International Journal of EXERCISE SCIENCE

*Original Research*

# Parent Motivational Climate, Sport Enrollment Motives, and Young Athlete Commitment and Enjoyment in Year-Round Swimming

RACHEL E. WILLIAMS†[1], CHRISTINE M. HABEEB‡[2], THOMAS D. RAEDEKE‡[2], DEIRDRE DLUGONSKI‡[3], and KATRINA D. DUBOSE‡[2]

[1]Department of Kinesiology, Recreation & Sport Studies, University of Tennessee, Knoxville, TN, USA; [2]Department of Kinesiology, East Carolina University, Greenville, NC, USA; [3]Sports Medicine Research Institute, University of Kentucky, Lexington, KY, USA

†Denotes graduate student author, ‡Denotes professional author

ABSTRACT

***International Journal of Exercise Science 15(5): 358-372, 2022.*** Parents are known to influence the athlete sport experience through motivational climates. Athletes' perception of motivational climates and their own motives for sport participation influence enjoyment and long-term sport commitment. It is unknown, however, the extent parent motives for initially enrolling their child in a year-round sports program associate with children's sport participation enjoyment and commitment. The purposes of this study were to (a) determine parent motives for enrolling their child (5-8 years) in year-round swimming and (b) explore the relationships of parent motives and motivational climates with child enjoyment and commitment. Parents ($n$ = 40) completed questionnaires on enrollment motives and motivational climate, while children ($n$ = 40) answered questions on enjoyment and commitment. Of the seven motives measured, parents enrolled children in swimming primarily for fitness benefits ($M$ = 4.5, $SD$ = .45) followed by skill mastery ($M$ = 4.31, $SD$ = .48) and fun ($M$ = 4.10, $SD$ = .51) reasons. Findings revealed the fitness motive was moderately, negatively correlated with the success-without-effort facet of a performance climate ($r$ = -.50, $p$ < .01). The fun motive was moderately, positively associated with commitment ($r$ = .43, $p$ < .01). Parent motives for enrolling their child in sport may impact the young child sport experience and long-term sport continuation via motivational climates, enjoyment, and commitment.

KEY WORDS: Task, ego, parent-child dyads, swim, sport commitment model

## INTRODUCTION

Sport participation potentially helps youth meet physical activity recommendations (20), facilitates youth development and provides positive mental and physical health outcomes (20, 40). Not only does sport potentially impact athlete health during the childhood years, but high school sport participation is also a strong predictor of desirable lifelong health outcomes through adulthood such as lower body mass index and higher physical activity levels (2). Given the impact that early sport participation has on lifelong physical activity, research is needed to understand what factors keep young athletes (under the age of 9) involved because sport commitment at this age is often low (8). Swimming, for example, is a lifetime activity with

positive physiological outcomes that is safe to engage in for most individuals (of all ages) due to the low-impact nature of water-based exercise (45). Year-round swimming, in particular, is a sport that children may start participating in once they can demonstrate legal completion of all four competitive strokes for one length of the pool. Year-round swimming is a unique sport because to develop advance technique, elementary-aged children (ages 5-8) typically practice at least three days per week, compared to other sports (e.g., soccer) that may only meet one to two days a week for the same age group. Although practice is abundant for year-round swimming, competitions are sparce; swimmers typically compete in one meet each month during the short-course season (September to April). Participation in year-round swimming has increased by 104% since 1986, though athlete retention is rather low among the younger swimmers (39). From 2018-2019, only 2.4% of swimmers ages 5-8 continued into the next season compared to the 9.2% of swimmers aged 9-18 (39). Further, only 28.8% of USA swimmers commit for at least 5 consecutive years, while an even lower number of athletes (i.e., 4.4%) commit for at least 10 consecutive years (39). This drop-out pattern indicates that children who begin year-round swimming at an early age may not participate in swimming long-term, while those who are committed by around age 9 are more likely to continue, yet the reason for this is unclear. Previous research has shown that parents potentially influence the quality of athlete sport experiences and athlete long-term sport participation (21). Therefore, the purposes of this study were to (a) examine parental motives for enrolling their child (ages 5-8) in year-round swimming and (b) explore the relationships between parental motives, parent-initiated motivational climate, child enjoyment and commitment in year-round swimming.

Understanding motivation related factors (e.g., enjoyment and commitment) associated with early sport participation in young athletes (i.e., under the age of 8) is important for sport attrition and maximizing sport benefits across the life span (5, 16, 35, 36). One theoretical framework used to understand athlete motivation is the sport commitment model (35, 36). Within this model, sport enjoyment (i.e., positive affective response to a sport experience) is a key variable associated with sport enthusiastic commitment (i.e., the psychosocial construct representing the desire and resolve to persist in sport; 36). While commitment is influenced by a variety of factors, enjoyment, however, is the strongest predictor of commitment (8, 36) and, therefore, was the main focus of the current study. Further, while the sport commitment research highlights the importance of enthusiastic commitment and enjoyment as key factors associated with athlete sport continuation, research also shows that parents play an important role such as through the motivational climate they create (6).

An athlete's motivation is arguably influenced by the motivational climate presented by social agents in the sport context (e.g., parents; 28, 29). Two motivational climates identified by Nicholls (29) are learning and ego climate (44). A parent-initiated learning climate supports effort and self-improvement as the key factors of success with less focus on social comparison compared to an ego climate. A parent-initiated learning climate is associated with positive sport outcomes for youth athletes (ages 9-11) such as higher levels of enjoyment and commitment (37). Whereas parents creating an ego climate highlight success through interpersonal competition and social comparison (41). Parents who create an ego climate worry their child will not do as well as others (e.g., success-without-effort) and view failing as a negative aspect of sport

participation (e.g., worry-conducive). O'Rourke et al. (32) suggests a parent-initiated ego climate is associated with maladaptive motivational patterns in athletes (ages 9-11) such as higher levels of trait anxiety and lower levels of motivation. In addition to the motivational climate parents create the initial reason parents enroll their child in sport may also associate with athlete sport enjoyment and commitment in the beginning sport ages (5-8 years; 4, 17).

According to Brustad (4), most athletes acknowledge that their family stimulated their early interest and participation in sports, though minimal research has examined parents' *personal* motives for enrolling their child in a sports program. McCullagh et al. (24) identified parents' *perceptions* for why their child participated in sport. In order of importance, parents perceived their child is motivated to participate in sport for fitness, skill mastery, fun, affiliation, recognition, team factors, and ego participation motives. Provided that during pre-adolescent years, parents are the strongest influencers of the sport experience, parents have the opportunity to provide immediate and specific feedback to their children that may be shaped by their motives for enrolling their child in sport in the (35, 26).

Not only are parent motives for enrolling their child in sport important, but these motives may be associated with parent-initiated motivational climates. Parent-initiated motivational climates (42, 43, 44) align well with McCullagh et al.'s (24) motives for activity participation. A learning climate is conceptually aligned with the following motives: skill mastery and fun, while an ego climate is closely aligned by the following motives: recognition and ego. Although motivational climate and motives are conceptually related, research has not yet examined whether parent motives for their child's participation would be associated with the motivational climate created by parents.

Parent-initiated motivational climates are associated with child and youth commitment and enjoyment in athletes ages 9-18 (6, 37), but minimal evidence (to our knowledge) supports this relationship in younger athletes (8 years of age and under). To better understand athlete enjoyment and commitment in children aged 5-8 years, it is pertinent to understand their parent motives for enrollment in sport. Further, understanding how these motives are related to parent-initiated motivational climates is important to identify early parent socialization in sport and its' influence on child athlete enjoyment and intention to continue. Therefore, the purposes of the current study were to (a) examine what motives parents have for enrolling their child in year-round swimming and (b) explore the relationships between parent motives for enrollment, parent-initiated motivational climates, child enjoyment and commitment in year-round swimming. The first purpose was exploratory, so no hypothesis was made. Based on previous literature that defines the motives for sport participation and motivational climates (24, 29), it was hypothesized that; (H1) parent motives of skill mastery and fun would be positively associated with a learning motivational climate, child enjoyment and commitment; (H2) parent motives: recognition and ego would be positively associated with an ego motivational climate, and negatively associated with child enjoyment and commitment; (H3) learning motivational climate would be positively associated with child enjoyment and commitment; and, (H4) ego motivational climate would be negatively associated with child enjoyment and commitment.

## METHODS

*Participants*

Using G*POWER 3.1 (12), the researchers determined that 29 participants were needed in the present study for a power of .80, effect size of .50 and α of .05. Participants included 40 parent-child pairs consisting of one child and either a mother, father, or guardian. The inclusion criteria for the study were that children were registered in a year-round swimming program for at least 1 month before data collection and were 5-8 years of age. Parents with more than one child, who met the inclusion criteria, selected the child with the least amount of swimming participation time to complete the survey because the study aim was to determine youth-sport experiences in the earliest stage of their involvement. Families were recruited from four registered USA Swimming club teams in the Southeastern United States. The study procedures were approved though a university Institutional Review Board. All adult participants provided written informed consent and written parent-permission (parents). All children participants provided verbal assent. This research was carried out fully in accordance to the ethical standards of the International Journal of Exercise Science (27).

*Protocol*

The primary investigator contacted 20 year-round USA Swimming club programs in the Southeast. A total of four teams agreed to participate (20%); one team declined participation (5%) while the remaining teams (75%) did not follow-up or respond. Of the four teams that agreed to participate, a total of 100 parent-child pairs were eligible for study participation. A total of 40 parent-child pairs participated (40% response rate), while we were unable to make contact with the remaining 60 parent-child pairs. The primary investigator and research assistants attended swim practices to collect data from interested parent-child pairs. Parents completed a series of self-report questionnaires. Children completed a single self-report questionnaire with assistance from researchers and away from parents. In line with Mellor and Moore (25), researchers demonstrated the use of the Likert-scale survey with the children and read each question to the child participants in a quiet space near the pool. Before beginning, the researcher used three sample questions to practice using the Likert-type scale to increase familiarity and accuracy of use. After the practice questions, the researchers began the survey by reading each question to the child. Responses were recorded with help by the researcher. Upon completion of the questionnaire, the child was given a swim cap for participation.

Parents answered questions relative to their family's demographics (e.g., size of city, family income, etc.) and their child's swim team participation (e.g., age started swimming, number of months on swim team, etc.) using both multiple choice and free-response questions. Other demographics included parent and child age, sex, race, and adult's relation to child (i.e., mother, father, or guardian).

The Motivation for Participation in Year-Round Swimming Questionnaire was modified from the survey used by McCullagh et al. (24) to assess physical activity participation motives (α = .58 to .93; 24). The questionnaire was contextualized to be specific to swimming rather than physical activity. For the current study, statements were adapted to measure parents' motivation to enroll their young child in year-round swimming (e.g., "Feel good when I have

played well" changed to "To feel good when he/she has swum well"). The survey consisted of 27 questions representing 7-subscales including: fitness ($n$ = 3 items; i.e., "to get exercise"), skill mastery ($n$ = 6 items; i.e., "to learn something new"), fun ($n$ = 5 items; i.e., "to have a good time"), affiliation ($n$ = 2 items; i.e., "to meet new people"), recognition ($n$ = 3 items; i.e., "to gain recognition"), team factors ($n$ = 5 items; i.e., "being on a team"), and ego ($n$ = 3 items; i.e., "to compete against others"). This questionnaire used a 5-point Likert-type scale from 1 'strongly disagree' to 5 'strongly agree' where the parent indicated how strongly they agreed or disagreed with the reason for enrolling their child in year-round swimming. The subscales' mean scores for each participant were ranked from 1 to 7 (with 1 being the top reason enrolled in year-round swimming). The reliability data for the seven subscales in the current study was: fitness ($\alpha$ = .73), skill mastery ($\alpha$ = .65), fun ($\alpha$ = .68), affiliation ($\alpha$ = .68), recognition ($\alpha$ = .80), team factors ($\alpha$ = .72), and ego ($\alpha$ = .84). Although reliability scores were low for some scales, we retained their use in line with McCullagh et al. (24) and Acar and Gündüz (1). Additionally, item deletion did not improve reliability.

The Parent-Initiated Motivational Climate Questionnaire-2 (PIMCQ-2; 42, 43, 44) was modified to measure parent perceptions of the motivational climate they create rather than a child's perception of the motivational climate. Cronbach's alpha was previously reported as $\alpha$ = .78 for the mastery climate scale and $\alpha$ = .84 for the ego climate scale (44). Though the scale is normally used to assess child perceptions of parent-initiated motivation climate, the readability index for the questionnaire indicates a 4$^{th}$ grade reading level. Since our target population were children ages 5 to 8 (kindergarten to 3$^{rd}$ grade) we felt the complexity of the questionnaire to be inappropriate for the children's reading comprehension level. Six items comprised the parent-initiated learning climate scale (e.g., "I am most satisfied when my child learns something new") and 10 items comprised the ego climate scales. The ego climate was measured on two subscales: success-without-effort ($n$ = 5; i.e., "I am satisfied when my child wins without effort") and worry-conducive ($n$ = 5; i.e., "I make my child worry about failing"). In accordance with the original, survey, responses were given on a 4-point Likert-type scale from 1 'strongly disagree' to 4 'strongly agree' (42, 43, 44). Responses within each subscale were averaged to create a mean score for each subscale. Previous studies combined responses on the ego climate subscales while others kept the responses of each ego climate subscale separate for data analysis (10, 34). Given the difference in the two subscales' construct meanings, the ego subscales were analyzed individually for a more descriptive explanation of relationships. In the current study, the reliability coefficients for the three subscales are as follows: learning climate ($\alpha$ = .55), worry-conducive climate ($\alpha$ = .90), and success-without-effort climate ($\alpha$ = .79). Because the inter-item correlation for the learning climate was below $\alpha$ = .70, two questions were removed from the PIMCQ-2 from the learning subscale which increased reliability the more accepted to $\alpha$ = .70 (31, 32, 43, 44). The two questions removed both represented parents' satisfaction when their child accomplishes/learns a new skill, rather than focusing on the process of learning as suggested by the remaining questions on the subscale. Thus, it is possible the two questions removed simply did not fit the construct the subscale was intended to measure. Mean scores for each of the three subscales were calculated after item deletion.

Two subscales from the Sport Commitment Questionnaire-2 were used to measure enjoyment and commitment. Items were modified to be specific to swimming rather than sport in general (36). The questionnaire included eleven items: five items for swimming enjoyment (e.g., "Swimming makes me happy"; $\alpha$ = .73) and six items for enthusiastic commitment (e.g., "I am determined to keep swimming"; $\alpha$ = .90). The questions were answered using a 5-point Likert-Scale, which ranged from 1 'strongly disagree' to 5 'strongly agree'. The Likert-scale was supplemented by adding a smiley face assessment tool to help the children understand the Likert-scale concept (19). Mean scores for each scale were computed.

*Statistical Analysis*

Participants with more than 10% of missing data for any questionnaire were removed from analyses of that questionnaire. For participants with less than 10% of missing data for any questionnaire, we imputed a value equal to the mean of non-missing items (for the sample) from relevant subscale items. A total of 5% of data was filled by imputation of mean by subscale. One participant exceeded 10% of missing data for parent motives for year-round swimming enrollment, and therefore, was removed for analyses, so the final sample size for this questionnaire was 39 parents (97.5% completion). The total sample used for analyses of the parent-initiated motivational climates were 36 parents (90% completion) due to four parents having more than 10% of missing data. All children ($n$ = 40) completed data for analysis of child enjoyment and commitment.

Means and standard deviations were calculated for demographics and swim history. A rank-order-by-mean analysis was used to determine the motives parents have for enrolling their child in year-round swimming to address the first purpose of the study. Pearson's product-moment correlation analyses were conducted to examine the relationships between parent motives for enrollment, parent-initiated motivational climates, child enjoyment and commitment to address the second purpose of the study. Cohen's conventions were used to determine correlation coefficients size, where $r$ = .30 is considered small, $r$ = .50 is considered moderate, and $r$ = .70 is considered large (7). Statistical significance was set at $p < .05$.

## RESULTS

Table 1 includes the demographic information for the parent-child pairs. The average age of the children was 7.18 ± .93 years, 55% of the child participants were male, and the majority were Caucasian (72.5%). Regarding swim history, the children started to swim for a USA year-round swim club at an average age of 6.44 ± 1.02 years and had been participating in USA year-round swim club for 8.76 ± 10.22 months (median = 5 months). The children practiced 3.17 ± .65 days per week. Half of the children previously participated in swim meets (50%), and most intended to participate in swim meets in the future (67.5%). The majority of parents who completed the questionnaires were the child's mother (72.5%) and were Caucasian (72.5%). The highest level of education of the parents surveyed included: a high school diploma or GED (6%), bachelor's degree (40%), and graduate degree (46%). The majority of the families (63%) lived in a medium-sized city (30,000-100,000 people) and had a household income above $50,000 (97.5%). The parents surveyed had mostly no experience with USA Swimming (73%), followed by significant

**Table 1.** Child and parent general demographics.

| | *N* | % |
|---|---|---|
| Child General Demographics | | |
| Age | | |
| 5-years | 3 | 7.5 |
| 6-years | 5 | 12.5 |
| 7-years | 14 | 35 |
| 8-years | 18 | 45 |
| Sex | | |
| Male | 22 | 55 |
| Female | 18 | 45 |
| Race | | |
| Non-Hispanic White | 29 | 72.5 |
| Asian | 9 | 22.5 |
| Other | 1 | 2.5 |
| Multiple Races | 1 | 2.5 |
| Parent General Demographics | | |
| Sex | | |
| Male | 10 | 25 |
| Female | 30 | 75 |
| Race | | |
| Non-Hispanic White | 29 | 72.5 |
| Asian | 9 | 22.5 |
| Other | 1 | 2.5 |
| Multiple Races | 1 | 2.5 |
| Relation to Child | | |
| Mother | 29 | 72.5 |
| Father | 10 | 25 |
| Other | 1 | 2.5 |

experience (20%), and some experience (3%).

On average, the top reason parents enrolled their child in year-round swimming was for fitness benefits (4.54 ± .45). This reason was closely followed by skill mastery (4.31 ± .48) and fun (4.10 ± .51). Ego (2.75 ± .92) or recognition (2.98 ± .69) were rated the least important motives for enrollment by parents. As for parent-initiated motivational climates, parents scored highest for creating a learning climate (3.72 ± .28) followed by a success-without-effort (1.79 ± .53), then a worry-conducive climate (1.48 ± .50). The average score for enjoyment and commitment indicated the children reported high levels of swimming enjoyment (4.35 ± 0.65) and commitment (4.29 ± 0.89; Table 2).

**Table 2.** Parent-Initiated motivational climate, parent motives for enrollment, and young child-enjoyment and commitment to year-round swimming: a correlation analysis with descriptive statistics.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Learn | - | -.08 | -.34* | .08 | .30 | .18 | .05 | .14 | .10 | .07 | -.15 | -.11 |
| 2. WC | | - | .45** | .00 | .22 | -.13 | -.20 | .12 | -.06 | .17 | .25 | .23 |
| 3. SWE | | | - | -.17 | -.12 | -.50** | -.38* | -.26 | -.17 | -.01 | .18 | .24 |
| 4. Enjoy | | | | - | .60** | .12 | .01 | .18 | .30 | -.14 | .09 | -.05 |
| 5. Com. | | | | | - | .20 | .07 | .43** | .22 | -.04 | .06 | .08 |
| 6. Fit. | | | | | | - | .57** | .28 | .20 | .05 | .09 | .08 |
| 7. S-M | | | | | | | - | .37* | .16 | .35* | .35* | .44** |
| 8. Fun | | | | | | | | - | .39* | .33* | .53** | .48** |
| 9. Affil | | | | | | | | | - | .16 | .30 | .09 |
| 10. Reco | | | | | | | | | | - | .75** | .74** |
| 11. TF | | | | | | | | | | | - | .83** |
| 12. Ego | | | | | | | | | | | | - |
| Mean | 3.72 | 1.48 | 1.79 | 4.35 | 4.29 | 4.54 | 4.31 | 4.10 | 3.85 | 2.98 | 3.10 | 2.75 |
| SD | .28 | .50 | .53 | .65 | .89 | .45 | .48 | .51 | .76 | .69 | 1.05 | .92 |

*Note.* 1. Learning Climate, 2. Worry-Conducive Climate, 3. Success-Without-Effort Climate, 4. Enjoyment, 5. Commitment, 6. Fitness, 7. Skill Mastery, 8. Fun, 9. Affiliation, 10. Recognition, 11. Team Factors, 12. Ego *$p$ < .05, **$p$ < .0

Parents who ranked fitness and skill mastery motives for enrollment higher also placed less importance on their child achieving success-without-effort with the correlations in the moderate range ($r$ = -.50, $p$ = .001; $r$ = -.34, $p$ = .022, respectively). No parent motives for enrollment were significantly related to parents' worrying about their child failing in swimming ($r$'s range = -.20 to .25, $p$ > .05; Table 2).

No parent motives for enrollment were associated with a learning climate ($p$ > .05). Parents ranking fun higher for a motive of enrollment were more likely to have children report higher levels of commitment to the sport ($r$ = .43, $p$ = .006). No parent motives for enrolling their child in year-round swimming were associated with the children's enjoyment of swimming ($p$ > .05). The type of motivational climates parents created did not relate to child enjoyment or commitment evident by small and nonsignificant correlations ($r$'s range = -.17 to .30, $p$ > .05; Table 2).

## DISCUSSION

The purposes of the current study were to examine parental motives for enrolling children in year-round swimming and explore the relationships of parent motives for enrollment and parent-initiated motivational climate with child enjoyment and commitment. The current study adds to the youth sport literature by providing insight into parent motives for initially enrolling their child in year-round swimming, which were identified as fitness benefits, skill mastery, and for fun. In partial support of the hypotheses, parents who enrolled their child for primarily fitness benefits and skill mastery motives were less likely to be concerned about their child

performing well without much effort. This evidence does not fully support the first hypothesis, as no relationship was found between parent motives and parent-initiated learning climate. Consistent with past research, parents who enrolled their child to have fun in swimming were more likely to have a child who feels more committed to year-round swimming (13). Contrary to our hypotheses, parent-initiated motivational climates were not associated with child enjoyment and commitment. The theoretical and applied implications are discussed subsequently.

The literature suggests that parents are a strong influence in children's initial sport participation and environment (4, 17), yet the literature lacks to explain the motives parents have for enrolling their child in sport. The current study provides insight on the motives parents have for enrolling their child in year-round swimming. The main reason parents enrolled their child in a year-round swimming program was for fitness benefits. This finding is an extension from findings of McCullagh et al. (24) where parents rated fitness benefits as a reason they felt their child participated in sport. This indicates parents may have similar motives for enrolling their child in sport as parents believe their child has for participating. However, it is possible that parent beliefs about why their child participates in sport is inaccurate, as other findings suggest young athletes participate for more social reasons (15, 16). Other motives (e.g., skill mastery and fun) were ranked very similar in importance to the fitness motive, again in line with findings from McCullagh et al. (24), which suggests that there are multiple reasons parents enroll their child in a year-round swim program.

Based on the previous literature on achievement goal theory by Nicholls (28), the language used to describe motivational climates and the motives for enrolling a child in sport show overlap. This indicates similar meanings for motivational climates and motives for sport enrollment (24, 42, 43, 44). In partial support of our second hypothesis, the current study identified that parents with fitness and skill mastery motives for enrollment were less likely to present a success-without-effort climate. A success-without-effort climate is known to have negative sport outcomes such as athlete anxiety, lack of motivation, and lower levels of sport commitment (11, 30). Previous research that focuses on *athlete* motives for sport participation has been associated with their *personal* goal orientations. Athlete motives' such as learning the skill and having fun are associated with mastery goal orientations. Specifically, when athlete mastery goal orientation is present, athletes are more likely to rate higher levels of sport enjoyment and commitment (10, 14, 22, 33). This extends on achievement goal theory's relationship between athlete motives and athlete goal orientations by considering a similar relationship in an important social agent (i.e., parents). Therefore, the current study provides a first indication of a possible relationship between parent motives for enrolling a young child in sport and parent-initiated motivational climate.

As described by the sport commitment model (35, 36), enjoyment is a strong predictor of future sport participation and can be influenced by athlete goal orientations, motives for participating, and parent-initiated motivational climates (37). However, the literature lacks to explore the relationship between young child (under 8 years of age) enjoyment and commitment in sport with parent-initiated motivational climate. Identifying relationships with young child

enjoyment in sport may provide early signs of sport attrition or dropout that can be maintained or prevented with intervention (13). Past research in older athletes (ages 9-18) suggests that parent-initiated learning climate would be positively associated with athlete enjoyment, and a parent-initiated ego climate would have no statistically significant relationship (6). In contrast to previous research (6, 37) and our hypothesis, the findings of the current study indicated no observed relationships between parent-initiated learning climate and child enjoyment. Findings in the current study, however, were in-line with previous findings indicating no statistically significant relationship for parent-initiated ego climate and child enjoyment (6, 37). Previous literature would suggest the current study's sample mean score and variability (3.58 ± .22) for a learning climate was lower and less variable compared to other samples (4.40 ± .58; 36). This might have contributed to the lack of a relationship between a parent-initiated learning climate and child enjoyment in the current study. Additionally, to further expand on the influence parents have on young athlete enjoyment, parent motives were correlated with child enjoyment in swimming. In the current study, there was no association between parent motives for year-round swimming enrollment and child enjoyment. Therefore, the influence of parent-initiated motivational climates and motives for enrollment may have different effects on young children, who are just starting out in sport, compared to older athletes. This may be because of the child's understanding of the sports competitive nature when they first begin compared to when they have matured through the sport environment and, as suggested by McCarthy et al. (23), can better comprehend the enjoyment of sport.

Gardner et al. (13) reported a significant relationship between youth athletes' intentions to continue sport and the level of parental support they perceived. Athletes who rated high levels of parental support (similar to parent-initiated learning climates) had continued with sport the following year. Further, a parent-initiated ego climate has been negatively associated with youth athletes' commitment to sport (37). In the current study, it was hypothesized that a parent-initiated learning climate would be positively associated with child commitment, while a parent-initiated ego climate would be negatively associated. Neither a learning nor ego climate was associated with child commitment to year-round swimming. This may be due to the early time point in which data was collected. When data was collected the season was 1-3 months into practice, and half of the children had not competed in a swim meet. In respect to self-determination theory, a child is more likely to want to continue doing a task when they are perceived as successful (9). Given the novelty of participating in year-round swimming, the younger athletes may not have developed a sense of being unsuccessful, thus commitment levels remain high due to the lack of competition experience.

Limitations: Due to sample size and timing constraints on the study, we were unable to explore the impact competition has on the young recreational swimmers. Parents who were new to year-round swimming or did not have a child involved in swimming competitions may have different experiences with the sport and thus scored their motivational climate different than those parents who had more experience with year-round swimming and competitions. Additionally, the parent-initiated motivational climate questionnaire used in this study was originally designed to assess athlete perspectives of parent-initiated motivational climates (44). In the methods of the current study, parents answered questions on their own motivation

climate created. Slightly altering a questionnaire to change the person of reference (e.g., changing the questionnaire to be from the athletes' perception to the parents' perception) is a typical measurement approach used in the field when the goal is to capture similar content (e.g., motivational climate) from a new frame of reference (e.g., 17). In the current study, using the motivational climate questionnaire to assess parents' perception of climate was more appropriate given the children's ages.

Future research: Future research may expand on the novel ideas explored in this study to add to the literature and theories of achievement goal theory and the sport commitment model. First, a similar study may be replicated in older children and youth to further build on previous studies of motivational climate, enjoyment, and commitment findings by identifying parent motives for sport enrollment (6, 13, 36). Second, to expand on parent motives for enrolling their child in swimming, researchers may further explore specifically why they enroll their child in year-round swimming over another sport or activity. Given that unique nature of year-round swimming, the abundance of practice and time dedication required at a young age may present different findings for motives, motivational climates, enjoyment and commitment. Additionally, due to the potential of young athlete burnout from the demanding practice schedule of swimming, future researchers should consider the role parents motives for year-round swimming enrollment have for swimmer continuation. In gymnasts, another practice-demanding sport for young athletes, Ryska et al. (33) identified gymnasts' motives in those who continued participation versus those who dropped out. What previous research lacks to consider is the impact of parents' socialization of sport (e.g., parent motives and motivational climates). Third, it is suspected that parent motives for enrollment mediate the motivational climate presented, which then influences a relationship with child enjoyment and commitment to sport (3). Given that a mediation model is best studied over time, future researchers may choose to follow young athletes, and their parents, from the start of year-round swimming over the course of their participation years until the child ages-out (athletes 19 and older) or discontinues sport. Similar to the one-year follow-up methods employed by Gardner et al. (13), future studies may choose to follow-up with youth and adolescent athletes over a longer duration.

Practical Application: The findings of the current study can be applied to year-round swimmers aged 5-8 years. Although previous research on achievement goal theory would suggest otherwise, the findings of the current study suggest that focusing on parent-initiated motivational climates may not be a key variable for understanding young child enjoyment and commitment in their beginning months/years of year-round swimming participation. However, parent motives may be of interest to year-round swim club organizers and leaders of USA Swimming. Previous work by Smoll et al. (38) indicated educational sessions and motivational climate intervention with coaches were successful in increasing mastery-oriented coaches and mastery goal-orientation of their athletes. Similar education strategies can potentially be used with parents of year-round swimmers. Parents can be surveyed upon year-round swimming registration and further educated on how their motives for enrollment may be associated with specific motivational climates. By educating parents of this possible relationship between motives and motivational climates, awareness can be brought to the parents about the

motivational climates they are likely to present. Getting ahead of the potential for an ego climate to be presented, more parents may become aware of creating a learning climate for their child and increasing the likelihood their child enjoys and commits to the sport long-term.

Conclusion: In conclusion, parents reported that they enroll their young child aged 5-8 years in year-round swimming for primarily fitness-related benefits. Parent motives, fun and skill mastery, are negatively associated with a parent-initiated success-without-effort climate, indicating a novel relationship in motivational climate literature for young athletes. Also, parents motivated to enroll their child in year-round swimming for fun, had children that were committed to the sport. Taken together, parent motives may play an important role in influencing the young child sport experience through the motivational climate they create.

## ACKNOWLEDGEMENTS

This project was for completion of the first author's master's degree. The author would like to thank the Kinesiology Department of East Carolina University for funding participation incentives.

## REFERENCES

1. Acar Z, Gündüz N. Participation motivation for extracurricular activities: Study on primary school students. Universe J Educ Res 5(5): 901-910, 2017.

2. Alfano CM, Klesges RC, Murray DM, Beech BM, McClanahan BS. History of sport participation in relation to obesity and related health behaviors in women. Prev Med 34(1): 82-89, 2002.

3. Atkins MR, Johnson DM, Force EC, Petrie TA. Peers, parents, and coaches, oh my! The relation of the motivational climate to boys' intention to continue in sport. Psychol Sport Exerc 16(3): 170-180, 2015.

4. Brustad RJ. Integrating socialization influences into the study of children's motivation in sport. J Sport Exerc Psychol 14(1): 59-77, 1992.

5. Cervelló EM, Escartí A, Guzmán JF. Youth sport dropout from the achievement goal theory. Psicothema 19(1): 65-71, 2007.

6. Chan DK, Lonsdale C, Fung HH. Influences of coaches, parents, and peers on the motivational patterns of child and adolescent athletes. Scand J Med Sci Sports 22(4): 558-568, 2011.

7. Cohen J. Statistical power analysis for the behavioral sciences, 2nd ed. Mahwah, NJ: Erlbaum; 1988.

8. Crane J, Temple V. A systematic review of dropout from organized sport among children and youth. Eur Phys Educ Rev 21(1): 114-131, 2015.

9. Deci EL, Ryan RM. Commentaries on "the 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior." Psychol Inq 11(4): 269 318, 2000.

10. Domínguez-Escribano M, Ariza-Vargas L, Tabernero C. Motivational variables involved in commitment of female soccer players at different competitive levels. Soccer Soc 18(7): 801-816, 2017.

11. Duda JL. Motivation in sport. In: Elliot AJ, Dweck C. A handbook of competence and motivation. New York, NY: Guilford; 2005.

12. Faul F, Erdfelder E, Lang AG, Buchner A. G*power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. Behav Res Methods 39(2): 175-191.

13. Gardner LA, Magee CA, Vella SA. Enjoyment and behavioral intention predict organized youth sport participation and dropout. J Phys Act Health 14(11): 861-865, 2017.

14. Gould D, Feltz D, Weiss M. Motives for participating in competitive youth swimming. Int J Sport Psychol 16(2): 126-140, 1985.

15. Gould D, Horn T. Participation motivation in young athletes. In: Silva J, Weinberg RS. Psychological foundations of sport. Champaign, IL: Human Kinetics; 1984.

16. Gould D, Petlichkoff L. Participation motivation and attrition in young athletes. In: Smoll FL, Magill RA, Ash MJ. Children in sport. Champaign, IL: Human Kinetics; 1988.

17. Greendorfer SL. Sport socialization. In: Horn, TS. Advances in sport psychology. Champaign, IL: Human Kinetics; 1992.

18. Habeeb CM, Eklund RC, Coffee P. Reciprocal relationships between efficacy and performance in athlete dyads: Self-, other-, and collective constructs. J Sport Exerc Psychol 41(3): 147-158, 2019.

19. Hall L, Hume C, Tazzyman S. Five degrees of happiness. Proceedings of the 15th International Conference on Interaction Design and Children - IDC '16; 2016.

20. Hebert JJ, Møller NC, Andersen LB, Wedderkopp N. Organized sport participation is associated with higher levels of overall health-related physical activity in children (CHAMPS Study-DK). PLoS one 10(8): e0134621, 2015.

21. Keshtidar M, Behzadnia B. Prediction of intention to continue sport in athlete students: A self-determination theory approach. PLoS one 12(2): e0171673, 2017.

22. Malete L. Goal orientations, sport ability, perceived parental influences and youths' enjoyment of sport and physical activity in Botswana. Int J Appl Sports Sci 18(2): 89-107, 2006.

23. McCarthy PJ, Jones MV, Clark-Carter D. Understanding enjoyment in youth sport: A developmental perspective. Psychol Sport Exerc 9(2): 142-156, 2008.

24. McCullagh P, Matzkanin KT, Shaw SD, Maldonado M. Motivation for participation in physical activity: A comparison of parent–child perceived competencies and participation motives. Pediatr Exerc Sci 5(3): 224-233, 1993.

25. Mellor D, Moore KA. The use of Likert scales with children. J Pediatr Psychol 39(3): 369-379, 2014.

26. Murray RM, Dugdale JH, Habeeb CM, Arthur CA. Transformational parenting and coaching on mental toughness and physical performance in adolescent soccer players: The moderating effect of athlete age. Eur J Sport Sci 21(4): 580-589, 2021.

27. Navalta JW, Stone WJ, Lyons TS. Ethical issues relating to scientific discovery in exercise science. Int J Exerc Sci 12(1): 1-8, 2019.

28. Nicholls JG, Cobb P, Wood T, Yackel E, Patashnick M. Assessing students' theories of success in mathematics: Individual and classroom differences. J Res Math Educ 21(2): 109-122, 1990.

29. Nicholls JG. The competitive ethos and democratic education. Cambridge, MA: Harvard University Press; 1989.

30. Ntoumanis N, Biddle SJ, Haddock G. The mediating role of coping strategies on the relationship between achievement motivation and affect in sport. Anxiety Stress Coping 12(3): 299-327, 1999.

31. Nunnally JC. An overview of psychological measurement. In: Wolman, BB. Clinical diagnosis of mental disorders. Boston, MA: Springer; 1978.

32. O'Rourke DJ, Smith RE, Smoll FL, Cumming SP. Relations of parent- and coach-initiated motivational climates to young athletes' self-esteem, performance anxiety, and autonomous motivation: Who is more influential? J Appl Sport Psychol 26(4): 395-408, 2015.

33. Ryska T, Hohensee D, Cooley PD, Jones C. Participation motives in predicting sport dropout among Australian youth gymnasts. N Am J Psychol 4(2): 199-210, 2002.

34. Salselas V, Márquez S. Perceptions of the motivational climate created by parents of young Portuguese swimmers. Percept Mot Skills 108(3): 851-861, 2009.

35. Scanlan TK, Carpenter PJ, Simons JP, Schmidt GW, Keeler B. An introduction to the sport commitment model. J Sport Exerc Psychol 15(1): 1-15, 1993.

36. Scanlan TK, Chow GM, Sousa C, Scanlan LA, Knifsend CA. The development of the sport commitment questionnaire-2 (English version). Psychol Sport Exerc 22(1): 233-246, 2016.

37. Sánchez-Miguel PA, Leo FM, Sánchez-Oliva D, Amado D, García-Calvo, T. The importance of parents' behavior in their children's enjoyment and amotivation in sports. J Hum Kinet 36(1): 169-177, 2013.

38. Smoll FL, Smith RE, Cumming SP. Effects of a motivational climate intervention for coaches on changes in young athletes' achievement goal orientations. J Clin Sport Psychol 1(1): 23-46, 2007.

39. USA Swimming. Membership demographics report. Retrieved from: https://www.usaswimming.org/docs/default-source/default-document-library/statistics-2018.pdf; 2018.

40. Weiss MR, Kipp LE, Phillips RA, Bolter ND. Evaluating girls on the run in promoting positive youth development: Group comparisons on life skills transfer and social processes. Pediatr Exerc Sci 32(3): 172-182, 2020.

41. Weiss MR, Williams L. The why of youth sport involvement: A developmental perspective on motivational processes. In: Weiss, MR. Developmental sport and exercise psychology: A lifespan perspective. Ann Arbor, MI: Fitness Information Technology; 2004.

42. White SA. Adolescent goal profiles, perceptions of the parent-initiated motivational climate, and competitive trait anxiety. Sport Psychol 12(1): 16–28, 1998.

43. White SA. Goal orientation and perceptions of the motivational climate initiated by parents. Pediatr Exerc Sci 8(2): 122-129, 1996.

44. White SA, Duda JL, Hart S. An exploratory examination of the parent-initiated motivational climate questionnaire. Percept Mot Ski 75(3): 875-880, 1992.

45. Williams RE, Barreria TV, Tseh W. Fitness-related benefits: land-based versus aqua-based. J Sports Med Phys Fitness 60(1): 26-31, 2019.