duerden et al.’s Model are easily measurable by valid and reliable constructs. Hence, the RAW Model is the best framework to study the phenomenon of recreation at work.
Summary

Work and non-work will forever be a part of human existence. Until recently, there have been very few models and theories concerning recreation in the workplace provided by the organization. Duerden et al.’s RAW Model is a large contribution to both management and leisure literature. Examining the efficacy of their model will be another large step, theoretically, to the literature and will fill the gap between theory and empirical evidence. Therefore, the purpose of this study is to examine the efficacy of Duerden et al.’s (n.d.) RAW Model by examining the relationship between recreation at work synergy and organizational flourishing.
Methods

The problem of this study will be to examine the efficacy of the Recreation at work Model (Duerden et al., n.d.) within the software and computer industry. Specifically, this study will investigate whether or not a relationship exists between recreation at work synergy (RAW activities, intrinsic motivation, perceived freedom, and positive affect) and organizational flourishing. This chapter will outline the structure and methods of the study. The following areas will be discussed: (a) study sample, (b) procedures, (c) measures, (d) data collection, and (e) analysis.

Sample and Procedures

In order to control for industry characteristics, we will limit our sample to software companies’ employees. A convenience sample will be taken from local software companies. These companies will be chosen due to already established contacts within the organizations from previous case study data collection. Assuming a 50% response rate, the sample size to be used during the analysis will be approximately 400. Therefore, the study will collect a convenience sample totaling approximately 800 employees. Klein (2005) considers anything over 200 to be a large sample for an SEM study. The researcher will contact Human Resource departments to explain the study and discuss the organization’s participation. The researcher will discuss the importance of the study, study procedures, participant involvement, and items to expect on the questionnaire, any risks involved, possible incentives and seek permission to conduct the study. The Human Resources contact at each respective company will distribute the questionnaire to all employees throughout the organization.

Measures

Five measures will be used in the RAW questionnaire. Each of the five instruments will be discussed in depth by describing the instrument, its validity and reliability, as well as why the
particular instrument and questions were chosen for this study. For the purpose of this study all of the instruments will be scaled to the same Likert scale of 1 (very untrue) to 5 (very true). The instruments will be presented beginning with dependent variables: (a) organizational identification, (b) work engagement, and (c) resilience; followed by the independent and control variables: (d) personal expressiveness, (e) intrinsic motivation, (f) perceived freedom, (g) positive affect, and (h) demographic information.

**Organizational identification.** Mael and Ashforth (1992) tested a reformulated model of organizational identification (see Figure 1). Their measure has been widely used and validated (Riketta, 2005; Van Knippenberg & Sleebos, 2006; Wiesenfeld, Raguram, & Garud, 1998); therefore, making it an appropriate measure to examine the efficacy of the RAW Model. For the purpose of this study, we will be using Mael and Ashforth’s (1992) measure in its entirety.

The measure consists of six questions on a 5-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). The questions represent certain feelings an individual might have about a company for which he or she works. An example question is, “When someone criticizes (name of company), it feels like a personal insult.” (Mael & Ashforth, 1992, p. 122; see Figure 1). Results from the six questions are summed up and divided by six, producing a mean score ranging between 1 and 36, indicating the level of organizational identification.

The measure has been applied to a variety of situations including university faculty (Van Knippenberg & Sleebos, 2006) and an all male college student sample attending a religious university (Mael & Ashforth, 1992). Additionally, the measure has been used in a sample of computer professionals (Wiesenfeld, Raguram, & Garud, 1998), which makes it especially appropriate for the current study. In a sample of employed business and psychology students Mael (1988) reported a coefficient alpha of .81. Additionally, Ashforth (1990) reported a similar
figure of .83 in a sample of managers in a variety of organizations. Because the measure is an already established measure with strong reliability it was used in the SEM analysis as composite observed variable.

Figure 1

Organizational Identification Scale (Mael & Ashforth, 1992)

When someone criticizes the organization I work for, it feels like a personal insult.
I am very interested in what others think about the organization I work for.
When I talk about the organization I work for, I usually say "we" rather than "they".
The organization I work for, their successes are my successes.
When someone praises the organization I work for, it feels like a personal compliment.
If a story in the media criticized the organization I work for, I would feel embarrassed

**Work engagement.** Work engagement is explicitly described by Duerden et al. (n.d.) as reflecting Kahn’s (1990) framework of engagement. Rich et al.’s (2010) measurement perfectly captures Kahn’s (1990) conceptualization of work engagement by measuring engagement on cognitive, physical, and emotional levels, making it a suitable instrument to test the RAW Model (see Figure 2). For the purpose of this study, we will use Rich et al.’s measure in its entirety. We will not be changing the order or wording of the items outlined in Rich et al.’s original study.

Rich et al.’s (2010) scale consists of 18 questions on a scale of 1 (strongly disagree) to 5 (strongly agree). The 18 questions are broken up into three sections: physical, emotional, and cognitive, with six questions each. Representative examples from each of the three sections are, “I work with intensity on my job,” “I am enthusiastic in my job,” and “At work, my mind is focused on my job” (Rich et al., 2010, p. 634). Among the original sample of firefighters, internal consistency was reliable at .95, while an additional study of UK Business Solutions employees produced an internal consistency of .88 (Alfes, Shantz, Truss & Soane, 2013).
Because the scale has already been established in the literature and produced a strong alpha we decided to use it as a composite observed variable as opposed to a latent variable.

Figure 2

Work Engagement Scale (Rich et al., 2010)

Physical engagement
- I work with intensity on my job
- I exert my full effort to my job
- I devote a lot of energy to my job
- I try my hardest to perform well on my job
- I strive as hard as I can to complete my job
- I exert a lot of energy on my job

Emotional engagement
- I am enthusiastic in my job
- I feel energetic at my job
- I am interested in my job
- I am proud of my job
- I feel positive about my job
- I am excited about my job

Cognitive engagement
- At work, my mind is focused on my job
- At work, I pay a lot of attention to my job
- At work, I focus a great deal of attention on my job
- At work, I am absorbed by my job
- At work, I concentrate on my job
- At work, I devote a lot of attention to my job

Resilience. Duerden et al.’s (n.d.) definition of resilience as “the ability to bounce back from negative emotional experiences, setbacks, and failures” (p. 15) is derived from Block and Kremen’s (1996) study to operationalize resilience (see Figure 3). This makes Block and Kremen’s measure, the ER-89, an ideal instrument to measure resilience in the RAW Model.

For the purpose of this study, we will be using the ER-89 in its entirety, and all of the questions will be used verbatim.
The ER-89 scale consists of 14 questions answered on a 4-point scale ranging from 1 (does not apply at all) to 4 (applies very strongly), indicating how resilient participants are in situations concerning friends, unusual situations, personality, etc. For example, “I quickly get over and recover from being startled” (Block & Kremen, 1996, p. 352).

The original study produced an alpha coefficient of .76 in a sample of 18 and 23 year olds. In a sample of 72 participants, test-retest reliability was $r = .78$ with internal reliability of .72 (Waugh, Fredrickson, & Taylor, 2008). A study among African American senior citizens yielded a Cronbach’s alpha coefficient of .77 (Baldwin, Jackson, Okoh, & Cannon, 2010). Additional studies of psychology students (Genet & Siemer, 2011) and students in Kuwait (Al-Naser & Ma, 2000) have been performed using this instrument. Because the measure is well established in the literature and produced a strong Cronbach’s Alpha it was modeled as a composite observed variable.
**Resiliency Scale (ER89) (Block & Kremen, 1989)**

I am generous with my friends  
I quickly get over and recover from being startled  
I enjoy dealing with new and unusual situations  
I usually succeed in making a favorable impression on people  
I enjoy trying new foods I have never tasted before  
I am regarded as a very energetic person  
I like to take different paths to familiar places  
I am more curious than most people  
Most of the people I meet are likeable  
I usually think carefully about something before acting  
I like to do new and different things  
My daily life is full of things that keep my interested  
I would be willing to describe myself as a pretty "strong" personality  
I get over my anger at someone reasonably quickly.

**Personal expressiveness.** Duerden et al.’s (n.d.) idea of personal expressiveness comes directly from Waterman (1990). Waterman is the founder of the concept of personal expressiveness; therefore, his Personal Expressiveness Activities Questionnaire (PEAQ) scale is an appropriate instrument for this study (see Figure 4). The original instrument begins by asking, “If you wanted another person to know about who you are and what you are like as a person, what five (5) activities of importance to you would you describe?” (Waterman, 1993, p. 681). After listing five activities, participants then respond to a series of 30 questions about each activity. The set of 30 questions contains a variation of different scales all ranging from one to seven. An example of one of these questions is, “This activity gives me my strongest feeling that this is who I really am,” and is scored on a scale of 1 (strongly disagree) to 7 (strongly agree) (Waterman, 1993, p. 682). Possible scores for the expanded version range from 6 to 42.

In this study, we will measure personal expressiveness using an adaptation of the PEAQ (Waterman, 1993). At the beginning of the questionnaire we will explicitly defined RAW
activities as “recreation activities for employees made possible through the allocation of organizational resources” (Duerden et al., n.d., p. 7). After defining RAW activities, we will ask participants to think about the every day work duties and task they have participated in over the past 6 months. As participants ponder on their work duties, we will ask questions 29, 32, 34, 35, 38, and 40. Participants will then be asked to ponder about their recreation at work activities they have participated in over the past 6 months and answer the same six questions. This contrast will provide a look into the added value of RAW activities above and beyond normal, everyday work activities. One example of PEAQ items is question 34, which reads, “This activity gives me my strongest feeling that this is who I really am” (Waterman, 1993, p. 682). We have chosen these six specific questions because they focus on personal expressiveness while other items focus on interest, flow, effort, etc. These other variables are not pertinent to the current study; hence, we will only be using the questions specifically asking about personal expressiveness.

Waterman’s (1991) original study produced one-week test-retest reliability of .84 as well as an average alpha coefficient of .90. A study of 173 undergraduate psychology students used a modified version of the PEAQ in which participants identified six activities constrained by crossing high and low levels of effort with three levels of affect (Waterman, 1991). The Cronbach’s alpha for this scale was .91 (Waterman, 1991). In another study with college students, the PEAQ showed one-week test-retest reliability and internal consistency at an alpha level of .90 (Waterman, 1993). The PEAQ has been used among a variety of different samples, including high school and college aged students (Sharp, Coatsworth, Draling, Cumsille, & Ranieri, 2007), as well as older adults in Japan (Zhang & Umemuro, 2012). The PEAQ is highly
adaptable and many variations of the instrument have been successfully used (Waterman et al., 2003).

Figure 4

*Personal Expressiveness Activities Questionnaire (PEAQ) (Waterman, 1993)*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>This activity gives me my greatest feeling of really being alive.</td>
<td></td>
</tr>
<tr>
<td>When I engage in this activity I feel more intensely involved than I do when engaged in most other activities.</td>
<td></td>
</tr>
<tr>
<td>This activity gives me my strongest feeling that this is who I really am.</td>
<td></td>
</tr>
<tr>
<td>When I engage in this activity I feel that this is what I was meant to do.</td>
<td></td>
</tr>
<tr>
<td>I feel more complete or fulfilled when engaging in this activity than I do when engaged in most other activities.</td>
<td></td>
</tr>
<tr>
<td>I feel a special fit or meshing when engaging in this activity.</td>
<td></td>
</tr>
</tbody>
</table>

**RAW Synergy.** RAW synergy is a combination of RAW activities and RAW perceptions. Perceived leisure is defined by Duerden et al. (n.d.) as “a psychological state in which an individual experiences freedom, intrinsic motivation, and positive affect during the recreation activity” (p. 6). In order to determine whether or not our participants are experiencing perceived leisure, we will measure their levels of intrinsic motivation, perceived freedom, and positive affect using the following scales.

**Intrinsic motivation.** We will measure intrinsic motivation using a scale created by Esteve et al. (1999) (see Figure 5). The scale contains four questions on a 6-point scale measuring the extent to which the activity was defined by each item. For the purpose of this study, participants thought of their RAW participation during the last six months. With these activities in mind they are prompted to rate on a scale of 1 (not at all) to 6 (defines it perfectly) the extent to which the activity is defined by each item. For example, if the participant thought of basketball, he will rate the extent to which basketball enables him “to enjoy [it] because [he]
like[s] it, with no other reward” (p. 85). Alpha reliability for this construct in the original study was .66 in a sample of 335 students at a university in Spain.

Figure 5

<table>
<thead>
<tr>
<th>Intrinsic Motivation (Esteve et al., 1999)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To enjoy doing something because you like it, with no other reward</td>
</tr>
<tr>
<td>To do something just to have a good time with no other purpose</td>
</tr>
<tr>
<td>To do something because you like it forgetting about its practical utility</td>
</tr>
<tr>
<td>To do something just for the pleasure of it</td>
</tr>
</tbody>
</table>

**Perceived freedom.** We will measure perceived freedom using the previously mentioned scale created by Esteve et al. (1999) (see Figure 6). The perceived freedom scale contains five questions on a 6-point scale. For the purpose of this study, participants thought of their participation in RAW activities during the last six months. With these activities in mind they were prompted to rate on a scale of 1 (not at all) to 6 (defines it perfectly) the extent to which the activities are defined by each item. For example, if the participant thought of using the on-site gym, he will rate the extent to which going to the gym enables him “to feel [he] own[s] [his] time” (p. 85). Alpha reliability for this construct in the original study was .75 in the sample of 335 students at a university in Spain.

Figure 6

<table>
<thead>
<tr>
<th>Perceived Freedom (Esteve et al., 1999)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To do what you want</td>
</tr>
<tr>
<td>To feel free to choose what you want to do</td>
</tr>
<tr>
<td>To do whatever you want whenever you want</td>
</tr>
<tr>
<td>To feel you own your time</td>
</tr>
<tr>
<td>To decide by yourself what you want to do</td>
</tr>
</tbody>
</table>
Positive affect. Positive affect will be measured using items from the previously mentioned PEAQ (Waterman, 1993). Included in the PEAQ is a subscale that measures hedonic enjoyment, which we used as the measurement for positive affect (see Figure 7). The scale for positive affect includes six items on a scale of 1 (strongly disagree) to 7 (strongly agree). The original study produced test re-test reliability of .80 and a coefficient alpha of .90 (Waterman, 1993).

Figure 7

Positive Affect Scale (Hedonic Enjoyment) (Waterman, 1993)

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I engage in this activity I feel more satisfied than I do when engaged in most other activities.</td>
</tr>
<tr>
<td>This activity gives me my strongest sense of enjoyment.</td>
</tr>
<tr>
<td>When I engage in this activity I feel good.</td>
</tr>
<tr>
<td>This activity gives me my greatest pleasure.</td>
</tr>
<tr>
<td>When I engage in this activity I feel a warm glow.</td>
</tr>
<tr>
<td>When I engage in this activity I feel happier than I do when engaged in most other activities.</td>
</tr>
</tbody>
</table>

Demographics. Demographic information will be included to provide potential controlling factors. They will include company title, age, sex, job title, level of education, marital status, and number of children. These specific demographic variables will be used because they all could have possible relationships with either the independent or dependent variables.

Qualitative. The questionnaire will end with one qualitative question. The question prompt will read, “Thank you for completing our survey. Before you're done we would appreciate hearing any thoughts you have about recreation at work seeing it is a relatively new practice. Does it make a positive or negative impact in your life and/or your organization? What
makes some recreation at work activities better than others? Should organizations be providing recreation at work activities? Your thoughts to any of these questions would be great.”

**Data Collection**

After contact with Human Resources (HR) representatives is established as previously mentioned, permission will be obtained from potential participants by way of reading and signing an online consent form (see Appendix C-1). The researcher will assure participants, organization contacts, and administrators that extreme caution will be taken to keep participants’ information confidential and safe. Data will be permanently stored on only one computer and is password protected. Once permission from the organizations is granted, the researcher will use email correspondence in lieu of letters of support for the purpose of the Institutional Review Board.

The survey method to collect data will be an online questionnaire using the Qualtrics platform. We will use the previously mentioned instruments to create a measure for recreation at work perceptions, personal expressiveness, organizational commitment, work engagement, and resilience. Data collection will begin in September 2015.

Data for intrinsic motivation, perceived freedom, positive affect, and personal expressiveness will be gathered twice. Once in the context of work responsibilities and again in the context of recreation at work responsibilities. Data will then be gathered on individual level dependent variables and demographic controls.

**Analysis**

Using AMOS 23 statistical software, structural equation modeling (SEM) will be used to address our hypotheses. Specifically, we will measure links between work and recreation at work perceptions (as measured by intrinsic motivation, perceived freedom, and positive affect)
personal expressiveness, organizational identification, work engagement, and resilience, while controlling for age, gender, marital status, level of education, number of children in the family, and company. Direct and indirect structural paths will be examined and bootstrapping will be used to confirm statistical significance of indirect paths. We will use full information maximum likelihood to handle minimal missing data.

Figure 3. Proposed structural equation model to be analyzed in AMOS 23

The model will be tested using model fit indices to determine how well the model fits the data. Kline (2005) recommended multiple conservative model fit indices that will be examined to evaluate the overall model fit. First, a chi-squared test will be used. It is unlikely that the test will produce a non-significant chi-square but a significant chi-squared test can be attributed to a large sample size and is not typically used in rejecting a model. We will examine absolute fit indices and the comparative fit index (CFI) will be considered to evaluate the model’s absolute fit relative to the proposed model. An index score of .95 or greater is desired. The root mean square error of approximation (RMSEA) will assess fit based on the magnitude of the residuals. An index score of .08 or less is desired. The RMSEA is often considered one of the most
valuable fit indices in SEM (Martin et al., 2005). We will also be looking for a Jöreskog-Sörbom Goodness of Fit Index (GFI) ≥ .90 and a Standardized Root Mean Square Residual (SRMR) ≤ .08 (Klein, 2005).
References


Appendix A.2

Consent Form

Consent to be a Research Subject

Introduction
This research study is being conducted by Andrew Lacanienta, Dr. Mat Duerden, Associate Professor and Dr. Mark Widmer, Professor at Brigham Young University as well as Dr. Stephen Courtright, Associate Professor at Texas A&M University to determine a relationship between recreation at work and individual flourishing within organizations. You were invited to participate because the organization by which you are employed provides recreation at work activities and we feel your opinion is important to this study.

Procedures
If you agree to participate in this research study, the following will occur:
• You will be given an online questionnaire to fill out that will take approximately thirty (30) minutes. You may fill out the questionnaire at any location convenient for you.
• You may be chosen to be interviewed for approximately thirty (30) minutes about recreation at work
• The interview will be audio recorded to ensure accuracy in reporting your statements
• The interview will take place in the workplace at a time convenient for you or it will take place at a time and location convenient for you
• The researcher may contact you later to clarify your interview answers for approximately fifteen (15) minutes.
• Total time commitment will be 45 minutes

Risks/Discomforts
None

Benefits
There will be no direct benefits to you. It is hoped, however, that through your participation researchers may learn more about recreation at work and its effect on individual flourishing. The results of this study will be shared with your organization in an effort to improve and continue recreation at work initiatives.

Confidentiality
The research data will be kept on password-protected computer and only the researcher will have access to the data. At the conclusion of the study, all identifying information will be removed and the data will be kept in the researcher's locked office.

Compensation
You will not be compensated for your participation

Participation
Participation in this research study is voluntary. You have the right to withdraw at any time or refuse to participate.

Questions about the Research
If you have questions regarding this study, you may contact Andrew Lacanienta at ajlacanienta@gmail.com.

Questions about Your Rights as Research Participants
If you have questions regarding your rights as a research participant contact IRB Administrator at (801) 422-1461; A-285 ASB, Brigham Young University, Provo, UT 84602; irb@byu.edu.

Statement of Consent

Name (Printed): _____________________  Signature ___________________  Date ___________________
Appendix A.3

Implied Consent

Welcome to the Recreation at work questionnaire! This survey will help us better understand whether recreation at work (i.e. activities provided for employees by an employer. For example, basketball, massage chairs, ping pong tables, foosball, bike rentals, food options, or nap pods provided by the employer for their employees.) is just fun or if it in fact provides real benefits to employees and organizations.

My name is Andrew Lacanienta. I am a graduate student at Brigham Young University, and I am conducting this research under the supervision of Mat Duerden, PhD; Stephen Courtright, PhD; and Mark Widmer, PhD at Brigham Young University and Texas A&M University to determine the relationship between recreation at work and positive outcomes. You have been invited to participate because you are part of an organization that provides recreation-at-work to its employees.

Your participation in this study will require the completion of the attached survey and should take no longer than 15 minutes of your time. Your participation will be anonymous, and you will not be contacted again in the future unless you are interested in being entered into a prize drawing, in which case you would provide your email address and agree to be contacted in the future if you are chosen as a winner. You will not be paid for being in this study. This survey involves minimal risk to you and you may choose to refuse or stop at any time. The researchers have also programmed the questionnaire such that you can skip questions you do not want to answer and you may exit the survey at any time.

There are no direct benefits to you for participating in this study, but doing so: 1) creates the opportunity to help advance the literature about recreation in the workplace, and 2) potentially makes a positive effect among Human Resources departments within work organizations worldwide. Your involvement in this research project is voluntary. You may withdraw at any time without penalty or refuse to participate entirely. The withdrawal or refusal to participate will not affect your employment. There will be no reference to your identity at any point in the research.

Your participation in this questionnaire will provide you entry into a drawing to win one of five $20 Amazon gift cards! After completing the survey you will be prompted to enter your email address as your entry into the drawing. We will contact winners via email no later than November 1, 2015. The odds of winning a gift card are approximately 1:150.

You do not have to answer any question that you do not want to answer for any reason. We will be happy to answer any questions you have about this study. If you have further questions about this project or if you have a research-related problem you may contact me, Andrew Lacanienta at 801.709.8926 or ajlacanienta@gmail.com or my advisor, Mat Duerden, PhD, at 801.422.3834 or duerden@byu.edu, Stephen Courtright, PhD at 979.862.3953 or scourtright@mays.tamu.edu, or Mark Widmer, PhD, at 801.422.3381 or mark_widmer@byu.edu.

If you have any questions about your rights as a research participant you may contact: IRB Administrator A-285 ASB Brigham Young University Provo, UT 84602 | irb@byu.edu | 801-422-1461

*The IRB is a group of people who review research studies to protect the rights and welfare of research participants. The completion of this survey implies your consent to participate.
Appendix B.1

RAW Questionnaire

Thank you so much for taking the time to participate in our survey. The following questionnaire will ask questions related to day-to-day work responsibilities as well as recreation at work activities. Your answers will be kept confidential, so please answer each question as honestly as possible.
During this set of questions, please think about the every day work duties and tasks you have participated in over the past 6 months as you answer the following questions:

<table>
<thead>
<tr>
<th></th>
<th>Very untrue</th>
<th>Untrue</th>
<th>Somewhat true</th>
<th>True</th>
<th>Very true</th>
</tr>
</thead>
<tbody>
<tr>
<td>My every day work duties and tasks give me my greatest feeling of really being alive.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I engage in my every day work duties and tasks I feel more intensely involved than I do when engaged in most other activities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My every day work duties and tasks give me my strongest feeling that this is who I really am.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I engage in my every day work duties and tasks I feel that this is what I was meant to do.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel more complete or fulfilled when engaging in my every day work duties and tasks than I do when engaged in most other activities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel a special fit or meshing when engaging in my every day work duties and tasks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
During this set of questions, please think about the every day work duties and tasks you have participated in over the past 6 months as you answer the following questions:

| I participate in my every day work duties and tasks because I feel I can do what I want. | Very untrue | Untrue | Somewhat true | True | Very true |
| I participate in my every day work duties and tasks because I feel free to choose what I want to do. | ✔️ | ❌ | ❌ | ☑️ | ❌ |
| I participate in my every day work duties and tasks because I feel I can do whatever I want whenever I want. | ✔️ | ❌ | ❌ | ☑️ | ❌ |
| I participate in my every day work duties and tasks because I feel I own my time. | ✔️ | ❌ | ❌ | ☑️ | ❌ |
| I participate in my every day work duties and tasks because I feel I can decide by myself what I want to do. | ✔️ | ❌ | ❌ | ☑️ | ❌ |
During this set of questions, please think about the every day work duties and tasks you have participated in over the past 6 months as you answer the following questions:

<table>
<thead>
<tr>
<th></th>
<th>Very untrue</th>
<th>Untrue</th>
<th>Somewhat true</th>
<th>True</th>
<th>Very true</th>
</tr>
</thead>
<tbody>
<tr>
<td>I participate in my every day work duties and tasks because I enjoy doing them because I like them, with no other thought of reward.</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>I participate in my every day work duties and tasks to do something just to have a good time with no other purpose.</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>I participate in my every day work duties and tasks to do something because I like it forgetting about its practical utility.</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>I participate in my every day work duties and tasks to do something just for the pleasure of doing it.</td>
<td>✔️</td>
<td>✔️</td>
<td></td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>
During this set of questions, please think about the every day work duties and tasks you have participated in over the past 6 months as you answer the following questions:

<table>
<thead>
<tr>
<th></th>
<th>Very untrue</th>
<th>Untrue</th>
<th>Somewhat true</th>
<th>True</th>
<th>Very true</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I engage in my every day work duties and tasks I feel more satisfied than I do when engaged in most other activities.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My every day work duties and tasks give me my strongest sense of enjoyment.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When I engage in my every day work duties and tasks I feel good.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My every day work duties and tasks give me my greatest pleasure.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When I engage in my every day work duties and tasks I feel a warm glow.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When I engage in my every day work duties and tasks I feel happier than I do when engaged in most other activities.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
For the purpose of this study recreation at work is defined as: Recreation activities provided for employees by an employer. For example, basketball, massage chairs, ping pong tables, foosball, bike rentals, food options, or nap pods provided by the employer for their employees.

Think about the recreation at work activities you have participated in over the past 6 months as you answer the following questions.

<table>
<thead>
<tr>
<th></th>
<th>Very untrue</th>
<th>Untrue</th>
<th>Somewhat true</th>
<th>True</th>
<th>Very true</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating in recreation at work activities gives me my greatest feeling of really being alive.</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>When I engage in recreation at work activities I feel more intensely involved than I do when engaged in most other activities.</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Participating in recreation at work activities gives me my strongest feeling that this is who I really am.</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>When I engage in recreation at work activities I feel that this is what I was meant to do. I feel more complete or fulfilled when engaging in recreation at work activities than I do when engaged in most other activities.</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>I feel a special fit or meshing when engaging in recreation at work activities</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
</tbody>
</table>
Think about the recreation at work activities you have participated in over the past 6 months as you answer the following questions.

| I participate in recreation at work activities because I feel I can do what I want. | Very untrue | Untrue | Somewhat true | True | Very true |
| I participate in recreation at work activities because I feel free to choose what I want to do. | | | | | |
| I participate in recreation at work activities because I feel I can do whatever I want whenever I want. | | | | | |
| I participate in recreation at work activities because I feel I own my time. | | | | | |
| I participate in recreation at work activities because I feel I can decide by myself what I want to do. | | | | | |
Think about the recreation at work activities you have participated in over the past 6 months as you answer the following questions.

<table>
<thead>
<tr>
<th>I participate in recreation at work activities because I enjoy doing them because I like them, with no other thought of reward.</th>
<th>Very untrue</th>
<th>Untrue</th>
<th>Somewhat true</th>
<th>True</th>
<th>Very true</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I participate in recreation at work activities to do something just to have a good time with no other purpose.</th>
<th>Very untrue</th>
<th>Untrue</th>
<th>Somewhat true</th>
<th>True</th>
<th>Very true</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I participate in recreation at work activities to do something because I like it forgetting about its practical utility.</th>
<th>Very untrue</th>
<th>Untrue</th>
<th>Somewhat true</th>
<th>True</th>
<th>Very true</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I participate in recreation at work activities to do something just for the pleasure of doing it.</th>
<th>Very untrue</th>
<th>Untrue</th>
<th>Somewhat true</th>
<th>True</th>
<th>Very true</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Think about the recreation at work activities you have participated in over the past 6 months as you answer the following questions.

<table>
<thead>
<tr>
<th></th>
<th>Very untrue</th>
<th>Untrue</th>
<th>Somewhat true</th>
<th>True</th>
<th>Very true</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I engage in recreation at work activities I feel more satisfied than I do when engaged in most other activities.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Participating in recreation at work activities gives me my strongest sense of enjoyment.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When I engage in recreation at work activities I feel good.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Participating in recreation at work activities gives me my greatest pleasure.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When I engage in recreation at work activities I feel a warm glow.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>When I engage in recreation at work activities I feel happier than I do when engaged in most other activities.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
While thinking of the organization you currently work for, please answer the following questions.

<table>
<thead>
<tr>
<th></th>
<th>Very untrue</th>
<th>Untrue</th>
<th>Somewhat true</th>
<th>True</th>
<th>Very true</th>
</tr>
</thead>
<tbody>
<tr>
<td>When someone criticizes the organization I work for, it feels like a personal insult.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am very interested in what others think about the organization I work for.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I talk about the organization I work for, I usually say &quot;we&quot; rather than &quot;they.&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This successes of the organization I work for are also my successes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When someone praises the organization I work for, it feels like a personal compliment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If a story in the media criticized the organization I work for, I would feel embarrassed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful. |              |        |               |      |           |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I talk up this organization to my friends as a great organization to work for.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel very little loyalty to this organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would accept almost any type of job assignment in order to keep working for this organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find that my values and the organizations values are very similar.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am proud to tell others that I am part of this organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I could just as well be working for a different organization as long as the type of work was similar.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This organization really inspires the very best in me in the way of job performance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It would take very little change in my present circumstances to cause me to leave this organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I am extremely glad that I chose this organization to work for over others I was considering at the time I joined. There's not too much to be gained by sticking with this organization indefinitely. Often, I find it difficult to agree with this organization's policies on important matters relating to its employees. I really care about the state of this organization. For me this is the best of all possible organizations for which to work. Deciding to work for this organization was a definite mistake on my part.
While thinking of the organization you currently work for, please answer the following questions.

<table>
<thead>
<tr>
<th></th>
<th>Very untrue</th>
<th>Untrue</th>
<th>Somewhat true</th>
<th>True</th>
<th>Very True</th>
</tr>
</thead>
<tbody>
<tr>
<td>I work with intensity on my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I exert my full effort to my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I devote a lot of energy to my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I try my hardest to perform well on my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I strive as hard as I can to complete my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I exert a lot of energy on my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am enthusiastic in my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I feel energetic at my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am interested in my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am proud of my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I feel positive about my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am excited about my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>At work, my mind is focused on my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>At work, I pay a lot of attention to my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>At work, I focus a great deal of attention on my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>At work, I am absorbed by my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>At work, I concentrate on my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
At work, I devote a lot of attention to my job.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>How likely is it you would recommend the company you work for as a place to work?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please indicate how true or untrue the following statements are for you personally.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very untrue</th>
<th>Untrue</th>
<th>Somewhat true</th>
<th>True</th>
<th>Very true</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am generous with my friends.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I quickly get over and recover from being startled.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy dealing with new and unusual situations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I usually succeed in making a favorable impression on people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy trying new foods I have never tasted before.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am regarded as a very energetic person.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to take different paths to familiar places.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am more curious than most people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most of the people I meet are likeable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I usually think carefully about something before acting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to do new and different things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My daily life is full of things that keep me interested.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I would be willing to describe myself as a pretty "strong" personality.
I get over my anger at someone reasonably quickly.

Please provide the following demographic information:

Please indicate the company you work for: ______________________________________

Please indicate your age: ____________

Please indicate your sex:
○ Male
○ Female

Please indicate your current job title:

Please indicate the highest level of education you have completed:
○ High school
○ Some college
○ Associate's degree
○ Bachelor's degree
○ Master's degree
○ Doctorate degree

Please indicate your marital status:
○ Single
○ Married
○ Divorced
○ Widow
○ Domestic partner
○ Civic Union

Please indicate how many children you have:
○ 0
○ 1
○ 2
○ 3
○ 4
○ 5
○ 6
○ 7 or more
Thank you for completing our survey. Before you're done we would appreciate hearing any thoughts you have about recreation at work seeing it is a relatively new practice. Does it make a positive or negative impact in your life and/or your organization? What makes some recreation at work activities better than others? Should organizations be providing recreation at work activities? Your thoughts to any of these questions would be great.

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

If you would like to be entered into a drawing to win a $20 Amazon gift card please enter your email address below

____________________________________________________________________