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An Examination of the Relatedness Needs of Adult Swimmers

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AN EXAMINATION OF THE RELATEDNESS NEEDS
OF ADULT SWIMMERS

by

Deward W. Loose

A thesis submitted to the faculty of

Brigham Young University

in partial fulfillment of the requirements for the degree of

Master of Science

Department of Exercise Sciences

Brigham Young University

August 2009

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BRIGHAM YOUNG UNIVERSITY

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As chair of the candidate's graduate committee, I have read the thesis of Deward W. Loose in its final form and have found that (1) its format, citations, and bibliographical style are consistent and acceptable and fulfill university and department style requirements; (2) its illustrative materials including figures, tables, and charts are in place; and (3) the final manuscript is satisfactory to the graduate committee and is ready for submission to the university library.

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ABSTRACT

AN EXAMINATION OF THE RELATEDNESS NEEDS OF ADULT SWIMMERS

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Department of Exercise Sciences

Master of Science

The purpose of this study was to first examine the role of coaches, peers, and significant others in the development of relatedness as it applies to the motivation of adult Master swimmers, and second to develop recommendations for coaches..

The participants in this study were 87 Masters swimmers from the Wasatch Front region of Utah in the counties of Davis, Weber, Utah, Wasatch, Salt Lake, and Summit. Participants in this study were registered members of United States Masters Swimming (USMS) and were spread across eleven age-group classifications in five-year increments and ranging in age from 18 to 74. There were 43 adult males and 44 adult females that participated in completing an open-ended response questionnaire.

The results of this study show that relatedness, fostered by coaches, peers and significant others, plays a key role in getting and keeping adult Masters swimmer in the water to train and compete.

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An Examination of the Relatedness Needs of Adult Swimmers

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Abstract

The purpose of this study was to first examine the role of coaches, peers, and significant others in the development of relatedness as it applies to the motivation of adult Master swimmers, and second to develop recommendations for coaches..

The participants in this study were 87 Masters swimmers from the Wasatch Front region of Utah in the counties of Davis, Weber, Utah, Wasatch, Salt Lake, and Summit. Participants in this study were registered members of United States Masters Swimming (USMS) and were spread across eleven age-group classifications in five-year increments and ranging in age from 18 to 74. There were 43 adult males and 44 adult females that participated in completing an open-ended response questionnaire.

The results of this study show that relatedness, fostered by coaches, peers and significant others, plays a key role in getting and keeping adult Masters swimmer in the water to train and compete.

Introduction

The Self-Determination Theory (SDT) was originally proposed in the 1970s, but it was not until the motivation researchers Deci and Ryan made their formal presentation on SDT in 1985 that SDT became widely researched. Self-Determination Theory states that every human being has three basic psychological needs: competence, autonomy, and relatedness. Deci and Ryan postulate that understanding how these three basic needs work will lead to an understanding of the “what” and “why” of goal pursuit. Self-Determination Theory states that when these needs are satisfied self-motivation and mental health will be increased; and when these needs are not fulfilled motivation and personal well being decreases (Deci & Ryan, 2000).

According to Ryan and Deci (2002) the first basic human need is competency, which is a “feeling of being effective in one’s ongoing interactions within the social environment and experiencing opportunities to exercise one’s capacities” (p. 7-8); the second basic human need, autonomy, is defined as “[a person]being the perceived origin or source of one’s own behavior” (p. 7-8); finally, the third basic human need is relatedness which is defined as “feeling connected to others, or to be caring for others and/or being cared for by those others, also to have a sense of belongingness both with other individuals and with ones’ community” (p. 7-8). Additionally, relatedness is concerned with establishing a mutual sense of respect for and reliance on others (Ryan & Deci, 2002). In their research Ryan & Deci put forth the idea that fulfillment of these needs leads to an increase in intrinsic motivation, which is the highest level of motivation a person can attain. Intrinsic motivation is defined as an internal motivation or self-

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determined behavior where one willingly acts to perform without outside forces compelling the person to participate in achieving a desired outcome. An example of this is doing an activity for the inherent satisfaction of the activity itself (Ryan & Deci, 2000, p. 71). Most research in SDT has focused on competency and autonomy. Relatedness, however, has not been as isolated or as widely addressed as the first two basic needs of competency and autonomy.

Gould, Feltz & Weiss (1985) examined the motivation to participate in competitive swimming in 365 youth swimmers ages 8 to 19 years old. They found that, "...athletic motivation is a result of both individual goals and/or objectives and environmental factors (athletic situation), and optimal athletic motivation results when an athlete's motives are matched to athletic environments in order to fulfill them" (p. 136). They determined that some "general factors" are prevalent in motives for youth to participate in swimming. These factors include "achievement-status, team atmosphere, excitement-challenge, fitness, energy release, skill development and friendship" (p. 137). Gould et al. suggest that to help young swimmers be motivated to swim competitively the coach should create an environment of fun, fitness, skill improvement and peer interaction. These characteristics, as well as interaction and enjoyment of the coach, are important to the youth swimmer and should be a part of each practice session.

Several of the factors mentioned in the Gould et al. study (1985) are considered characteristics of relatedness: fun, peer to peer socialization, and coach to athlete socialization. These factors help to create a positive team atmosphere as well as a positive

learning environment and are important in the motivation of youth to continue to learn. (Gould et al., 1985).

Osterman (2000) adds another dimension to relatedness. She connects relatedness with belongingness, or the development of a sense of community, in an effort to help students learn, behave properly, and increase their feelings of self-worth. Ryan (1995), defines relatedness as the need for all students to experience belongingness, or a sense of community. According to Ryan, students must come to feel closely connected to others; in this way they may have the experience of increasing their sense of self-worth and increasing their internal motivation to learn. Osterman (2000) finds that students' feelings of relatedness affects their self-perception, classroom behavior, motivation to learn, and their motivation to continue to make personal improvements. Without a sense of relatedness students will not be motivated to learn, will not behave in a positive manner, and will not continue to make efforts toward progress. Conversely through fulfilling the relatedness need students will be motivated to learn, want to behave in a positive manner and put forth the effort to learn and develop.

It is possible that relatedness contributes to the motivation of adults to participate in physical activity. One such physical activity adults may participate in is swimming. United States Masters Swimming (USMS) was started in 1970 (www.usms.org/about.php). Since the start of Masters swimming there has been an increase in membership as former age group and senior competitive swimmers get into their adult years and want to continue competing, but with more of a focus on leisure (Hastings, Kurth, Scholder & Cyr, 1995). Recently, with the wide spread popularity of

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triathlons, men and women have taken to the water in order to be prepared for the swimming portion of this athletic event. Additionally, with the increasing concern over the rising rates of heart disease, diabetes, obesity, and other weight related health problems people are trying to find new ways to improve and increase their fitness levels. One of the fitness related activities that many are turning to is Masters swimming. A stated purpose of Masters swimming "...is dedicated to studying and developing fitness swimming activities for the general membership at the national level"

(www.usms.org/fitness).

The purposes of this study was first to examine the role of coaches, peers and significant others in the development of relatedness as it applies to the motivation of adult Masters swimmers and .second to develop recommendations for coaches.

Methods

Participants

This study involved 87 swimmers who were registered members of United States Masters Swimming (USMS) from the Wasatch front area of Utah who were invited to participate. The Wasatch Front includes Utah, Summit, Weber, Salt Lake and Davis counties of Utah. All participants ranged in age from 18 to 74 years old. There were 43 male participants and 44 female participants. University Institutional Review Board approval for the study was received and all participants signed an informed consent to participate.

Data Sources

Data sources included a written questionnaire, follow-up phone call interviews with a sample of participants and field notes gathered by the researcher.

Questionnaire. The instrument used for this study was a questionnaire which had been designed in consultation with a university professor within the Department of Exercise Science at Brigham Young University (Appendix C). The purpose of the questionnaire was to probe into the reasons why these Masters swimmers continue to participate and compete today with specific questions on relatedness factors. The questionnaire had been tested in a pilot study with 20 adult Masters swimmers. It was administered after a practice session. These Masters swimmers did not participate in the final study. Appropriate revisions to the questionnaire were then made to reflect initial participation as a youth and as an adult. The questionnaire consisted of open-ended questions which allowed participants to share the experiences they may have had as youth and/or adult swimmers that they felt impacted their decision to start swimming once again or to begin competitive swimming for the first time as an adult.

Phone Interviews. For the follow-up phone call interview 12 participants were purposely selected based on the range of responses, age, and gender. Equal numbers of participants were selected from each age and gender category. Interviews were conducted by the researcher. The purpose of the phone interview was to seek greater clarity on any response given during the open-ended response questions of the questionnaire. The clarifying questions were regarding the influence of coaches, peers and other significant individuals who impacted their decision to start and/or restart participating in competitive

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swimming as a youth and adult. Field notes were also made during the follow-up phone call interviews.

Field Notes. The researcher recorded field notes in a notebook, and on a tape recorder while the participants completed the questionnaire, and during practice sessions, at a swim meet, during interviews, and throughout the data analysis process. These notes consisted of insights, emerging ideas, and summaries of conversations obtained throughout the data analysis process (Bogdan & Biklen, 1998).

Procedures

A team or club representative of several USMS clubs and swim meet officials were contacted to get permission for a visit and to invite athletes to complete the questionnaire. During this contact the purpose of the study was explained to each team or club representative and meet official so they would understand the purpose of the visit and be reassured that completing the questionnaire, and the researcher site visits would not interfere with the athletes and their practice sessions or meet performance. It was also explained to the appropriate officials that the study was completely voluntary. After the explanation of the purpose of the visit and study, and permission was granted by all of the clubs/teams, the visits were made to observe relationships between coach and athlete, athletes and peers, and for encouraging athletes to complete the questionnaire.

At the practice sessions and swimming meet, and prior to participating in filling out the questionnaire, participants were informed as to the purpose of the research and were then invited to fill out a 10 minute questionnaire. The questionnaires were administered either after a practice session, or just prior to the start of a swimming meet.

Participants were allowed to seek clarification on any of the survey questions they did not understand, and were not required to answer any question they did not want to respond to. A few participants asked if they could take the questionnaire home to complete them as they did not have enough time to give the responses they wanted to give at pool side. They were given permission to do so and returned the completed questionnaires via US Mail. No Masters swimmer dropped out of the study or refused to participate in completing the questionnaire once they began answering the questions.

Following initial analysis of the data from the questionnaire, follow-up phone call interviews took place with 12 participants who were purposely selected based on the range of responses, age, and gender.

Establishing Trustworthiness

To establish a working relationship, the researcher arrived at the practice sessions early to meet with, and greet, the Masters swimmers. Before attending the South Davis Master Invitational Swimming meet the researcher had called the hosting coach and explained the purpose of the research and asked permission to attend the swim meet and seek volunteers to fill out the questionnaire. On the day of the meet, the researcher arrived prior to athlete check in and sat with and mingled in and among the athletes. According to Thomas & Nelson (2001) in order to have a valid study it is important for the researcher to establish a relationship with the participants. The qualitative researcher must construct a proper working relationship with the potential participants and the facility at which the research is going to take place. The first objective for the researcher is to gain access to the facility or site of the research, and the second is to gain the trust of

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the participants who will be involved in the research by building a rapport with them so that they are more likely to take part in the research. Thomas and Nelson recommend that the qualitative researcher develop a “collaborative relationship...” with the facility and participants (p. 335). Because of the prior contact the host team and coach had arranged for a table to be placed next to the check in table where a sign was also placed identifying the researcher and what the research was about. Those Masters swimmers who were competing and wanted to complete the questionnaire could stop at the table after signing in and fill out the questionnaire. After the meet began the researcher then went into the stands and sat with and among the participants to converse and make field notes. All participants were able to ask questions and give their responses freely during the meet.

Data Analysis

All data from the questionnaires, interviews, and field notes were then analyzed and grouped into themes using the constant comparison method. The constant comparison method of qualitative research was proposed by Lincoln & Guba (1985). By employing the constant comparison method to analyze the data, the researcher was able to compare incidents applicable to each category which lead to a refinement of final themes (Lincoln & Guba).

Peer Debrief

A university professor within the Department of Exercise Science at Brigham Young University with an expertise in Pedagogy served as peer debriefer. According to Hanson & Newburg (1992) the role of the peer debriefer is to insure participant responses

are correctly interpreted and analyzed and there is no bias on the part of the researcher.

The researcher used the peer debriefer prior to the administration of the questionnaire and in a post research setting.

The peer debriefer helped ensure that the questionnaire was appropriately written and that all responses were properly interpreted and analyzed. This was done in order to ensure the validity of the conclusions and to protect against bias in the interpretation of the data.

Results

Of the 87 participants 33 had no competitive swimming experience until they had reached their adult years. Thirty-five participants had a variety of experience in competitive swimming as youths (i.e., Summer Recreational League, High School, AAU/USSClub, Masters), and only 19 reported only one level of competitive swimming experience prior to their adult years. As a result of the data analysis several themes became apparent.

Influence of Coaches

Swimmers responses to the first question, *What did your coach/es do that influenced you to train and compete in swimming, a) as a youth, and b) as an adult?* were grouped into themes as shown in Table 1. Themes will be addressed as they relate to when swimmers began swimming as youths or adults. On the first question of the questionnaire the influence of coaches upon those who started as a youth and as an adult is compared.

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Youth. Results show that the coach provided *encouragement* (23% of responses) while they were youth swimmers. Some of the other comments mentioned the influence of the coach outside of the pool and swim team setting. One such comment stated the coach was, “very encouraging to me and not only in the pool, but as an educator. He (the coach) believed in me.” Another participant revealed that their youth coach, “Set goals. Encouraged me by writing down goal splits. Had fun Saturday practices. Took us to breakfasts, etc...” A participant in the 60-64 year-old age group made the comment that his youth coaches “Were encouraging-positive.” Each of these participants had previously started swimming during their youth and continue to swim in their adult years because of the influence of a coach from their youth. Their youth coaches encouraged them and this helped them feel connected to the sport, the team, and the coach.

The *fun* (21%) aspect of workouts was mentioned as being the second most important factor in their youth. A participant mentioned that his youth coaches “had stimulating, competitive, and fun activities.” Another similar comment from a participant was about a coach from their youth who “made practices fun.” Even more concisely a participant simply stated that her youth coach “made swimming fun”.

Another theme in the response of the questionnaire was that as youth, the adults felt their youth coach *challenged* (17%) them. One participant related how his youth coach “...developed a sense of goals and achievement...” Several participants stated that their coach made it “fun and competitive,” and “...had high expectations.”

Being a *positive role model* (10%) was another theme for those adults who competed and swam as youth. One participant mentions how her youth swimming coach

was “..knowledgeable,” while another participant related that his youth coaches were “...very good role models...and were “...a major influence/father figure in my life.”

Creates a team feeling (6%) was a factor for some participants in this study. Two participants spoke of their youth coaches as “emphasizing the team,” and “helped me have fun. I enjoyed being competitive and being on a team.”

Adult. Adults also need *encouragement* (33%) from coaches and this theme was the most commonly stated influence that the coach had on swimmers who began as adults. The responses mention specifically what the coach did to encourage them. One participant said, “...he encouraged me to train to lose weight, live a healthy lifestyle, and be accomplished.” Fitness plays a big part for the adult swimmers in this question. A number of comments indicated that during their adult years the coach was encouraging by creating a “sense of camaraderie with the team, and emphasized life long fitness.” Another participant mentioned that their adult coach was “...very, very encouraging and positive, very quick to help me and, never talked down to me.”

Instruction and feedback (15%) from the coach was the second most important factor in their swimming. One participant commented about the coach that “She [the coach] is encouraging and helpful in pointing out what needs to be done to increase efficiency.” Still another participant related that, “I get instruction and encouragement from my coach and so I come and improve. She’s positive and knows what she’s talking about and doesn’t make you feel dumb for doing something wrong.” Another participant recorded “I absolutely love the way she teaches and helps me along because I have felt really dorky and awkward at times and she keeps me wanting to continue.”

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Promote goal achievement (13%) was the next most important factor for the adult swimmer. For the swimmer who began as an adult, encouragement to achieve goals is a continual process. One participant mentioned that his adult coach "...continues to motivate me to be faster and accomplish my goals." Another participant mentioned that his adult coaches were "supportive of my goals and choices made in swimming."

Being a *positive role model* (10%) was the next most frequent response by participants on the questionnaire. An older participant stated that his adult coaches were "...a major influence in my life," and his Masters coaches are "good coaches." One participant related how his coaches "taught by example," still another female participant mentioned that her "coaches are great, and a very positive role model and fun." During a follow-up question one participant related that the coach was a positive role model of fitness because she would periodically swim with the group and show them how the drills and sets should be done.

Creates a team feeling (9%) was found to be a factor for adult swimmers. Coaches who help build a team atmosphere help the adult swimmer to stay in the water on a more regular basis. One participant commented that their coach was "friendly and welcoming". Another participant stated that her adult coaches emphasize "the team" and "camaraderie". From a field note observation two participants related how their coach encourages each member of their Masters group to cheer for one another during practice sessions.

Uses positive pressure (7%) was mentioned by the participants in the study. Two participants related as they were filling out the questionnaires that their coach "coerced"

them to come to practice. In a follow-up question they clarified that their coach misses them when they are not at practice and frequently will call them to check up with them if they miss. Another swimmer stated that her coach “calls her by name.” One of the younger swimmers indicated the reason for her continued participation in a Masters group as being “I get instruction and encouragement from my coach and so I come and improve.”

Influence of Peers

Responses to the second question *What did your peers do that influenced you to train and compete in swimming, a) as a youth, and b) as an adult?* were grouped into themes as shown in Table 2.

Youth. The overriding influence of peers on their feelings of relatedness as youth had to do with being *provided support* (43%) and being *challenged* (35%). Regarding the first theme a participant commented, “We had a good camaraderie and competition amongst ourselves.” Peers were also credited with helping their fellow teammates get faster and better. One participant stated that her peers “supported me, pushed me and really made the pain more enjoyable.” An older participant from the 50 to 54 age group related that, “We were like a family and everyone wanted to be the best for everyone else.”

Regarding being *challenged* (35%), group competitiveness was enhanced through the encouragement that a swimmer’s peers gave to each other. One participant made the comment that “When I received encouragement, my level at practice increased.” Still

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another Masters swimmer made the comment regarding his teammates as a youth that “They were competitive in workouts and meets, they were good friends.”

Created a fun atmosphere (13%) was an influence for the adult swimmer when they were swimming as youth. One participant stated that she went to workout because “it was all about the friends.” The comment by another participant was that his peers “...were always supportive and made it an enjoyable time” when he went to workouts or meets. Still an older female swimmer mentioned that it was the “relays, relays, relays!!!” that keep her attending practice and meets.

Adult. It was found that during the adult years the most important factor in keeping them in the water and participating was creating or providing a social network (38%) for each other. Regarding the influence of their peers, a participant responded, “They give me encouragement and they want my encouragement back. Which is one thing I think makes it so great. We love to workout together and push each other to be the best we can be, and we let each other know when we see progress.” Additionally, peers helped create an atmosphere where they could give encouragement to those who were having a hard day and/or less talented. A swimmer mentioned, “The group of women I train with are all faster than I am, but they continue to give me support and encouragement.” Another response given supports the idea that peers create relatedness during the adult experience: “I always come for the visiting that goes on in the locker room after practice.”

Swimmers were *motivated with positive comments* (22%) from their peers. For the most part the participants in this study mentioned specifically that peer pressure to attend

practice and meets really helped them in joining a Masters group. One of the older swimmers in this study related that his peers “expect me to be there” and when he is not at practice or at a meet his peers “...tell me how much they missed me when I am gone.” While observing a practice session, one participant who had just participated in the Huntsman World Senior Games and lost a close race to another swimmer in his age group from Russia kept being reminded by his peers about the Russian swimmer during a hard set. It was observed that these friendly reminders served to push the swimmer through to completing the set at a faster pace.

Participants in this study mentioned their peers *provided challenge* (15%) for them. A swimmer who participated in this study related that her peers “swam faster than me and I had to keep up.” Another Masters swimmer related how she is “much more motivated to push myself in workout if I have others in my lane. It’s easier to get up in the morning knowing I’ll see other swimmers.” Peers provided the adult swimmers with a means to challenge themselves and thus improve.

With the rise in popularity of triathlons, *peers that compete in triathlons* (8%) served as a motivational factor for some of the participants in this study. One of the swimmers mentioned, “I know people who do triathlons and who just swim a lot. I was impressed with their ability to swim.” Two other participants stated that they began swimming Masters because of “triathlons” and that it was out of a desire to “be a better triathlete.”

Other Significant People

Responses to the third question *Were there other significant people, besides your coach and peers that influenced you to train and compete in swimming? Who were they (e.g., wife) and what did they do to influence you as a) youth, and b) as an adult?* were grouped into themes as shown in Table 3.

Youth. In youth, the *family* (80%) plays a key role in influencing them to swim, but it is mostly through the influence of parents. The most often recorded response regarding what their parents did to influence them was to be supportive of their participation. One participant made the comment that her parents helped her develop a “feeling of belonging.”

Friends (24%) who were on the swimming teams were also mentioned as other significant people that influenced them to join in and keep going. An experienced Masters swimmer related “Friends in swimming were a huge influence. When I received encouragement, my effort level at practice increased.” He went on to state “my swimming peers respected me and thought highly of me.”

Adult. According to the responses given the adult swimmers participate due to support and encouragement from a *spouse* (37%) or their *family* (25%). One participant stated, “My husband is my greatest support. He is always watching my stroke and giving me honest feedback.” Still another response was, “My husband always supports me when I need to leave at night. He also motivates me when I don’t want to go.” A male participant responded, “My wife is the best cheerleader, supporter and very best friend.”

Adults influenced by *friends* (24%) were often invited or encouraged by a friend, or friends to join in a Masters group. One participant stated they became involved through her best friend who runs SDM (South Davis Masters). Another swimmer illustrated how friends help get others involved by relating “I had a friend that said he was going to do a triathlon and that got me interested.” Finally a swimmer related that it was “other swimmers my age, and old friends” that influenced his participation.

A few swimmers were influenced by *medical personnel* (5%). One person related how her “physical therapist said it’s [swimming] good for my back.” Another swimmer added that “My doctor tells me to swim for heart and cholesterol benefits.” In a conversation with a swimmer attending the South Davis Masters Invitational swim meet a swimmer mentioned how her doctor told her that swimming would be good to help her in her recovery from pancreatic cancer.

Youth Swimming Experience Effect on Adult Participation

Responses to the fourth question *How did your youth swimming experience affect your decision to continue swimming as an adult?* were grouped into themes as shown in Table 4 which shows that 49% of the adults had *liked swimming and wanted to continue*. One swimmer reported, “I gained self-esteem in swimming. The decision to continue swimming as an adult is probably attached to this reality.” One participant focused in on *increasing fitness* (21%) as a reason, stating that through her youth participation she “learned to love the sport and go to workout.” In a follow-up phone call with this participant, she related how her youth coach was very negative and she wanted to prove him wrong about her so she kept trying to show the youth coach that she could do it.

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Over time she came to love training and the increased fitness and the sport and just kept going through to her adult years. Another participant who focused on fitness related that Swimming became her “outlet for fitness and stress relief.” The final aspect of the youth swimming experience was that the adult swimmer had *learned many new things* (20%) in their youth, and as they became adults they wanted to continue to learn. One adult Masters swimmer contributed that he “always wanted to learn to do the freestyle correctly.” A second respondent stated that through his youth he “learned that planning, enthusiasm, and being positive are fundamental characteristics of gaining success” and he wanted to keep these things as an active part of his life.

Factors that Influenced Individuals to Start Swimming as Adults

In Table 5, themes are listed to the fifth question *If you started competitive swimming as an adult, what influenced you to do so?* Factors that influenced individuals to start swimming as adults, reveal that most adults took up swimming as a means to increase *health and fitness* (27%). The range of comments regarding the health and fitness aspect of starting to swim as an adult were from simple responses like “health” to “I was exercising for personal benefit-mostly strength training.” The most poignant statement by a participant was that she “started swimming to help me in my recovery from pancreatic cancer and Type II Diabetes. I continue because it is fun and gives me a much more structured workout than swimming on my own.”

It is interesting to note the influence of *friends and influential others* (23%) was the second most common theme. Several participants credited the Masters coach with

inviting them and getting them started. One comment indicated that “the coach really talked it up, how fun it was, and it was. My friend did it also.”

Many of the responses regarding reasons for starting Masters swimming are tied to the participants who start *training for triathlons* (17%). Participants listed among their reasons for joining a Masters swimming group was that they had a friend who was doing both Masters and triathlons. One participant mentioned that a friend and neighbor was involved in triathlons and “talked me into my first triathlon. He coached me initially and then invited me to join Masters swimming.”

Another theme was *fun* (16%). A participant who listed this as their answer stated that they started to swim on a Masters group “out of curiosity to see how well I could do, it was fun so I plan to do it again.”

Lastly, *learning new things* (12%) was the remaining theme. A beginning adult swimmer mentioned in her response that being on a Masters group was “...fun and a great experience as well as helping me to learn and improve. I like sporting events and would like to add that to my list of things I want to accomplish.” A participant who had competed as a youth mentioned that he just missed learning and wanted to continue to learn as the techniques had changed

Discussion

The purpose of this study was to examine the role that coaches, peers and significant others played in the development of relatedness as it applies to the motivation of adult swimmers. This should help explain why adults would return to swimming, perhaps after having competed many years as a youth; as well as explain why an adult

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would start swimming when they have never tried competitive swimming prior to their adult years. From the results of this study, Masters swimmers who have/had coaches, peers, or significant others who created a sense of relatedness are likely to continue participating in swimming into their adult years. Additionally, the results of this study reveal that the building of relatedness for the beginning adult swimmer helps keep them coming to the pool and getting involved in Masters swimming.

The coach had a large impact in helping to establish relatedness with the team and sport for the young swimmer by creating an encouraging environment, providing fun and challenging activities in workouts. They also created a team feeling that encompassed social opportunities in and out of the water. Such an environment helped the younger swimmers to feel a part of a larger social whole in a competitive youth experience, and helped them want to keep swimming. Then in their adult years, the Masters swimmer who competed as a youth seemed to be more influenced by their peers and significant others who appear to take over as the primary contributor regarding relatedness. The coach does play a role in the decisions and motivation of the adult Masters swimmer, but mostly in terms of teaching and giving feedback.

For those Master swimmers who took up the sport as adults without having had a youth experience it appears that the coach plays a strong role in helping create relatedness for the adult swimmer so that they will take up swimming or stay with it. It is evident that the coach who invited and encouraged participation helped the beginning adult swimmer feel comfortable with getting in the water and doing something they may not be entirely comfortable doing.

For the adult swimmer who is new to competitive swimming their spouse, peers and significant others are strong sources contributing to the development of relatedness. Spousal support and encouragement was mentioned a great deal as a primary reason for starting Masters swimming. Spouses who encourage their partner to attend practice and help to free up time by tending children and attending meets and practices all help the participant to feel connected to the sport. Another way that the spouse helps to build relatedness occurs as the participant increases their fitness levels and thus loses weight and changes their body, the spouse compliments and build up the swimming spouse and encourages them more. This helps the participant spouse to see the benefits of swimming and they want to do it more to continue their self-improvement and please the encouraging spouse.

Peers inviting others, and encouraging their friends to come and join the Masters group and then socializing with each other, especially during the workouts, after meets and practice sessions, helped include the adult swimmer who never swam competitively until their adult years.

From the observations made at the meet and practices attended when peers reached out and encouraged each other, whether it is a beginning adult or a veteran swimmer this served to connect swimmers to each other and create a team feeling. The team feelings that are created by the Masters group form a strong bond of friendship that serve to motivate and encourage continued participation of the adult swimmer.

Conclusion

The results of this study show that relatedness plays a role in motivating Masters' swimmers participation. The adult Masters swimmer should feel connected to the sport, the team and their training so as to be motivated to keep attending. In order to accomplish this coaches should follow these recommendations.

The coach should lead the way in helping develop a sense of relatedness in group members. The coach should set an example of social interaction by greeting every team member by name, asking team members how they are doing and encouraging team members to support and cheer for one another. Providing fun and challenging practice sessions where group members can socialize and compete with one another should help in the fostering of relatedness. Social activities outside of the pool are also valuable in the creation and strengthening of relatedness. The coach should create activities and opportunities for group interaction in and out of the pool.

The coach also needs to understand the importance of the influence of family, peers, and significant others in motivating adults to participate. By understanding these relationships the coach will be better prepared to deal with challenges that might develop between parent and child, spouse and athlete, and between peers. If the coach makes these recommendations a part of his or her coaching strategies, feelings of relatedness should be enhanced and swimmers will have a greater sense of connectedness to the coach, their peers, the team, and the sport.

The coach that creates an atmosphere of sociality helps the adult swimmer, whether beginning or veteran to build relationships. According to this study the fostering

of group swimming relationships caused the adult swimmer to want to be involved, attend practices more often and compete in meets with their respective Masters group. Due to the encouragement of social interaction, and the creation of a social support network within and without the group, the building of relatedness becomes a reality rather than a mere possibility. Through the fulfilling of the relatedness need, this should foster a desire within the swimming participant to choose swimming as a life-long activity.

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Table 1

Influence of Coaches

Theme	Number of comments	Percent
Youth		
Encouraging	11	23%
Fun	10	21%
Challenged	8	17%
Positive role model	5	10%
Create team feeling	3	6%
Other	1	2%
Total	49	100%
Adult		
Encouraging	22	33%
Gives instruction & feedback	10	15%
Promote goal achievement	9	13%
Positive role model	7	10%
Create team feeling	6	9%
Uses positive pressure	4	6%
Other	9	13%
Total	67	100%

Table 2

Influence of Peers

	Theme	Number of Comments	Percent
Youth			
	Provided Support	19	43%
	Provided Challenge	16	35%
	Created a Fun atmosphere	6	13%
	Other	4	9%
	Total	45	100%
Adult			
	Provided a Social Network	29	38%
	Motivated with positive comments	17	22%
	Provided Challenge	15	19%
	Peers that compete in Triathlons	6	8%
	Other	10	13%
	Total	77	100%

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Table 3

Other Significant People

	Theme	Number of Comments	Percent
Youth			
	Family	39	80%
	Friends	5	10%
	Others	5	10%
	Total	49	100%
Adult			
	Spouse	22	37%
	Family	15	25%
	Friends	14	24%
	Medical Personnel	3	5%
	Others	5	9%
	Total	59	100%

Table 4

Youth Swimming Experience Affect on Adult Participation

Theme	Number of Comments	Percent
Liked swimming and wanted to continue	30	49%
Increase fitness	13	21%
More skills and newer things to learn	12	20%
Other	6	10%
Total	61	100%

Table 5

Factors that influenced individuals to start swimming as an adult

Theme	Number of Comments	Percent
Health and fitness	18	27%
Friends and influential others	15	23%
Training for Triathalons	11	17%
Fun	11	16%
Learning new things	8	12%
Other	3	5%
Total	66	100%

Appendix A

Prospectus

Chapter 1

Introduction

Gould, Feltz & Weiss (1985) examined the motivation to participate in competitive swimming in 365 youth swimmers ages 8 to 19. From their research the authors determined that "...athletic motivation is a result of both individual goals and/or objectives and environmental factors (athletic situation) and optimal athletic motivation results when an athlete's motives are matched to athletic environments to fulfill them" (p. 136). In the study, Gould et al. (1985) determined that although boys and girls are each motivated to participate in swimming for different reasons there are several "general factors" prevalent in motives for youth to participate in swimming. These factors include "achievement-status, team atmosphere, excitement-challenge, fitness, energy release, skill development and friendship" (p. 137). Interestingly, several of these factors identified by Gould et al. can be considered part of the Self-Determination Theory.

The Self-Determination Theory (SDT) was originally proposed over thirty years ago by the motivation researchers Deci and Ryan (1985). The SDT states that every human being has three basic psychological needs: competence, autonomy, and relatedness. The SDT states that when these needs are satisfied self-motivation and mental health will be increased; and when these needs are not fulfilled motivation and personal well being decreases (Deci & Ryan, 2000). Ryan and Deci (2002) define the first basic human need, competency, as "feeling effective in one's ongoing interactions with the social environment and experiencing opportunities to exercise one's capacities";

they define the second basic human need, autonomy, as “being the perceived origin or source of one’s own behavior”; the third basic human need, relatedness is defined as “feeling connected to others, to caring for and being cared for by those others, to having a sense of belongingness both with other individuals and with one’s’ community sharing” (p. 7-8). Additionally, relatedness is concerned with establishing a mutual sense of respect for and reliance on others (Ryan & Deci, 2002). In their research Ryan & Deci (2002) postulate that fulfillment of these needs leads to an increase in intrinsic motivation, which is the highest level of motivation a person can attain. Most research in SDT has focused on competency and autonomy. Relatedness, however, has not been as isolated or as widely addressed as have the basic needs of competency and autonomy.

Osterman (2000) adds another dimension to relatedness. She connects relatedness with belongingness, or the development of a sense of community, in an effort to help students learn, behave properly, and increase their feelings of self-worth (326). Osterman, citing a study by Ryan, defines relatedness as the need for all students to experience belongingness, or a sense of community, they must come to feel closely connected to others; in this way they may have the experience of increasing their sense of self-worth and an increasing their internal motivation to learn (Osterman, 2000; Ryan, 1995). Osterman finds that students’ feelings of relatedness affects their self-perception, classroom behavior, motivation to learn, and their motivation to continue to make personal improvements. The need of relatedness is important because without a sense of

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relatedness students will not be motivated to learn, behave in a positive manner, and continue to make efforts to progress.

Statement of Problem

There are two purposes of this study: a) to examine the contribution of relatedness in the motivation of adults to continue to participate in, return to and/or start training and swimming competitively as a Masters swimmer, and b) to develop recommendations for coaches.

Hypothesis

Master Swimmers who have/had coaches, peers or significant others who create a sense of relatedness are more likely to continue their participation in swimming into their adult years.

Null Hypothesis

Master Swimmers who do/did not have coaches, peers or significant others who created a sense of relatedness are less likely to continue their participation into their adult years.

Assumptions

The assumptions that will apply to this study are

1. The participants will answer the questions honestly.
2. The interviewer will solicit open and honest answers from participants.
3. Audio recordings and notations will be taken so all data can be carefully organized, analyzed and interpreted.

Delimitations

This study will be delimited to Masters Swimmers who are eligible to compete in a recognized United States Masters Swimming age group.

Limitations

The following limitations are considered possibilities of this study:

1. Athletes may not have participated in age group swimming.
2. Athletes may have just started swimming as an adult.
3. The athletes may have a difficult time talking freely as they are being recorded.
4. The athletes may not want to give the interviewer the proper time required.
5. Results are limited to those athletes who volunteer to participate.

Operational Definitions

For this study the following definitions will apply to the research being conducted:

- *Masters Swimmer*—any competitive swimmer between the ages of 19 to 99 (www.usms.org).
- *Age Grouper*—a competitive swimmer under 18 years of age (www.usaswimming.org).
- *Learning*—a visible change in practice and behavior.
- *Competency*—is feeling successful, or succeeding at optimally challenging tasks and being able to attain desired outcomes (Baard, 2002, p. 259).

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- *Autonomy* (democratic behavior)—is the experiencing of choice and feeling like the initiator of one's actions (Baard, 2002, p. 259).
- *Relatedness*—is the establishment of feelings of mutual respect and reliance with and among others (Baard, 2002, p. 259).
- *Social Support*—coaching behavior characterized by a concern for the social and athletic welfare of individual athletes and the team, as well as a concern for the creation of a positive behavioral atmosphere and warm interpersonal relations with members of the team.
- *Intrinsic Motivation* (IM)—internal motivation or self-determined behavior where one willingly acts to perform without outside forces compelling the athlete to participate in achieving a desired outcome. Doing an activity for the inherent satisfaction of the activity itself (Ryan & Deci, 2000, p. 71).
- *Extrinsic Motivation* (EM)—external sources that compel one to act toward achievement of a predetermined goal. Performance of an activity in order to attain some measurable outcome (Ryan & Deci, 2000, p. 71).
- *Technique/Fundamentals*—are those psychomotor skills required to perform any given component of competitive swimming.

Significance of Study

The goal of this study is to examine the contribution of relatedness in the motivation of adults to continue to participate in, return to and/or start training and swimming competitively as a Masters swimmer, and to develop recommendations for coaches.

Chapter 2

Review of Literature

Self-Determination Theory

The Self-Determination Theory (SDT), as established by Deci and Ryan (1985), is based on the idea that humans are motivated to achieve challenging tasks, and it addresses the reasons why humans persist in these activities. According to Ryan and Deci (2000), SDT provides an understanding of motivation through examining three basic human psychological needs and how the fulfillment of these needs increases or decreases intrinsic motivation. They identify the three needs of SDT as competency, autonomy and relatedness. When the three basic psychological needs are fulfilled students, athletes, employees, etc. will be more intrinsically motivated, have an increased sense of enjoyment or satisfaction with their association, and will more likely have greater longevity with the endeavors they are involved in. In essence, competency, autonomy, and relatedness are intertwined with people feeling satisfied with their life choices (Deci & Ryan, 2000).

Over time, SDT has evolved from research focused on the fulfillment of single individual needs as a source of increased internal motivation to studies examining a combination of factors as a possible explanation for increased internal motivation (Ryan & Deci, 2000). SDT researchers define competency as an individual succeeding at optimally challenging tasks and being able to attain desired outcomes, therefore resulting in feelings of success; autonomy is defined as a democratic behavior that concerns experiencing choice and feeling like the initiator of one's actions; and relatedness is

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concerned with the development of mutual respect and reliance between an individual and the associated group (Baard, 2002; Deci & Ryan, 2000).

For this study the characteristics of coaches, peers, and significant others will be examined to determine if they translate into the development of swimmers' feelings of relatedness that will influence their motivation to continue to train and compete in the sport into their adult years. More specifically, an examination will be made of the impact coaches, peers, and significant others have in developing swimmers' feelings of relatedness that might cause them to be intrinsically motivated to stay in swimming, return to it, or begin to participate in it during their adult years.

Competency, Autonomy, and Relatedness

Standage, Duda, and Ntoumanis (2005) determined that students in physical education classes who felt their teachers showed more support for their competency, autonomy, and relatedness were more likely to have stronger feelings of satisfaction with their physical education and related outcomes. The results of this study reveal that teachers who create an environment which empowers students through helping them to retain autonomy, feel competent and increase relatedness cause students to develop more intrinsic motivation. The development of intrinsic motivation leads the students to a greater "investment, creativity, and high quality learning in activities" (Standage, Duda, & Ntoumanis, 2005, p. 425). This study takes a holistic approach to SDT and does not look at just one aspect of the theory. The results of this study suggest that the swimming coach should develop behaviors which help athletes develop increased feelings of competency, autonomy, and relatedness. According to SDT, the coach that satisfies the

three basic needs of the swimmers should see an increase in intrinsic motivation of his/her swimmers and a greater willingness to take on challenging activities and tasks.

An earlier study by Deci, Vallerand, Pelletier, and Ryan (1991) examines the role of motivation in education. These researchers look at how SDT is involved in students' desire to learn, how much importance the students place on their education, and the impact made on students' self-confidence in their own capabilities (Deci, Vallerand, Pelletier & Ryan, 1991). In their work the authors define competency, relatedness and autonomy as "an understanding of how to attain various external and internal outcomes and being efficacious in performing the requisite actions, relatedness involves developing secure and satisfying connections with others in one's social milieu; and autonomy refers to being self-initiating and self-regulating of one's own actions" (Deci et al., 1991, p. 327).

Based on their research, Deci et al. (1991) state that teachers who show support for students in social situations help students feel more competent, autonomous, and related, and these students develop more self-starting behaviors. Deci et al. continue on to state that when an educator shows support for autonomy and relatedness, this facilitates a student becoming more self-determined and having an enhanced self-determined motivation. Deci et al. conclude that when significant adults, like parents and teachers, enhance intrinsic motivation in an autonomous and relatedness supportive way competency and the student's desire to learn are enhanced. The researchers offer teachers recommendations for what they should do to increase a student's motivation to learn: offer choice, minimize controls, acknowledge feelings, and make available information

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that is needed for decision making and for performing target tasks (Deci et al., 1991). For the purposes of the present study, the researcher is going to examine the influence of coaches, peers and significant others in providing social support and acceptance for the athletes, and determine whether the athletes perceive that this influence leads them to be more inclined to take an active role in their swim training and competitions. Specifically the application of the findings of Deci et al. suggest the coach/teacher should make every effort to show support for athlete choice and encourage team members to accept and encourage their teammates. In this way the athletes may feel like they have more choice in their training and become more related to the program, team and team goals, thus becoming more intrinsically motivated.

In another study examined the role of competency, autonomy, and relatedness in the lives of Chinese students who were studying and living in Belgium. These researchers found there was a positive correlation between the three basic needs of SDT and the development of a positive well-being (Vansteenkiste, Lens, Soenens & Luyckx, 2006). In this study the researchers measured students' basic needs satisfaction, subjective well-being, vitality, and depression levels. Through the use of questionnaires researchers found that both autonomy and relatedness satisfaction correlated with the well-being of the Chinese students. The students' competency need was found to have a positive effect on the Chinese students' vitality and psychological well-being beyond that of the autonomy and relatedness need. Vansteenkiste et al. concludes that when the three basic needs of SDT are met for the Chinese students they have a higher sense of well-being and better adjustment in their non-native land. This supports the premise that if the swimming

coach wants the athletes to feel good about their involvement, and stay active in the sport, then the three basic needs of competency, autonomy, and relatedness must be fulfilled.

A study on the motivation and dropout rate of female handball players by Sarrazin, Vallerand, Guillet, Pelletier & Cury (2002) show that coaches who create a learning environment which focuses on task mastery will facilitate the development of feelings of competency, autonomy, and relatedness; on the other hand, if coaches create a climate that is more oriented to pleasing the ego, this leads to a loss of competency, autonomy, and relatedness. The study also reveals that “feeling incompetent, nonautonomous, and unrelated to others undermines self-determined motivation toward handball...” and causes athletes to drop the sport (Sarrazin et al., 2002, p. 414).

Conclusions from this study show that a coach should create an atmosphere that is less ego-involving and more oriented on task instruction or skill mastery behaviors. The less ego-involving behaviors a coach exhibits will allow for increased feelings of competency and relatedness and the athletes will feel like they are able to make choices (autonomy) and not feel like they are being pressured into performing and learning. For the swimming coach the results of this study indicate that in order to keep the swimmers motivated in the water and on the team, the coach should stress learning the fundamentals of swimming in a task mastery environment and avoid ego-involving instructional behaviors. This focus by the swimming coach should help the swimmers increase their feelings of competency, autonomy and relatedness and keep them in the sport.

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SDT researchers have tried to explain the relationship of the three basic needs to an increase of intrinsic motivation in people. They have also endeavored to determine if there are correlations to an increase of intrinsic motivation and two of the basic needs.

Competency and Relatedness

Ntoumanis (2001) measured cooperative learning, self-referenced improvement, social factors, the three needs of SDT and the types of motivation and consequences which impact student interest in a compulsory English physical education class for 14-16 year old students. Ntoumanis identified and defined four types of motivation and their relationship to feelings of competency, autonomy, and relatedness. The four types of motivation are external regulation, introjected regulation, identified regulation, and integrated regulation. On the questionnaire students were asked questions that were connected to each of the four types of motivation. This was done to determine which type of motivation they were most impacted by and what most influenced the students to actively take part in a physical education class. Ntoumanis found that the most important component of developing intrinsic motivation for students in a compulsory physical education setting was perceived competency. Autonomy and relatedness played a role, but it was the teacher's ability to help the students feel competent that made the greatest difference in getting students to actively take part in a compulsory physical education class. Feelings of relatedness were enhanced through the use of cooperative learning situations, and this, in turn, helped foster a greater sense of competency as the students helped one another in these cooperative learning situations. Applying results of Ntoumanis' research to the coaching of swimmers, shows that if a coach wants to foster

feelings of competency and relatedness, activities that help athletes work together should be planned and inserted into each practice session.

Competency and Autonomy

Factors that impact an individual's level of intrinsic motivation are discussed by Vallerand, Deci, and Ryan (1987). In this article they relate how competency and feelings of autonomy influence intrinsic motivation. Vallerand et al. state that coaches have a powerful impact on the development or destruction of intrinsic motivation through the manner in which they build competency and allow for autonomy. They explain that a coach/teacher can increase a person's feelings of competency and autonomy by the use of feedback. The researchers discuss two types of feedback: informational or performance, and ego-centered or controlling. The potential impact the coach has on an athletes' feelings of competency and autonomy is that informational or performance feedback gives athletes a sense that they are learning and have control over their own progress; however, ego-centered or controlling feedback gives little or no direction to athletes and only serves to stroke the athletes' ego and not give them any real information on how they are performing. Additionally, Vallerand et al. state that "Positive competence information is theorized to increase the likelihood of their engaging in the activity again because it affects their expectation about being competent enough to get reinforcement" (Vallerand et al., p. 393). The authors state that to improve a persons' feelings of autonomy or control over their own actions the coach should provide opportunities for the athletes to have a say in their participation and/or what they are learning. This "locus" of control will enhance the athletes' feelings of competency because they will feel in

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control of their progress and learning environment. This feeling of control will enable them to develop a greater sense of intrinsic motivation. An important point that Vallerand et al. highlight is that the teacher is the most important factor in determining and setting the classroom environment or context.

Vallerand et al.'s research can help coaches who want to have intrinsically motivated athletes who stay with the program, by helping coaches understand how to create an environment where the athletes develop a high degree of intrinsic motivation through increased feelings of competency and autonomy. Part of this context setting is the use of instructional methods and feedback tailored to the level of motivation of the participants. In a study of swimming coaches it was determined that a coach's perception of the level of motivation of their athletes would determine the type of feedback given to the athlete (Vallerand & Pelletier, 1985). When coaches perceived their athletes to be more intrinsically motivated they would give more informational feedback, whereas when coaches perceived their athletes to be less intrinsically motivated, or nonself-determined, they gave more controlling feedback (Vallerand & Pelletier, 1985). The application of this information is such that if the coach is interested in having self-determined athletes, the coach must know the individual motivation levels of the athletes and adjust the type of feedback given to the athletes. By doing this the coach may help the athletes feel more competency and relatedness, which in turn might translate into the athletes staying with swimming longer than if they were presented only controlling feedback.

Frederick-Recasino (2002) finds that when the basic needs of autonomy and competency are satisfied, the fulfilling of these needs has reliably been shown to help increase intrinsically motivated behavior. Intrinsically motivated behavior leads to the development of an increased desire to participate and to be connected to the activity, team, and sport. This increased desire to belong is most impacted by the athletes' feelings of being able to succeed, the sense that the athlete have a choice, and the belief that they are connected to their success and that of the team in their sport. Frederick-Recasino believes that when individuals are in a "state of intrinsic motivation," they experience feelings of satisfaction, enjoyment, and competence which in turn lead to individuals desiring to "persist at the activity." Satisfying the needs of competency and autonomy impacts intrinsic motivation to participate in the sport or activity and usually gets its start during childhood, the teen years, or young adulthood. Differences in intrinsic motivation are impacted by age and the experiences had by people at the various stages of growth and development. Adults have differing motives to participate in physical activity then they once did as youth. According to Frederick-Recasino, adults between 18-51 years of age have a decreased intrinsic motivation to participate in fitness activities in spite of interest, competence, appearance, and social motives. Frederick-Recasino recommends that further research needs to be done in order to determine what motivates adults to participate in fitness activities.

Autonomy and Relatedness

Wild and Enzle (2002) address the connection between social events and motivational processes. In their work the authors explain and define the Social Contagion

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Model. In this model there are five parts which are connected to each other that may help explain the level of a person's intrinsic motivation. These parts are perception of others' motivation, expectancy formation, perceiver's motivational orientation, expected quality of task involvement, and expected quality of interpersonal relations. This model explains the dyadic relations that exist between teacher-student, parent-child, coach-athlete, and so on. The model shows that one person's perceptions of social acceptance and expectations directly impacts another person's feelings of social acceptance and task involvement. One person's feelings of autonomy and relatedness will be affected negatively or positively by the level and type of perceived support, control, and autonomy. The Social Contagion Model shows that for the optimum level of autonomy, relatedness and even competency to be developed, the teacher, coach, or parent must model a passion or enthusiasm for the topic [sport]. As well as support the child, student, or athlete in their development of self-determination in the learning process. For the coach this means that if they want the athletes to be excited, involved, and connected to the sport or activity athletes must see the coach as being those very same things.

Competency

A study looking at motives of adult participation in sport and exercise reveals that a task mastery orientation with a focus on intrinsic motivation encourages participation and achievement (Gill, Williams, Dowd, Beaudoin & Martin, 1996). Gill et al. find that there are differences between motivation to participate for men and women. Adults ranked what motivated them the most to participate. Females ranked fitness and flexibility (competency), then affiliation (relatedness) as the most important aspects of

participation that kept them motivated. The males ranked competitiveness and winning (competency) as the most important aspects of their being involved. The overall results of the research by Gill et al. was that adult sport and exercise participants are motivated by “multiple motives and more diverse competitive orientations” (p. 317). Gill et al. suggest that to meet the interest and motives of participants, those directing programs should offer diverse activities and approaches to motivate each individual enrolled in a class or activity.

Application of this study for the swim coach means that motivation for males and females must be addressed and applied individually, taking gender into consideration. The coach should develop an approach that is appropriate for both genders that will address competency and relatedness in order to encourage participation, longevity, and persistence for both men and women. Furthermore, to retain adult participants in a swim training program the coach should focus on providing a strong teaching/learning environment within the aspect of a strong team setting.

The role of the coach in creating an environment for the development of competency, relatedness, and social acceptance in an effort to retain athletes should be of primary importance. Burton and Martens (1986) studied wrestlers and their coaches who were members of U. S. Wrestling teams. They surveyed sixty-nine coaches and eighty-three athletes ranging in age from 7 to 17. In this study using the Nicholl’s Perceived Ability Motivational Model, Burton and Martens learn that the primary reason for dropping out is a conflict of interests. However, according to Burton and Martens, these results are flawed due to several of the questions asked in the Nicholls’ questionnaire

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which did not address the loss of motivation. They believe that the athletes themselves seemed to respond in interviews that a loss of motivation was a large part of the reason for them leaving the sport of wrestling.

Recommendations based on this study indicate that the problem with the drop-out rate is that the wrestlers were continually feeling as though they were failing, which led to decreased feelings of competency. The researchers suggest that coaches, working closely with their athletes, develop a performance orientation system rather than an outcome (win at all cost) orientation in their athletes. Burton and Martens conclude by recommending coaches help their athletes set long-term goals that can show steady and continued growth that is systematic and allows the lower ability wrestler to recognize the achievement. Coaches, whether a swimming coach or wrestling coach, can take from this study and apply a progressive goal orientation to their athletes. This should enable the athletes to see progress and develop feelings of competency.

Kitsantas, Zimmerman, and Cleary (2000) conducted a study of the role of the coach as a model for skill acquisition and competency using high school girls who were taught to throw darts. In their research, Kitsantas et al. defines two levels of modeling: coping and mastery. Coping models are defined as models that perform a skill which was copied for emulation, but usually left some part of the skill out, whereas a mastery model is a model that presents each part of the skill and can be used as a viable model from which to learn the proper way to perform the skill. In this study authors suggest there are four levels of learner acquisition: observational, emulation, self-control, and self-regulation. The simplest level of learning is observation, with the highest, most proficient

level being self-regulation. On the observational level of skill acquisition, beginning learners are provided with a clear picture of how the skill should be performed. Next, the emulation level is where novice learners learn from other athletes and do so through the social feedback of their peers. The third level is that of self-control where students learn from their self-directed practice and achieve automaticity in their athletic endeavors. The highest level of skill acquisition is self-regulation where students learn to adapt their performances to changes in the internal and external environments. According to Kitsantas et al. students start at the lowest level and as they gain competency they will eventually rise to the self-regulation level if they have been presented with the right learning environment and models. Modeling can be a strong force for the development of feelings of competency.

Relatedness

A motivation and learning theory that precedes SDT, yet is related to the present study, is the Social Cognitive Learning Theory. According to Banduras' (1977) Social Cognitive Learning Theory people learn best when they observe and imitate the behaviors of significant role models. Bandura outlines four conditions that are part of the learning process and must be included if the observed person's behavior is to be learned. They are attention, retention, motor reproduction, motivation, and reinforcement. The coach is in a prime position to teach each of these behaviors. Applying Bandura's theory means that if coaches expect their athletes to be connected to the team, the coach must first model those behaviors that lead to the development of feelings of relatedness within the team setting. Coaches should also model acceptance for each team member so that

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team members in turn will give each member of the team social acceptance; in other words, coaches must be connected to the team and show athletes they are accepted if the athletes are to do the same. Banduras' theory postulates that as coaches model connectedness and social acceptance with the team, the athletes should do the same. Feelings of relatedness between coaches and athletes are impacted by another factor in the coach-athlete relationship, and that is coach-athlete compatibility.

As coaches and athletes work together to set goals, a key element in establishing connectedness, social acceptance, and competency compatibility between the coach and athlete will be enhanced. Horne and Carron (1985) examine three major issues relative to the coach-athlete relationship. The three issues are (a) the variables discriminating between compatible and incompatible dyads; (b) the relationship between coach-athlete compatibility and athlete performance; and (c) the relationship between compatibility and athlete satisfaction. According to Horne and Carron the results show significant difference between what the coaches perceive the athletes think about their behavior, and vice versa for the athletes. Older athletes have a greater sense of satisfaction when they perceive their coach as providing more social support. Additionally, the results show that training and instruction have a high association with athlete satisfaction, especially at the university level. The application of this study for coaches is that coaches must use varying forms of training and instruction in order to enhance the coach-athlete relationship and thus create feelings of relatedness between the coach and athlete and members of the team. As feelings of connectedness or relatedness are developed, a natural by-product is an associated enhancement of competency (Horne & Carron, 1985).

Urduan and Schoenfelder (2006) study the effects of the classroom environment on student learning. They look at the characteristics of the school and classroom that may influence a student's motivation to learn. One of the influences they look at is the role of the teacher in creating an effective learning environment that will foster student learning. They find that teachers are accountable for the management of the learning environment. They also find that a teacher who shows caring attitudes for students and the subject will have a significant impact on the students' attitudes, academic performance, and the pursuit of social goals. Urduan and Schoenfelder conclude by stating that the teacher who creates the proper classroom environment will have students who are more motivated to learn because they feel acceptance.

Applying the results of Urduan and Schoenfelder to swimming and relatedness means that the swimming coach who creates the type of environment conducive to learning and relatedness may have athletes that have better attitudes toward training, give better athletic performances and be more inclined to pursue their goals. The athletes may do this because they feel accepted by the coach and feel as though they are learning (developing feelings of competency).

In Ostermans' (2000) study, she found that relatedness affects peoples' perceptions of others, leads them to view friends and group members more favorably, as well as think of them more often and in more complex ways. Osterman believes that the quality of students' relationship with adults and peers in the home and school, combined with their perceptions of how they are accepted by the significant adults and peers in their lives, is directly tied to the level of "intrinsic motivation... internal regulation as well as

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self esteem and identity integration” exhibited by the student (p. 328). It is pointed out in her study that when adults show a lack of interest and involvement in a task assignment, this leads to a decrease in intrinsic motivation because the students feel disconnected from the teacher.

For swimming coaches this means that they need to set up the learning environment in such a way as to allow for the athletes to feel accepted by the coach. By doing this coaches may help their athletes learn more and gain greater feelings of relatedness which could lead to more intrinsic motivation, increased satisfaction, and ultimately longevity in the sport.

Summary

A review of the literature and research using SDT demonstrates that most research on SDT has focused on some combination of the three basic needs as proposed by Deci and Ryan (1985). Most research has examined the connections of intrinsic motivation to competency and relatedness, competency and autonomy, autonomy and relatedness, or connections between all three-competency, autonomy and relatedness. The basic need of relatedness has rarely been examined as a stand alone item explaining an athlete’s motivation to participate. Therefore, the purpose of this study is to a) examine the contribution of relatedness in the motivation of adults to continue to participate in, return to, and/or start training and swimming competitively as Masters swimmers, and b) to develop recommendations for coaches.

Chapter 3

Methods

Participants

The researcher will contact, via phone, the Masters Group coach and/or team representative to ask permission to attend a practice session and administer a questionnaire to the Masters swimmers. The researcher will explain to the Master Group coach and/or the team representative the nature of the research and describe the questionnaire. Subjects will be recruited from members of six local Masters Swimming groups along the Wasatch Front in Davis, Salt Lake, Utah and Wasatch Counties. Participants will range in age from 25 years and older. Equal numbers of males and females will be given the opportunity to fill out the questionnaire with a minimum sample size of eighty athletes; however, all team members will be invited and encouraged to complete the questionnaire. All participants will be asked to sign an informed consent form prior to their participation in this study (Appendix A). Before beginning the study and presenting the survey the researcher will gain IRB approval.

Data Collection

Questionnaire. Once permission has been obtained from the coach and/or team representative, the researcher will attend the practice session and meet the team prior to the start of the practice session, explaining the purpose of the visit. Before completing the questionnaire, participants will be asked to sign a letter of consent granting permission to participate in the study, and agreeing to be available for a follow-up phone call interview. The purpose of the follow-up phone call interview will be to seek greater clarity on

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answers given on the questionnaire. The researcher will observe the practice session and meet those Masters swimmers who are willing to participate in filling out the survey at the end of the practice session.

All participants will be asked to complete the two part questionnaire which has been revised for greater clarity from a completed pilot study. The first section involves filling out specific demographic information. In this section they will also state what their first or previous level of experience with competitive swimming and training was. In the short answer section athletes will be asked to respond briefly to five open-ended questions, and one multiple choice question (Appendix B). A tape recorder will be used during the time Masters swimmers are filling out the questionnaire in order to record any questions swimmers may have, or make observations about the swimmers' questions. A recorder will be used at pool side during the practice session to record any observations of the interactions between Masters swimmers, their coach, peers, or any significant others.

All participants filling out the questionnaire will be informed that the results of the questionnaire will be kept confidential and used only for research purposes. Prior to filling out the survey participants will be informed that a few participants will be purposely selected for an additional brief follow-up phone call interview. Upon completion of the questionnaire all participants will be given a silk-screened swim cap.

Follow-up Interviews. After data analysis, seven to ten athletes will be purposely selected as part of a representative sample group for a follow-up phone interview. During the phone call interview the researcher will use a recorder to record the interview. The

follow-up phone call interview will be done in an effort to clarify answers expressed on the questionnaire which may be unique or unusual and can be better understood through the follow-up phone call (Thomas & Nelson, 2001). During the phone interview, the researcher will make field notes to record additional information which may help provide further understanding of the influences of coaches, peers and significant others in the lives of the participants. Each participant, at the start of the follow-up phone call interview will be reminded of the confidentiality of the interview, and informed as to its purpose as previously stated in the letter of permission which they received and signed at the time they filled out the questionnaire.

Field Notes. Field notes will be kept using a recorder and a note pad while swimmers are completing the questionnaire should they ask any questions. This will provide the researcher with material from which to ask additional questions during the follow-up phone interviews. Field notes will also be kept at the time questionnaires are analyzed. During the follow-up phone call interview the researcher will make notes of the comments made as well as record the responses given by the swimmers. The purpose of field notes is to help facilitate the categorizing of responses that are selected for additional clarification through the follow-up phone interview. The researcher will also attend three Masters Swimming Meets making observations of all Masters swimming groups using the recorder. Attending the meets will be used for the purpose of observing the interaction of Masters swimmers with their coaches, peers, significant others and the crowd in attendance.

Data Analysis

Upon completion of the questionnaires, responses will be grouped into similar themes. Once each response has been grouped accordingly, the data will be combined and grouped with the results from the follow-up phone interviews, and the researcher's notations on participants' responses. All data will be analyzed using the constant comparison method as proposed by Lincoln & Guba (1985). By employing the constant comparison method to analyze the data, the researcher will be able to compare incidents applicable to each category which will lead to a refinement of final categories and themes (Dye, Schatz, Rosenberg & Coleman, 2000; Lincoln & Guba, 1985). Through use of the constant comparative method the researcher will be able to compare and compile related types of information and then compare them in a logical manner (Dye, Schatz, Rosenberg & Coleman, 2000). In this process descriptive statistics will be used to report the results of the research.

Establishing Trustworthiness

To establish a working relationship, the researcher will arrive at the practice sessions early to meet with, and greet, the Masters swimmers. When attending meets the researcher will also sit with and mingle in and among the athletes. In order to have a valid study it is important for the researcher to establish a relationship with the participants. According to Thomas & Nelson (2001) the qualitative researcher must construct a proper working relationship with the potential participants and the facility at which the research is going to take place. The first objective for the researcher is to gain access to the facility or site of the research, and the second is to gain the trust of the participants who will be

involved in the research by building a rapport with them so that they are more likely to take part in the research. Thomas and Nelson recommend that the qualitative researcher develop a “collaborative relationship...” with the facility and participants (p. 335). In order to build this collaborative relationship, the researcher will follow up with Masters Group coaches and or team representatives by e-mail and/or phone prior to the visit as a reminder. This will also help to establish a working relationship with the coach and team members

Peer Debriefing

A university professor with an expertise in pedagogy within the Department of Exercise Science at Brigham Young University will serve as peer debriefer. According to Hanson & Newburg (1992), the role of the peer debriefer is to insure that participant responses are correctly interpreted and analyzed and that there is no bias on the part of the researcher. The researcher will use the peer debriefer prior to the administration of the questionnaire and in a post-research setting. The peer debriefer will help ensure that the questionnaire is appropriately written and that all responses are properly interpreted and analyzed. This will be done in order to ensure the validity of the conclusions and to protect against bias in the interpretation of the data. The peer debriefer will be asked to review the questionnaire prior to the visits to the respective Masters Swimming teams, and will also be used to help interpret and analyze the data.

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Appendix B

Consent to be a Research Participant

Consent to be a Research Participant

Dear Participant,

Introduction

This research study is being conducted by Deward W. Loose, Graduate Student, to determine the role of coaches, peers and significant others in decisions to continue to train and participate in Masters Swimming. You are invited to participate because of your membership in a Masters Group. The criteria for participation in this study are membership with a masters group and are above the age of 25. The research is being supervised by Professor Carol Wilkinson from the College of Exercise Science at Brigham Young University.

Procedures

In this study, you will be asked to complete a two-part questionnaire that will take approximately five minutes to complete. The first part of the questionnaire will ask you for some demographic information, and the second part consists of five open-ended questions. Upon completion of the questionnaire the results will be gathered and evaluated in consultation with a peer debriefer at Brigham Young University. After the questionnaires have been gathered and the data analyzed seven to ten participants will be purposely selected for a brief follow-up phone call interview. All interviews will be conducted with the researcher using a note pad and tape recorder to make field notes from which to ask clarifying questions.

Risks/Discomforts

There are no risks involved in participating in this study.

Benefits

There are no direct benefits to the subjects. It is hoped that researchers will learn more about the role that coaches, peers and significant others play in helping those swimmers over 25 years of age to continue to train and participate in masters swimming. Additionally it is the goal of the researcher to develop a set of recommendations as to what coaches might do to help the Masters swimmer to want to continue with their training and the sport of competitive swimming.

Confidentiality

The results of this study may be published in a professional journal and/or presented at a professional conference. Information obtained from this study will only be used for research purposes. Your name and demographic information will not be revealed, and will remain confidential. All data obtained will remain confidential and will only be reported as group data with no identifying information. All data, including questionnaires and tapes/transcriptions from observations and follow-up phone call interviews will be kept in a locked file cabinet and only those directly involved with the research will have

access to them. After the research is completed, the questionnaires and tapes will be destroyed.

Participation

Participation in this study is voluntary. Participants may choose to withdraw from participation at any time. Withdrawing from participation in this study will not affect our standing in your swimming group.

Questions about the research

If you have any questions regarding this study, you may contact the principal investigator Deward W. Loose at (801) 472-6155 or by e-mail at hastcoach1@hotmail.com or dloose@alpine.k12.ut.us You may also contact Dr. Carol Wilkinson, Associate Professor of Exercise Sciences, Brigham Young University, 249 D SFH, Provo, Utah 84602, (801) 422-8779, or e-mail carol_wilkinson@byu.edu.

Questions about your Rights as Research Participants

If you have any questions regarding your rights as a participant in this research project, you may contact Dr. Christopher Dromey, IRB Chair, 133 TLRB, Brigham Young University, Provo, Utah 84602, (801) 422-6461, dromey@byu.edu

Sincerely

Deward W. Loose

Consent to be contacted through a follow-up phone call

I have read, understood, and received a copy of the consent form, and I volunteer to participate in this study by filling out the questionnaire and will allow the principal researcher, Deward W. Loose to contact me by phone should I be selected for a follow-up phone interview.

Name

Date

Day Time Phone

Evening Time Phone

Appendix C
Athlete Questionnaire

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4. How did your youth swimming experience affect your decision to continue swimming as an adult?

5. If you started competitive swimming as an adult, what influenced you to do so?

6. As part of your involvement with Masters Swimming, check all that apply to your involvement with the sport of swimming. Do you:

- a. donate to a local swim club?
- b. volunteer time to help at meets other Masters meets?
- c. attend meets as a spectator?
- d. coach or volunteer with a swimming program?