

One Size Doesn't Fit All:

Gender Differences in Strategies for Satisfying Psychological Needs Through Youth Sport

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As most coaches and physical educators know, children and adolescents join sports to explore their interests and identities and to form friendships. Coaches and physical educators also know that children and adolescents struggle with establishing their autonomy with relation to authority and gaining a sense of competence in their skills. Although most coaches and physical educators have good experience and personal approaches to deal with these issues, understanding the literature on gender differences could provide some guidance and evidence-based strategies for helping youth navigate these growing pains. In particular, self-determination theory (Ryan & Deci, 2017), one of the most studied and applicable theories of motivation (<https://selfdeterminationtheory.org/topics/application-physical-education/>), offers practical insights for coaches and physical educators, inexperienced and seasoned alike.

Self-determination theory posits that every human, regardless of their background, has needs for autonomy, competence, and relatedness, which need to be satisfied for optimal motivation, performance, and well-being (Ryan & Deci, 2017). *Autonomy* refers to the feeling of volition or control when completing tasks, *competence* refers to the feeling of effectiveness when attempting to master a task or skill, and *relatedness* refers to feeling meaningfully connected to and supported by others within a social context, such as school or sport where relationships are formed. An important concept to keep in mind is that perceived satisfaction and frustration of these needs matter more than the actual satisfaction of them. Many studies have demonstrated that sport and physical activities offer an avenue for either satisfying or frustrating psychological needs through developmental tasks, which affect

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levels of well-being, burnout, and performance in sport (Chu, 2018; Chu & Zhang, 2019).

In youth sport, coaches and physical educators play a vital role because they regularly provide environments for the physical, psychological, and social development of youth and influence how youth athletes support each other within those environments. When youth perceive their coach or physical educator as supportive and empowering, it leads to positive outcomes such as increased motivation and engagement (Chu & Zhang, 2018, 2019; Chu et al., 2021). Supportive and empowering coaches and physical educators know how much autonomy to provide to each of their athletes, based on their maturity levels, so they can begin to take responsibility for creating a support system (e.g., peers) and finding directions for success.

Although autonomy, competence, and relatedness are essential to all human well-being and functioning, how these psychological needs are satisfied or frustrated can differ across settings and demographic factors (Ahrens & Chu, 2021; Chu, 2018). Because there are clear gender differences in how different psychological needs are satisfied (Lietaert et al., 2015; Tian et al., 2016), the purpose of this article is to review relevant research evidence and identify and explain evidence-based strategies that coaches and physical educators can use (or help parents and guardians use) to support autonomy, competence, and relatedness by considering the gender of the athletes (middle to high school ages) they coach. The ultimate goal is to provide coaching tools for developing optimal motivation and well-being in boys and girls through sport.

Manifestation of Psychological Needs in Sport

Positive and negative experiences in sport lead to satisfaction and frustration of psychological needs, respectively. For example, the way a coach or physical educator structures practice and assigns tasks and playing time can influence athletes' perceptions of psychological needs. When coaches provide choices and listen to athletes' desires, this tends to result in satisfaction of psychological needs. Other sport-specific experiences that influence satisfaction and frustration of these psychological needs include how coaches and parents respond when athletes make mistakes (Bhavsar et al., 2020). When coaches are aware of these influences and create an environment that capitalizes on strengths and positive feedback for each athlete, athletes are more likely to feel autonomous, competent, and socially connected (Sommerfeld & Chu, 2020).

It is important to recognize that satisfaction or frustration of each of the three psychological needs are not mutually inclusive or exclusive (Ryan & Deci, 2017). In other words, one coaching or teaching strategy may satisfy one or more needs. For instance, satisfaction of autonomy can depend on satisfaction of relatedness and vice versa (Deci & Ryan, 2014). If an athlete has the option to choose practice drills within their abilities and skills, this can enhance the quality of the relationship between the coach and the athlete. Similarly, if an athlete feels socially and emotionally connected to their coaches and teammates, they likely perceive greater control and engage in their

sport willingly. Coaches and physical educators should ideally understand how autonomy, competence, and relatedness can work together for the athletes they coach or teach, and apply evidence-based strategies to satisfy these needs simultaneously.

The Role of Gender in Satisfaction and Frustration of Psychological Needs

Because gender differences in satisfying and frustrating basic psychological needs exist in both life and sport domains, understanding these gender differences and methods for satisfying boys' and girls' different needs can help coaches and physical educators, especially those with less experience, more intentionally and properly create a motivating environment through training and feedback. In the life domain, research has consistently shown that boys' competence needs are satisfied more than those of girls, who generally perceive more competence frustration (Rodríguez-Meirinhos et al., 2020). Research has shown that even if girls outperform boys in certain tasks (e.g., academics), girls tend to show less confidence, discount their achievements (e.g., seeing them as luck rather than ability), and worry more about failure (Beyer, 1990). In sport and physical education settings, these gender differences might be more apparent, because girls have fewer opportunities to receive competent feedback from coaches and parents than boys (Fredricks & Eccles, 2002). Therefore, coaches and physical educators can try to prioritize satisfying the competence need when coaching and teaching girls. Additionally, they should stay informed of new research on these gender differences. Meanwhile, instead of making direct assumptions from research findings, coaches and physical educators would benefit from observing and understanding the unique needs of the boys and girls they coach, because their reasons for playing sports could be different than those discussed in a research study.

Beyond the levels of psychological-need satisfaction and frustration, the influence and process of satisfying autonomy, competence, and relatedness also vary by gender. Research has indicated that youth tend to have greater life satisfaction and well-being when they feel competent and closely connected with significant others (e.g., peers and parents) in life (Demirbaş-Çelik & Keklik, 2019) and in physical or leisure activities (Chu et al., 2019; Leversen et al., 2012). Gender differences do exist; girls are generally more sensitive to interpersonal relationships, and boys place greater value on personal achievements, in both sport and school (Chu et al., 2019; Tian et al., 2016). Thus, in practice, coaches and physical educators who work with both boys and girls in a coed setting need to address girls' relatedness through more frequent and intentional communication and collaboration, especially because girls typically do not feel as close to their coaches as do boys (Chu, 2018). In other words, coaches and physical educators might consider providing girls with more structured opportunities to build a sense of belonging and meaningful connections with others without fear of negative judgment.

In addition to gender, maturation is a factor to consider for satisfying youth athletes' psychological needs. Specifically, autonomy plays a greater role as students go through adolescence (Tian et al., 2016). Thus, providing more choices or independence may become more important for helping older adolescent athletes feel more intrinsically motivated. When doing so, coaches and physical educators should note that, based on research in sport and education, boys tend to prefer more support and less pressure from authority figures (i.e., coaches, teachers, and parents) to gain autonomy,

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whereas girls need quality relationships with significant others, peers in particular (Chu, 2018; Lietaert et al., 2015; Tian et al., 2016; Weiss & Smith, 2002). Because sport is traditionally identified as masculine, boys may perceive higher expectations from others and more pressure to perform well, resulting in a feeling of less autonomy compared to girls (Fredricks & Eccles, 2002).

Applications for Coaching and Teaching

Although many well-trained coaches and physical educators may have tools in their coaching toolbox for youth athletes' psychological needs, it is helpful to address gender differences by learning and applying theory-informed strategies (Berntsen & Kristiansen, 2019; Hook & Newland, 2018). Coaches and physical educators, for instance, may know that they should give their athletes and students a voice, help them realize that they can improve their skills with practice, and encourage quality relationships and inclusivity among teammates. When implementing these theory-informed practices (Ryan & Deci, 2017), coaches and physical educators can align specific strategies with their athletes' and students' needs according to their gender and other identities or characteristics. However, it is imperative to also consider individual differences within gender and treat boys and girls accordingly by taking their individual needs and preferences into account instead of making overgeneralizations.

To address the role of gender, coaches and physical educators can generally focus on satisfying girls' competence and boys' autonomy through the following strategies (see Table 1):

- Offer girls opportunities and resources to feel successful by encouraging them to set clear and achievable goals that focus on the process rather than the outcome, guide them

to achieve those goals, and recognize their progress and achievements, regardless of how small they may seem, as well as the roles (including starters and nonstarters) they play on the team.

- Guide boys to explore and develop their practice, competition, and training plans according to their needs and desires; offer opportunities for them to voice their opinions; and demonstrate active listening by reflecting their thoughts and feelings and accepting their perspectives without judgment.

These gender-specific strategies may help inexperienced coaches and physical educators be sensitive to, and the seasoned ones be even more understanding of, the differences in boys' and girls' attitudes toward and responses to coaching and teaching strategies. As previously discussed, although girls typically feel less confident in their abilities, they can and need to feel autonomous and a sense of belonging through relationships and emotional connections, particularly with peers. Boys typically have stronger beliefs about their ability to complete tasks, especially in "masculine" (i.e., gender-typed) activities such as sports (Fredricks & Eccles, 2002). They need more choices and freedom with guidance provided by authority figures such as coaches and physical educators, to complete those tasks in sport (Lietaert et al., 2015; Rodríguez-Meirinhos et al., 2020; Tian et al., 2016). If these corresponding needs are not met, athletes, especially those in their later high school years, are prone to disengagement and burnout (Chu, 2018; Chu et al., 2022).

When coaches and physical educators realize that an athlete is displaying signs of burnout, decreased interest, lack of effort, or lowered attentiveness, all of which indicate potential frustration of psychological needs, they may consider the following strategies (see Table 1):

Table 1.

Coaching and Teaching Strategies for Satisfying Athletes' Psychological Needs in Youth Sport

Autonomy	Competence	Relatedness
Allow athletes to choose their practice, competition, and treatment plans. *Ensure that boys feel in control and satisfied with the training plan they are participating in by discussing plan options.	Aid athletes in focusing on successes and provide opportunities for them to improve their skills.	Avoid judgmental or subjective criticisms and display trust and understanding with athletes.
Provide small hints or tricks for athletes to explore instead of giving away solutions to questions in training.	Help athletes set realistic individual goals and team goals and work toward them. *Provide structure and guide girls to achieve goals and celebrate small wins along the way.	Provide preseason and in-season programming to build teammate relationships. *Encourage events outside of practice and competition for girls' teams to support team bonding and relationship building.
Encourage group decisions and compromises when appropriate and provide reasons for decisions.	Treat athletes' mistakes as part of the learning process and offer constructive feedback with respect. *Instead of yelling at boys and being "tough" on them when they underperform, use the incident as an opportunity to provide constructive feedback for growth.	Incorporate team-building activities into practices and assign a role to each athlete.

Note. *Examples of gender-specific strategies.

- Work with team leaders to brainstorm additional preseason and in-season team events and activities to foster team cohesion and teammate relationships, especially for girls' teams. Sport-related activities can include running a scavenger hunt, discussing a mission statement and team values, and making a team-goal poster that incorporates individual goals. Non-sport activities might involve organizing movie or game nights and pairing up girls for peer mentorship (between a new athlete and a returning athlete) or as study buddies. These team-driven activities can help satisfy autonomy and relatedness of individuals and the whole team on and off the field (Hook & Newland, 2018).
- Take the time to talk privately with a stressed or unmotivated athlete to listen to and empathize with his situations, thoughts, and feelings. To help a stressed or unmotivated boy gain a sense of control and satisfaction with the training plan, coaches and physical educators can include him in some appropriate decision-making processes, share their knowledge and rationale for conducting certain exercises or drills, and provide feedback that is constructive and noncontrolling (e.g., using "you may/will" instead of "you must/should/have to") according to the athlete's preference (Berntsen & Kristiansen, 2019).

Some coaches and physical educators probably understand and have already used the abovementioned strategies. Those working with both boys and girls could be more intentional about planning and applying these strategies based on the characteristics of the boys and girls they coach/teach and the corresponding issues they face. In addition, daily actions that coaches and physical educators can take to satisfy each athlete's psychological needs include acknowledging their presence, effort, and feelings, as well as helping them to feel seen, heard, and valued (Berntsen & Kristiansen, 2019). Doing so provides the environment necessary to satisfy not only athletes' psychological needs but also coaches' and physical educators', such that the whole team, from coaches to athletes, is satisfied, motivated, and engaged (Cheon et al., 2014). Athletes who practice and compete in a more need-supportive environment perform at a higher level. Therefore, when coaches and physical educators apply proper strategies to satisfy their athletes' and students' autonomy, competence, and relatedness, this results in a win-win situation for the whole team.

Gender Comparisons of Basic Psychological Needs in Response to Parenting

In addition to coaches, teachers, and peers, parents play an important role in satisfying or frustrating youth athletes' psychological needs both within and outside of sport (Chu, 2018; Chu & Zhang, 2019; Sommerfeld & Chu, 2020). Therefore, coaches and physical educators can apply their knowledge to observe and understand how parents care for their children, communicate with them, and respond to their needs. Though coaches and physical educators cannot "control" parents, they can influence and educate parents to be more supportive of athletes' psychological needs based on strategies informed by self-determination theory (Lienhart et al., 2019; Sommerfeld & Chu, 2020). Even though many coaches and physical educators may have good strategies and experience working with parents, understanding some developmental research could help them better deal with various sport parenting issues.

Both the father and the mother have significant impacts on their child's psychological needs. Research has suggested some differences in their impacts and how sons and daughters respond to them



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(Inguglia et al., 2018). In life in general, support from both fathers and mothers tends to satisfy their children's autonomy, but a mother's support is more likely to satisfy the child's relatedness. In addition, only mothers' controlling behaviors, but not fathers', tend to frustrate adolescents' autonomy and relatedness (Inguglia et al., 2018). In youth sport settings, only fathers' praise and understanding behaviors, but not mothers', tend to satisfy their youth athletes' competence and relatedness. Moreover, pressure from both fathers and mothers could frustrate their youth athletes' competence, but only a father's pressure is likely to also frustrate their relatedness (Lienhart et al., 2019). Coaches and physical educators can work with both parents to satisfy youth athletes' psychological needs while recognizing that fathers tend to have greater influences on their children in sport contexts compared to mothers.

Regarding athletes' perceptions of their parents' behaviors in sport, boys tend to perceive more frustration, especially related to competence, and girls tend to perceive more satisfaction, especially in terms of relatedness (Amado et al., 2015; Lienhart et al., 2019). For example, when fathers "coach" (e.g., criticize) their children and emphasize winning, boys are more likely than girls to perceive it as a threat and feel incompetent in the sport skill or activity. On the other hand, when fathers seem to show praise and understanding, girls are more likely than boys to feel valued and connected to the sport. Considering the perceptions of both coaching and parenting behaviors, boys seem to crave autonomy from coaches and competence from fathers, whereas girls seem to crave competence and relatedness (Amado et al., 2015; Lienhart et al., 2019). These findings highlight the ways in which boys and girls may perceive the support and pressure from their parents (fathers in particular) differently, indicating a potential opportunity for coaches and physical educators to intervene and work with parents through observation and education.

Implications for Coaches and Physical Educators: Involving and Educating Parents

In today's youth sport world, coaches must work with parents to create a supportive environment and culture to help athletes feel satisfied and motivated. With an understanding and application of concepts from self-determination theory, coaches can involve parents in regular group and individual conversations and educate them about their influence on their children's psychological needs. By regularly interacting with at least one parent of an athlete, coaches

and physical educators can potentially influence both parents and, in turn, the motivation and well-being of the athlete (O’Neil & Amorose, 2021; Sommerfeld & Chu, 2020). Through those interactions and trusting relationships, coaches and physical educators can help parents implement evidence-based parenting strategies to satisfy their children’s psychological needs (see Table 2):

- Encourage parents to allow their children to choose their sport(s), and potentially their team(s), and to cross-train to learn skills and strategies.
- Provide parents with examples and information about the benefits of playing multiple sports and not specializing in one early. For instance, NBA players who were multisport athletes in high school tend to play more games, have longer careers, and suffer fewer injuries than those who were single-sport athletes (Rugg et al., 2018).
- Invite parents, especially fathers, to work with coaches and physical educators by helping their children set challenging but achievable goals. These goals need to focus more on personal improvements (i.e., process and performance goals) than on winning (i.e., outcome goals) to help athletes gain a sense of competence.
- Encourage parents to praise their children often and celebrate the small wins; that is, whenever athletes make progress or achieve process or performance goals.

Though seasoned coaches and physical educators could work with parents on these abovementioned strategies without much additional education or expertise, the following might require more training (e.g., completing a relevant graduate degree or certification program) or need to be delivered by an external professional with relevant qualifications, such as a sport psychology consultant or parent

educator. These communication and educational strategies teach parents about the interpersonal processes and emotional control in parenting, as well as the differences in satisfying athletes’ psychological needs, based on the gender combination of the parent and the child (Inguglia et al., 2018; Lienhart et al., 2019; Schemenauer & Chu, 2022):

- Encourage parents to be actively involved in their sons’ sports while limiting controlling behaviors, especially those of fathers, such as “coaching” during practices or competitions, placing too much emphasis on winning, or enforcing sport specialization. Doing so can generally help reduce a boy’s perceived pressure from his father and his frustration of competence.
- Educate parents to provide genuine encouragement and show unconditional pride, especially from fathers, in their daughters’ sport participation. Specific strategies include offering support during and after “failures,” setting expectations by asking for the daughter’s input, and listening to the daughter’s concerns with empathy rather than judgment (Schemenauer & Chu, 2022). This effort can help a girl feel seen, heard, and valued.
- Invite parents to ask their daughters about their relationships with others, including coaches and teammates, instead of only asking about their sport performance. These nonperformance interactions could enhance a girl’s sense of belonging, connection with others, and intrinsic motivation.

When structuring formal parent education sessions to offer these strategies, coaches and physical educators might consider using a short, mandatory program format (e.g., 60–90 minutes, once or twice per season) supported by research and practical experience (Dorsch et al., 2019; Schemenauer & Chu, 2022). Throughout the program, coaches or the program deliverer (i.e.,

Table 2.
Communication and Educational Strategies for Helping Parents Satisfy Their Children’s Psychological Needs in Youth Sport

Autonomy	Competence	Relatedness
<p>Allow the child to choose their sport(s) and team(s) and to cross-train to learn skills and strategies.</p> <p>*Discuss all the sports available and allow them to try any sport of interest beyond traditionally gender-typed sports, such as football and basketball for boys and volleyball and softball for girls.</p>	<p>Celebrate the child’s progress and accomplishments and trust their ability to improve their skills.</p>	<p>Foster a supportive parent–child relationship through active listening and empathy rather than judgment.</p>
<p>Avoid “coaching” from the sidelines or offering opinions during or right after athletes’ performances. Let coaches do the job.</p> <p>*Seek boys’ preference for parents’ involvement at practices and competitions and limit controlling behaviors.</p>	<p>Work with coaches to help athletes set effective goals that are not outcome driven and monitor their progress.</p> <p>*Explain to boys why goals are important and guide them to set goals and strategies that focus on the process and performance.</p>	<p>Spend time with the child to bond over their sports and other interests.</p> <p>*Make an extra effort to ask girls about relationships with others in sport beyond practices and competitions.</p>
<p>Encourage the child to express their concerns and perspectives about sport participation and discuss participation options.</p>	<p>Treat the child’s mistakes and losses as part of the learning process and encourage them to grow from the experience.</p>	<p>Establish mutual trust and respect beyond the hierarchical parent–child relationship.</p>

Note. *Examples of gender-specific strategies.



consultant, parent educator) can collaborate and provide opportunities for parents to voice their opinions and share their experiences. Doing so can help parents feel connected, satisfy parents' psychological needs, and allow them to "let their guard down," so they are more likely to actively listen and participate in the program (Sommerfeld & Chu, 2020). It is important to also assess the parenting culture in a sport and the corresponding community to personalize the program and the parenting strategies in Table 2.

Future Questions and Conclusion

Although the literature and research evidence have revealed important gender differences in the satisfaction and frustration of athletes' psychological needs, the existing findings, drawn from correlations at a single point in time rather than over time, lack consistent outcomes, ways of measuring them, and the ability to form causal conclusions. Therefore, it would be valuable for coaches and physical educators to follow the latest research across various athlete demographic characteristics and backgrounds over a longer period. Further, learning more about the entire developmental period from childhood to adolescence to understand how to satisfy youth athletes' psychological needs based on gender and age is crucial. Lastly, including parents' perspectives on how their children's psychological needs are satisfied or frustrated in daily life may provide more comprehensive information about relevant gender differences on and off the field to inform better coaching, teaching, and parenting practices (Chu & Zhang, 2019; Inguglia et al., 2018; Lienhart et al., 2019).

In conclusion, this article highlights that youth athletes' perceptions of psychological need satisfaction and frustration can be attributed to a variety of factors, among which gender is an important and obvious one for coaches, physical educators, and parents to consider. The gender of an athlete is part of their identity and social status and a characteristic that may determine others' expectations of them as an athlete and a whole person (Fredricks & Eccles, 2002). If a youth athlete is unable to obtain the proper treatment from significant others in their life and from sport to fulfill their needs for autonomy, competence, and relatedness, they will not be able to reach their full potential and can suffer negative physical and psychosocial consequences. Keeping self-determination theory and evidence-based strategies in mind, coaches and physical educators can use their platforms to support boys' and girls' psychological needs through sport and, in turn, their performance and overall well-being throughout their critical developmental periods.

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