WOMEN IN ENDURANCE SPORTS: LINKING COMPETITIVE AND PROFESSIONAL WORK LIVES

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ABSTRACT

Aim/Purpose: Explore the benefits of participating in competitive endurance sports. Beyond the obvious health and social benefits, endurance competitions offer significant psycho/social growth that translates into more effective professional life.

Background: Utilizes triadic agentic theory to explain the transference of learning from divergent experiences.

Methodology: Mixed method using a validated instrument for measuring work engagement, and a structured interview for investigating and explaining additional phenomena.

Contribution: Though it is unlikely that the elements of this study would affect men and women differently, because of social constructs, women are often at a disadvantage when presented with competitive situations, or the consequences of learning gained from serious competition. This study shows one way that inequality can be neutralized.

Findings: Given the time consuming and physically demanding nature of endurance sports, one would imagine that participation would be a detriment to work life. This research details a much more positive effect.

Recommendations for Practitioners: Recognizing the importance of competition greatly improves the quality of life, and work for those participating, and for those who work with, and live with the competitors.

Recommendation for Researchers: Examination of the various factors investigated in this research will hopefully inspire additional study.
Impact on Society  Women are under-represented in both endurance sports, and in executive offices. If there is greater understanding of the link between healthy competition and professional success, perhaps some headway can be gained in reducing inequities.

Future Research  Additional research into other forms of competition, or performance will determine if there are equal or similar benefits to activities that contain elements of endurance competition, without the extreme physical stress that puts such competition out of reach for many people.

Keywords  endurance, competition, agentic learning, work engagement, problem focused coping, emotion focused coping

THE STUDY

This study investigates the experience of women who hold professional positions of responsibility in business and who participate in competitive endurance sports. This work is influenced by Albert Bandura’s (1999) assessment that individuals may be agents of their own change. It also examines how self-efficacy gained from goal setting and achievement in one area is capable of influencing performance in other areas. It is hoped that the results will help to better understand some of the unique qualities of endurance competition and the manner in which those qualities manifest themselves in professional life.

STATEMENTS ON THE SUBJECT OF COMPETITION AND BUSINESS

Leaving aside the obvious physical benefits, there are life’s lessons doled out in seemingly innocent fashion during competition that translate into personality traits which can define a person in their business life. Measured aggression, physical and mental endurance, and the ability to strategize are natural by-products of participation. Whether you consider those positive traits or not, an empirical look at the business world, reveals evidence of those traits at regular intervals.

The influence of participation in various sports on students and adults has been well documented, producing mixed results (Fejgin, 2001; Kerr & Vlaswinkel, 1995; Nixon, 2001; Wiley, Shaw, & Havitz, 2000). While these studies contain useful information, and strong arguments both for and against active participation, thus far, there does not appear to be a great deal of information regarding the influence that physical competition has on the ability for individuals to manage the intricate functions of business.

This study concerns women who compete in endurance sports (triathlon, marathon, cycling, and the like). These sports were chosen because they each include many levels of competition, such as professional, age group, and team, and for many, just crossing the finish line is the completion of a competitive goal, so “winning” is not confined to one person, or a small group of people.

As a device for examining the manner in which this phenomenon manifests itself, this study used social cognitive theory (SCT) as the primary lens through which to observe phenomena. The subtleties of this viewpoint provided an opportunity to dissect the experiences of individuals and determine how they might have formed their actions and their responses to the actions of others – particularly as those apply to an aggressive/competitive workplace setting.

SCT supports the notion that learned behavior triggered by social cues elicits automatic responses (Rotter, 1982). This is important to this study because the imprint that is made during the competitive experience is often similar enough to business interactions that it will create a demand for the employment of similar strategies. More to the point, the reinforcement – the social learning – that is
experienced in large and small scale business interaction is physically and emotionally equivalent to that experienced on the field of play.

This provides a reasonable bridge to the supposition that, if the lessons learned on the playing field translate into the boardroom, an individual with no sporting background, who finds themselves in a room full of others who have been exposed to a learning process that they have not, is at a significant disadvantage when that learning is applied by the group.

This study also examined whether Bandura’s identificatory process (1969), wherein behaviors are learned from informal observation of members of one’s social group, and reinforced through repetition, apply when those lessons are learned in a context as different as physical competition and the office.

The reason for including only women in this study is that this will provide an opportunity to address a larger portion of the population who actively experience the effects being researched. Those effects are, at least in part due to the still pervasive gender-expectation role that continues to exist in sports, and the hegemonic byproduct of “masculine” oriented activities (Wiley et al., 2000). The inclusion of only non-contact, individual sports is intended to further reduce that role effect.

**METHODOLOGY**

A mixed method framework was selected for this study for the ability to offer a complementary measure of overlapping, but different facets of this phenomenon (Greene, Caracelli, & Graham, 1989). The quantitative Utrecht Work Engagement Survey (UWES-9) (Schaufeli, Bakker, & Salanova, 2006) test was used to validate the existence of the phenomenon by revealing the level of the three factors that make up work engagement; vigor, dedication and absorption. Understanding this assisted in developing the conversation that formulated the remainder of the data collection in the qualitative portion of the study. Looking at this from the opposite direction, this method examined both the process and outcome of the lessons learned in endurance competition by providing a quantitative measure for the activities explained in the interview portion of the study.

The qualitative portion of this study added richness and explanation for the existence of the phenomenon established in the quantitative phase. Using the philosophy forwarded by Greene et al. (1989), one of the strengths of a mixed-method study is the ability to triangulate on a subject to strengthen the core of the arguments. Each of the methods imply a bias on the data, but the use of methods with offsetting (or at minimum different) biases that, by their existence, converge to collaborate the results.

While the interviews did not affect the structure of the questionnaire, the results of the questionnaire provided direction and influence on the interview design. The interview protocol was designed to guide the discussion toward the issues of interest, while giving the participants ample opportunity to expand on any subject that is meaningful to them.

**DESCRIPTION OF THE PARTICIPANTS**

The participants in both the qualitative and quantitative phases of this study were women between the ages of 25 and 60 years old, who had been actively participating in endurance competition for at least three years, and entered a minimum of two competitive events per year. Additionally, the participants were actively employed full time in professional positions of responsibility.

Taking each of these variables separately, the study focused on women because they are less likely to experience athletic competition (Niederle & Vesterlund, 2007; Thorne, 1993), or at least be as immersed in it as their male counterparts, so may be better able to recognize the changes that they have experienced, and describe the phenomenon. A less scientific, but greater personal reason for selecting women is that they have, in the opinion of the researcher, more to gain from understanding the outcome of this study, as they are underrepresented in both endurance sports and executive offices.
The age range specified for this study reflects the observation that women in the target population will be most connected to their careers between the ages of 25 and 60. Literature did not drive this decision because it was believed this study would show that active participation in endurance sports obviates much of the ebb and flow in a career that produces burnout or distraction, regardless of where the individual is in their productive work life. The low and high ranges of the ages were selected so as to reduce the distraction of starting a career or preparing for retirement, which may skew the results.

Though it may be that the lessons learned remain with the athlete long after their competitive career, active participation in competitive endurance sports ensured that the phenomenon was fresh in the study participant’s mind, and could be explored in greater detail. The minimum three year period, and two events per year ensured that the participant was not simply challenging herself to complete a single, or small series of events, but rather, was a competitive athlete who trained consistently and incorporated competition into her lifestyle.

Similarly, current employment in a position that the participant described as “professional or responsible” was critical to the study. The point being that the working life must be at least as serious, and preferably considerably more so, than the athletic life so that the decisions and actions were meaningful to the participant and her organization.

**Quantitative Phase**

Following the recommendations of Podsakoff, MacKenzie, Lee, & Podsakoff. (2003) for reducing common method variance, the pairing of an accepted survey instrument (UWES-9) with a separate interview protocol which is administered to a subset of the survey participants is intended to reduce the probability of method bias that might result from acquiring data using a single, static method.

**Survey Results**

The first step in understanding the survey data is observing it in context. Data for the present study is presented in Table 1, followed by the data provided by the author of the survey. Each of those may be placed within the scoring categories, then compared to the established norms. All the survey questions are scored on a Likert scale with 0 representing no presence of the experience, and 6 showing the highest incidence.

Table 1. Data gathered for the present study (N=81) and the established norm from the test’s author (N=12,631) (Schaufeli & Bakker, 2003)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Study Mean</th>
<th>Study Standard Deviation</th>
<th>Norm Mean</th>
<th>Norm Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigor</td>
<td>4.53</td>
<td>0.89</td>
<td>4.01</td>
<td>1.13</td>
</tr>
<tr>
<td>Dedication</td>
<td>4.89</td>
<td>1.05</td>
<td>3.88</td>
<td>1.38</td>
</tr>
<tr>
<td>Absorption</td>
<td>4.82</td>
<td>1.02</td>
<td>3.35</td>
<td>1.32</td>
</tr>
<tr>
<td>Total score</td>
<td>4.75</td>
<td>0.88</td>
<td>3.74</td>
<td>1.17</td>
</tr>
</tbody>
</table>

This will give a strong indication of the existence of the phenomenon in question. Vigor at 4.53 is the least convincing of these statistics, falling in the range of average, and only slightly above the norm of 4.01 for the instrument. Dedication measured in the high range at 4.89, and was well above the instrument’s norm of 3.88. Similarly, absorption at 4.82 was high, and above the instrument’s
norm of 3.35. The total for the test was also high at 4.75, and was also above the instrument's norm of 3.74.

These results well established the probability of the existence of the phenomenon in question, meaning that there does appear to be statistical support for theory that women who participate in endurance sports experience a high level of work engagement.

**Discussion of Qualitative Results**

The results of the qualitative phase of this study were both surprising and confirmatory. The richness of the descriptions, and enthusiasm for the subject gave clarity to the subject matter. Though there was great diversity in the personality types – from Chris (all names are pseudonyms), the highly competitive, personally driven firefighter whose competitive efforts were directed at maximizing performance and winning, to Willow, who presented herself in the interview as a self-assured mortgage broker and grandmother with a calm demeanor, who, though she takes her sport and competition very seriously, understood that the purpose of her effort was, in the end, health and happiness.

This is not to say, though, that opinion was entirely drawn to poles. The larger consensus found that the participants were serious about training and racing to the extent that they were able to place themselves in their sport and create challenges that offered them measurable successes, and myriad opportunities to fail, and perhaps more importantly, to recover from failure, and derive a level of success that permits satisfaction and an understanding of personal accomplishment.

The one thread common to each of the emergent themes remains competition. These athletes did not train simply to stay in shape, or satisfy a social need. They wanted to compete. This is important for two reasons; first, having a goal such as a specific race, or desired result, provided some of the incentive necessary to put in the long hours of very difficult training that they must endure. Second, competition provided feedback on the work that they have been doing. There was an immediate and measurable result given at that event. That measure may be as obvious as their finish position, or it may be as complex as an analysis of time, weather conditions, perceived effort and use of nutrition which may be further scrutinized by telemetry collected by computers used by the athlete that track time, distance, terrain, output wattage (power expended by the athlete), heart rate, cadence, respiration, and other key physical metrics. None though, would dismiss the satisfaction gained from crossing the finish line before a rival competitor, whether that rivalry was burning with intensity, or a friendly competition among training partners – in fact, as often as not, the adversary at the finish line may not have known that they were being targeted in this challenge.

Each participant considered herself a competitor, even if that definition was personal. Tied to that role was an identity which was displayed by clothing declaring accomplishments, and the selection of social groups. That identity may also be one that manifested itself in a quiet, personal pride that avoided public displays, or was very selective of the venue for those displays. In a number of cases, discussion of sport was intentionally avoided in typical work and family situations, sometimes out of fear of seeming immodest, and other times because there was a lack of interest or understanding on the part of those in the environment. Most frequently however, it was simply deemed more appropriate to don the outward identity of the current social group, a strategy that was seemingly simple for the athletes, who did acknowledge their various roles, but did not note any role conflicts.

Where the role of endurance athlete became dominant is in the measure of accomplishment, and the feeling of self-efficacy that accompanied these efforts. Whether the participant had a personality that predisposed her to a high degree of self-efficacy, or one that required nurturing of that quality, the measurable accomplishments of endurance sports clearly elevated that sense. Further to the nature of endurance sports, the need to set goals through the entire process, and the verification that comes from accomplishing those goals provided constant reaffirmation. What makes those accomplishments work well as a catalyst for self-efficacy was that, frequently, those challenges were met through significant effort. That one must “walk or crawl” to get to the finish was common theme, as was the
notion that “if I start, I will finish”. The stories of the heights to which these athletes have risen were impressive, and that sentiment was not lost on the athletes themselves.

These athletes learned from their experience in sport that planning and preparation returned measurable results, and through agentic learning, as supported by social cognitive theory, their personal and professional lives also benefited from that feeling of self-efficacy. More to the point, the lessons learned in sport; planning, preparation, effort, dedication, sacrifice, balance, coping, and the myriad other tools required to reach goals in endurance sports applied to other areas of life in similar fashion, and became intuitive habit.

That feeling of self-efficacy also reached into the attitude displayed when the participants discussed their work place. While most statements of passion where directed toward sport, there remained a great deal of pride and commitment toward their professional life. For some, that was based upon interest in their career path, others enjoyed the security, and in one notable case, Chris, the firefighter, a large part of the interest was excitement and competition. Each of the participants, though, noted being stimulated and genuinely interested in their jobs. Those qualities were demonstrated in various forms as Positive Organizational Behaviors (POB) (Nelson & Cooper, 2007). Given the amount of time and effort that is spent on their sport, the level of energy brought to their work was surprising. All of the participants found regular reason to immerse themselves in their work, and improve their workplace for themselves and others through the general tenants of POB – hope, optimism and resilience. Above all, however, a general enthusiasm for both sport and work pervaded each discussion.

The mechanism by which experiences and learning in one area of these participant’s lives is expressed in another area is agentic learning. The process, as described in social cognitive theory, involves a perception of competence in one area, for example, setting and reaching goals in sport, and the ability to adapt that competency to similar use in a different context, such as planning and project completion in business. (Bandura, 1989) SCT also discusses the extension of a general feeling of competency in one area to an increased perception of self-efficacy in another. These states were apparent in the discussions with the participants and took many forms.

The lessons taken from endurance sports varied somewhat from athlete to athlete, but the sources were similar; breakdowns that resulted in having to resolve problems on their own; planning to maximize the efficiency of the time available; resolving conflicts with others and creating a balance in their lives. These, along with related issues, are the sources of lessons that project similar actions into business and personal life. The lessons were not, of course, one way. They came into sport from other sources as well, but the urgency and immediacy of situations in sport, and the degree to which the athletes are left to their own devices to resolve issues has elevated learning and the resulting lessons to a more readily intellectualized position.

The final phase of the learning loop is teaching, which is a role that all of these participants accepted readily. Each was asked how they would respond if a co-worker expressed a desire to compete in an endurance event. They were uniformly encouraging, and offered real, sensible advice born of their practical experience. The advice ranged from nutrition, planning and personal balance suggestions to offers of active coaching and support. The opportunity to share both their passion and their hard earned learning were heartfelt and genuine, as their recounting of actual events verify.

The enthusiasm these athletes bring to their workplace reached into all phases of this study, most particularly POB and the underlying theme, work engagement. Each of the above factors ultimately related to the degree to which the participants are engaged in their work.

It was somewhat surprising to learn that, of the three elements of work engagement – vigor, dedication and absorption – that vigor, while still above the average score, was the least impressive mark in the pen and paper survey. Examining the results of the interviews shows that the explanation for that may be hidden in the difficult economic times that were taking place during the period of this
study. Given that setting, each of the elements of work engagement were well represented in the descriptions of the participant’s work lives.

Vigor, for many of these participants, translated to energy spent becoming more effective and higher reaching. The identity that they have created for themselves, and the self-efficacy learned in sport has taught a number of these athletes that they are capable of setting ambitious goals for themselves in the workplace, and by applying the work ethic they demand of themselves, those goals are reachable. This is not to say that each of these individuals has their sights set on some lofty rung at the top of their corporate ladder. Indeed, they more readily discussed goals that related more to near term, measurable goals that may be stepping stones to career advancement. The long term plan exists for most, but just like their life in sport, they saw the smaller steps necessary to achieve their goal as the more important place to expend energy.

Dedication is also a state in work engagement that is supported by the activities in endurance sports, and it is one that helped these athletes transcend the difficult economic times. The issues surrounding the economy came up in several conversations, and were often connected to how fortunate the participants felt that they were working at jobs that satisfied their needs and gave them opportunities for growth. Dedication, to these individuals, was not boundless. Part of the lessons they brought with them from sport was the understanding of balance and limits. They understood, and did not shy away from hard work, but they also recognized that by properly budgeting time and effort, they were able to include more of the things they wanted from life into their day.

The same could be said of the final factor in work engagement, absorption. The participants in this study were people whose work ethic was very strong, but they were not workaholics. They embraced difficult tasks and willingly applied themselves for long periods of time, but they respected both their professional and personal lives, and were willing to put in the hard work necessary to permit them to continue to engage in both.

Of particular note in these results is the continued presence of positive organizational behaviors. It was expected that, once a rapport was gained with the individual participants, when the discussion turned to the work environment, there would be some degree of resentment or distain for work as an intrusion on the chosen lifestyle. This was not the case. The participants were uniformly pleased with their professions and work environment. There was clear acknowledgement of dysfunction and conflict, but it was done through a lens that does not generally include them as a catalyst, rather, it was seen more as something that is happening around them, despite their existence.

The participants often viewed themselves as a facilitator for, if not resolution, at least a resource for stability. Donna, for example, though she had no experience working in customer service, saw conflict in the workplace as a customer service type problem wherein she was tasked with determining the problem from as neutral a position as possible, then offering a resolution that would, to the degree possible, reduce the conflict. An important part of that strategy included Donna’s stated willingness to bring in additional resources (co-workers, higher management, and the like) to ensure resolution.

Deeply entwined with POB and conflict resolution is the use of appropriate coping behaviors. Each participant was asked to recall a situation where difficulties needed to be resolved in sport and in business. By investigating which coping mechanisms were selected, and how they were applied revealed how the participants reacted when presented with a problem that required quick attention, in a stress situation. In discussing problem solving, resolution was far less a factor than the manner in which the problem was approached. The interview questions focusing on this issue were structured to find problems that required significant effort and caused at least some frustration. From that it was determined that emotion-focused coping (EFC), and its characteristic venting, ruminating and avoidance, was far less prevalent than the planning, problem solving and execution of a resolution that is indicative of problem-focused coping (PFC). PFC emerged as the most common method for
the participant’s approach to problems, and dominated in situations where resolution to the problem was within the span of control of the participant.

In business, as in competition, a PFC approach is more likely to produce a favorable outcome, and active athletes display higher levels of PFC than non-athletes (Hammermeister & Burton, 2004; Ntoumanis & Biddle, 2000), and this study has determined that those states were present in both the competitive and business lives of the participants. Incidents describing the use of PFC behaviors outnumbered EFC characteristics by a significant factor. More importantly, it was apparent that the selection of the coping method was most often appropriate to the situation, moreover, the problems approached using PFC behaviors were described with a greater sense of pride and accomplishment, while EFC type behaviors were portrayed as frustrating and a bit embarrassing.

There is a place for EFC in sport and business. As interview participant Janet described, when she was wrestling with the loss of her father, she found herself in a frustrating position on a long ride. By giving vent to her emotions, she was able to reduce her anxiety, better cope with her current situation, and improve her long term outlook. In this case, there was no solution to the problem that was within Janet’s control, but the disquiet was understandable and real. In events such as this, EFC is an appropriate and useful response.

**CONCLUSION**

The lives that these women experienced in work and sport were very different. Balance was always an issue, and in almost every case, work was prioritized above sport. Not every participant had family (notably, children), but those who did, prioritized family first. Thus, when conflicts arose, it was sport that suffered. This may be somewhat surprising given that endurance sports are lifestyle sports, which are described by Wheaton (2004) as a sport that is central to the life of the athlete, giving meaning, expression and distinctive, often alternative identity to the participant. Each of the athletes in this study derived a large part of their identity from their sport, and they had become consistently adept at organizing their lives well enough to include all of their priorities.

The results of this study show that, while it may not be intuitive that such a difficult and time consuming avocation as competitive endurance sports would have a positive effect, it provided necessary balance in their lives. The lessons they learned, and the habits they acquired in both their vocation and their avocation are visibly present in everything they did.

It was also clear that the goal of the sport must be more than simple fitness. The motivating force for these women was goal driven, and those goals were satisfied in competition. Regardless as to whether the athlete was likely to cross the finish line first, the targets they set for themselves were what compelled them to compete. Failure is possible, which makes success meaningful, and the ability to adjust goals, add new ones, or adapt to external conditions narrowed the chasm between simple success and failure.

From that ability to achieve – to do what few others can do – comes a strong sense of self-efficacy that extends directly into the workplace, and affects the way these women perform their jobs. The methods used to attain goals in sport are the same ones used in professional life to compete in the workplace: planning, discipline, problem solving, and preparation - each used in abundance. This study does not identify where these activities are originally learned, but the degree to which they are necessary in competitive endurance sports, and the clarity with which they are discussed supports the claim that their use is made more effective by their incorporation into preparation for a race.

To focus on just one, the role played by problem-focused coping exemplifies this concept. Endurance sports are individual efforts that leave athletes far away from resources for assistance. One other common factor in endurance sports is the probability of some type of complication arising during a competition. Whether that is in the form of equipment failure, physical or mental distress, the immediacy and stress of competition demands that problems be resolved by the athlete alone, and it
must be done as quickly as possible. Because competitions are emotionally charged events, athletes are forced to adapt methods that reduce stress, quickly identify, then resolve problems.

Social cognitive theory and agentic learning provides an understanding for how those qualities learned in sport permeate other pursuits in life. When an outcome has been deemed valuable by the individual – as is the case with a competitive or business goal – and an action taken is perceived to further that goal, it is likely to be repeated. And if that series of events is translatable into another setting, those same habits will be applied to the new setting. Again, the understanding of the bridge between work and sport is gapped.

The benefits derived from sport are not confined to the competitors. The positive organizational behaviors displayed by the participants in this study created a more constructive, pleasant and cohesive work environment for themselves and the people around them. Each of them displayed natural, and positive oriented leadership abilities whether they were in an official leadership role or not. Their energy, initiative and optimism present them as role models, and their resilience helps them and others around them to weather difficult periods.

Hiring agents, managers and co-workers will benefit from recognizing the existence and effect of these phenomena. Similarly, those who are considering entering competitive endurance sports, may increase the benefit of their efforts by familiarizing themselves with the experiences of these athletes. These findings further suggest the importance and need for additional research into the source, and intensity of the various phenomena.

REFERENCES


**Biography**

**Dr. Walton** is an Adjunct Professor of Ethics and Organizational Psychology for the University of Laverne, and a Research Psychologist for the American Institute of Behavioral Research and Technology.

His primary areas of research include critical thinking, decision making, self-efficacy and work engagement. His research has been well received at conferences, and he frequently lectures on the subject for clubs, teams and interested groups.

In the business world, Dr. Walton has done considerable work in start-up, turn-around and growth for small to mid-sized businesses. In that capacity, he has served on various boards and as an advisor to the staff. His specialties in business are strategy, conflict resolution, motivation and problem solving.