PERCEPTIONS OF PARENT BEHAVIOR AND BURNOUT IN HIGH SCHOOL COACHES

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ABSTRACT

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Coaching is a dynamic role that encompasses multiple demands within the social environment (e.g., managing athletes, working with administrators, communicating with parents). Due to the high pressure and workload, coaches commonly report negative work outcomes such as burnout (Altfeld et al., 2018). There are various social agents in the sport setting that can contribute to the demands of coaching. Parents are among them and have been understudied by sport burnout researchers. Parental interactions can be positive, characterized by supportive behavior, or negative, characterized by controlling behavior. Self-Determination Theory (SDT; Ryan & Deci, 2000) posits that such interactions have the potential to influence the well-being of coaches by supporting or thwarting their basic psychological needs (i.e., competence, autonomy, relatedness). Whereas need satisfaction is theorized to mitigate burnout perceptions, need thwarting may amplify burnout perceptions. The purpose of this study was to examine if perceptions of supportive and controlling behavior from parents are associated with burnout in coaches through satisfaction and thwarting of basic psychological needs. High school coaches (N = 192, $M_{age} = 43.43$, $SD_{age} = 11.85$) were recruited to take an online survey assessing their perceptions of supportive and controlling behaviors from parents, psychological need satisfaction and thwarting, and burnout. Observed variable path analysis showed perceptions of autonomy supportive parent behavior to be associated with lower levels of coach burnout through need satisfaction and thwarting. Coaches' perceptions of parent behavior are important to consider when examining coach burnout perceptions.

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CHAPTER I:

INTRODUCTION

Whether it be perfecting a skill, winning a long-sought championship, or being recognized on the podium, these goals of athletes would not be possible without the continuous guidance from coaches. Specifically, coaching involves, "...structuring the team and establishing its purposes, arranging for the resources a team needs for its work and removing organizational roadblocks that impede the work, helping individual members strengthen their personal contributions to the team, and working with the team as a whole to help members use their collective resources well in pursuing team purposes" (Hackman & Wageman, 2005, p. 269). Coaching can be an impactful career that also encompasses a variety of demands within the social environment. Some of these demands include managing athletes, working with administrators, and communicating with parents. Due to the complexity of the coaching profession, a closer examination of coaches' environmental factors may provide a unique perspective on coach motivation and burnout.

Some coaches commonly report negative work outcomes such as burnout because of the high pressure and workload associated with demands in the social environment (Altfeld et al., 2018). Burnout is defined as, "a psychological syndrome," (Maslach & Jackson, 1986 p. 192) characterized by a person feeling exhausted, a reduced sense of accomplishment, and less invested in their work and the people associated with it. Specifically, exhaustion is characteristic of perceptions of either emotional or physical fatigue, reduced self-accomplishment is poor perceptions of one's current performance, and devaluation is an indifferent attitude toward one's work (Pacewicz et al., 2019). Burnout can stem from multiple factors including the coach's gender (Kelley & Gill, 1993; Kelley, 1994), perfectionistic tendencies (Vealey et al., 2020),

emotions (McNeil et al., 2017), social support (Altfeld et al., 2015), and key stakeholders like athletes and parents (Knight & Harwood, 2009). Because sport operates in a social context where coaches commonly interact with various social agents such as athletes, parents, and administrators, an examination of social constructs warrants attention to better understand the experience of coach burnout.

These individuals have the potential to influence coaches through positive or negative interactions. For example, parents that offer social support to coaches throughout a season might be considered a positive interaction, while parents that raise their voices at coaches might be an example of a negative interaction. Current research examining the link between social interactions and coach burnout has predominantly assessed the coach-athlete relationship (Myhre & Moen, 2017; Westfall et al., 2018). For instance, coaches that cultivate an adaptive working alliance and establish complementary goals with their athletes report lower perceptions of coach burnout (Myhre & Moen, 2017; Westfall et al., 2018). Whereas the relationship between coaches and athletes has been examined in the burnout literature, less attention has been paid to other salient social agents (e.g., parents).

Parents may be a source of both positive and negative social interactions for coaches.

Parents can provide support for coaches by encouraging them, telling them thank you, supporting their decisions for the team, and listening to what they have to say. On the contrary, parents are also a common source of pressure for coaches (Scantling & Lackey, 2005). For example, parents are known to display stressful behaviors such as calling coaches during their personal time, asking them questions when it is inappropriate, blaming them for losing, being too involved or uninvolved, and approaching them aggressively or defensively (Knight & Harwood, 2009).

While these studies highlight that parents can be both supportive and stressful, there is limited evidence that examines how coach-parent interactions relate to coach burnout.

One way to tackle this missing link is to examine the relationship between coaches' perceptions of parents' behavior and coach burnout through the lens of self-determination theory (SDT; Deci & Ryan, 2002). A subtheory of SDT, Basic Psychological Needs Theory (BPNT; Deci & Ryan, 2002), hypothesizes individuals have three basic psychological needs consisting of competence, autonomy, and relatedness that are central for understanding the initiation and regulation of behavior. Competence is, "...feeling effective in one's ongoing interactions with the social environment and experiencing opportunities to exercise and express one's capacities," (Deci & Ryan, 2002; p. 7). Autonomy is, "...being the perceived origin or source of one's own behavior," (Deci & Ryan, 2002; p. 8). Relatedness is, "...feeling connected to others, to caring for and being cared for by those others, to having a sense of belongingness with other individuals and with one's community," (Deci & Ryan, 2002; p. 7). The satisfaction or thwarting of an individual's basic needs is theorized to have important consequences for behavior. When basic needs are satisfied, more adaptive outcomes such as vitality and positive affect are expected, whereas need thwarting results in maladaptive outcomes like burnout, depression, and nonoptimal functioning (Bartholomew et al., 2011; Costa et al., 2015; Deci & Ryan, 2002). Need thwarting is characterized by an individual's perception that their psychological needs are being obstructed in a certain context. For example, feeling that others are preventing one from making choices may thwart the innate need for autonomy (Costa et al., 2015).

Research has shown that coaches' perceptions of their environment, including of the behavior of salient social agents, can support or thwart their psychological needs (Rocchi & Pelletier, 2017). More specifically, psychological needs can be satisfied or thwarted based on

whether behavior in the social environment is perceived to be autonomy supportive or controlling. Autonomy supportive behavior promotes choice and makes people feel responsible for their actions (Deci & Ryan, 1987). Parents may engage in autonomy supportive behavior towards coaches by listening to the coach's perspectives and rationale for certain decisions, supporting coach organization and management, and expressing words of encouragement (Mageau & Vallerand, 2003). Autonomy supportive behavior from parents may thus support coaches' psychological needs, resulting in adaptive motivational outcomes. On the other hand, controlling behavior refers to pressuring an individual toward a particular outcome (Deci & Ryan, 1987). For instance, parents can exhibit controlling behavior by pressuring coaches to spend more one-on-one time with their athlete outside of practice or to award more playing time during competition. Thus, coach perceptions of need satisfaction or thwarting might depend on their perceptions of autonomy supportive and controlling parent behavior. Because the social environment may play an important role in coach burnout, deliberate attention to coach interactions with social agents in sport is warranted. Given that evidence is scarce linking parent behavior and coach burnout, the purpose of this study is to examine if perceptions of supportive and controlling behavior from parents are associated with burnout in coaches by way of psychological need satisfaction or thwarting. It is hypothesized that (a) controlling behavior from parents will positively associate with burnout perceptions in coaches, mediated by psychological need thwarting, and (b) supportive behavior from parents will negatively associate with burnout perceptions in coaches, mediated by psychological need satisfaction.

CHAPTER II:

LITERATURE REVIEW

Coaching

Coaching effectiveness is defined as, "The consistent application of integrated professional, interpersonal, and intrapersonal knowledge to improve athletes' competence, confidence, connection, and character in specific coaching contexts" (Cote & Gilbert, 2009, p. 316). From this definition it is clear that a career in coaching involves continuous interaction with the social environment. Coaches interact with a multitude of people including other coaches, athletic trainers, team sport psychologists, referees or judges, administrators, athletes, and parents. Through these frequent interactions, coaches may walk away feeling like the interaction went well, or they may walk away feeling the interaction was strained or did not go well. For example, parents that support the coach regardless of a win or loss may let the coach know that they care about the coach as a person and not just the outcome of the competition. On the other hand, parents can sometimes place challenging demands on the coach. For example, parents bringing up the subject of more playing time for their child could leave the coach feeling unsure of how to tackle this situation when other parents are also bringing that up. If these demands continue to persist and are perceived as unmanageable, burnout could result (Smith, 1986). Specifically, high school coaches may be more prone to these experiences due to their connections both within the team, school, and community setting.

Burnout

Burnout is a term that is used colloquially within sport and typically comes with a negative connotation. In the scientific study of burnout, the phenomenon is defined as a syndrome that people experience consisting of three pillars – exhaustion, depersonalization, and reduced self-

accomplishment (Maslach & Jackson, 1986). Exhaustion is characterized by job related fatigue. Coaches who are exhausted may feel emotionally drained or not have enough energy to carry out typical day-to-day activities. Depersonalization, or devaluation as studied in sport, happens when an individual has an indifferent attitude toward others and their job. For example, a coach that used to check in with athletes to see how their day is going may not currently care enough to ask when experiencing depersonalization. Relatedly, this may reflect the coach devaluing their coaching work. Reduced self-accomplishment takes place when an individual believes that they are not achieving what they ought to be. Coaches that feel they should be accomplishing more than what they are would be an example of reduced self-accomplishment. Because the experience of burnout currently does not have a clinical diagnosis (Olusoga et al., 2019), it is difficult to assess whether individuals are in fact burned out versus simply experiencing burnout symptoms. High exhaustion and depersonalization in conjunction with low self-accomplishment are characteristic of burnout symptoms, however specific clinical cutoffs have not yet been established. Therefore, rather than assessing whether participants are actually "burned out" or not, this study will focus on coaches' perceptions of burnout. There are many factors that play into the burnout syndrome, which can be classified by personal situational characteristics.

Personal Factors Influencing Coach Burnout

There are both personal and situational factors that have linked with burnout in coaches. For the purpose of this literature review, personal factors are those that are tied directly to the coach (i.e., gender, perfectionism, emotions). Situational factors are concerned with the link between coach and environment (i.e., unclear expectations, social support, relationships). Areas of prevailing interest in the literature are covered rather than providing an exhaustive treatment of all personal and situational factors that have been explored in sport psychology research.

Gender

Gender is one personal factor that can influence burnout. Using Smith's (1986) cognitiveaffective model of burnout, Kelley and Gill (1993) surveyed college basketball coaches to understand how gender differences in coaches related to the experience of stress and burnout. Results indicated that female coaches had a higher stress appraisal than male coaches, which led to a higher level of burnout. Building on the previous study, Kelley (1994) surveyed 249 college baseball and softball coaches to examine gender and time of season effects on burnout. This study also linked higher stress appraisal with female coaches. Kelley suggested that female coaches may be expected to nurture athletes more than male coaches. Other possible reasons that female coaches may perceive greater stress than male coaches include dealing with gender stereotypes that assert coaching is mainly for men, lacking female mentorship, and wanting to have children (Ong & Zhao, 2019). Another study conducted by Kelley, Eklund, and Ritter-Taylor (1999) revealed that female college tennis coaches found coaching issues more stressful than males. Contradictory evidence by Knight and colleagues found that gender was not linked with coaches' perceived stress (Knight et al., 2013). Whether this reflects change in the coaching context for women, signals gender as related to stress in complex ways, or sample specific variations, the extant literature suggests that it is important to consider gender when examining burnout in coaches.

Perfectionism

Perfectionism is another personal factor that has been linked to burnout (Vealey et al., 2020). Broadly, perfectionism is when an individual will only accept flawlessness (Cashmore, 2008). There are various types of perfectionism including adaptive and maladaptive, where maladaptive perfectionism has been linked with burnout (Sas-Nowosielski et al., 2018).

Adaptive perfectionism is concerned with one's high personal standards, maladaptive perfectionism stems from, "intolerance of errors" (Sas-Nowosielski et al., 2018; p. 876). Given that the public is able to see errors as evidenced by a win-loss record, coaches can sometimes perceive that communities and athletic departments expect them to be perfect (Vealey et al, 2020). Researchers noted that, "controlling forms of social expectations and external regulation may act as a 'slippery slope' in which initial motivation of coaches may move toward burnout" (Vealey et al., 2020; p. 1). Considered in total, social contexts that are controlling and direct coaches to try to be perfect may increase susceptibility to experiencing burnout perceptions.

Emotions

The inclusion of emotional exhaustion as a dimension in burnout (Maslach & Jackson, 1986) highlights the role one's emotions play in the burnout syndrome. McNeil et al., (2017) extensively interviewed 5 full time coaches that were currently experiencing burnout.

Considering most studies examine burnout after it happens, a study analyzing it while coaches are presently experiencing it is particularly noteworthy. Researchers found that all three dimensions of burnout were addressed through the coaches' answers. First, emotional exhaustion was mentioned by every coach. A track coach described burnout such that, "It was a feeling of uncontrollable, continuous, consistent white nose in the brain...It wasn't physical pain, but psychological discomfort..." (p. 188). Next, depersonalization was seen in four of the five coaches' interviews. A figure skating coach expresses her cynicism towards athletes when she says, "...sometimes I get too harsh and I get too negative, and it builds this atmosphere where nothing creative can happen" (p. 185). Finally, reduced accomplishment was clearly evident when a tennis coach said, "if I get frustrated, it's usually that I feel I am not doing a good enough job with the kids, or I feel like they're not doing enough, that I'm the one working harder than

them" (p. 186). The key phrase here is feel that I am not doing a good enough job. The coach may be doing a fine job, however if they perceive that they are not performing up to their own standards, then that is their reality. These findings complement Olusoga and Kentta's (2017) narratives of burnout in high performance coaches. Reduced accomplishment is seen when a coach conveyed, "...I'm not good enough and I can't handle it" (p. 242). Clearly, emotional demands play an important role in the experience of burnout. This suggests that situational and social demands are salient to burnout, and these are covered in the next section.

Situational Factors Influencing Burnout

Situational factors can serve as the frame of reference leading coaches to appraise their work as stressful. Situational factors of particular interest in the coach burnout literature surround the clarity of expectations tied to the coaching role and the social relationships that coaches must manage.

Unclear Expectations

Research shows unclear job expectations to be related to perceptions of stress in coaches (Knight et al., 2013). As we know, the appraisal of stress can contribute to burnout (Smith, 1986). Knight and colleagues analyzed 502 coach responses to an online questionnaire evaluating factors that coaches might perceive as stressful (i.e., characteristics of their coaching contract). Even though the coaches in this sample scored slightly below the norm for stress, results indicated that coaches perceived higher stress levels when their job expectations were not distinctly laid out for them. This was the case for coaches with the lowest income between \$0-\$5,000 and coaches with a salary on the higher end of the spectrum. The authors speculated that the lower salaried coaches perceived more stress because the expectations set for them were vague, whereas coaches that had higher salaries probably experienced very high expectations for

their performance. This makes sense, given that low or no salaried coaches are probably volunteers and may lack concrete standards while high salaried coaches probably operate within a more competitive environment characterized by pressure to win. If expectations are not defined, then how can a coach know if he is truly doing his job? Although this study focused on stress rather than burnout, it is helpful to acknowledge because stress can contribute to burnout. In regard to this study, there may be instances where coaches do not know what parents expect of them. Typically, parents do not explain to coaches how they expect them to coach their athlete. It is plausible that coaches may wrongly interpret parent expectations for them.

Social Support

Social support is a prevalent situational factor associated with burnout in coaches. For example, coaches who feel supported by their families are less exhausted (Altfeld et al., 2015). Additionally, in a study examining Singaporean coaches, a lack of support from family and friends was noted by participants (Ong & Zhao, 2019). Coaches in this study mentioned that their friends gave little respect to their coaching position, while family were not pleased with the night and weekend coaching schedule. Although support can come from family and friends, it can also come from the organization the coach resides in (Kilo & Hassmen, 2016). A study of Australian coaches indicated that those who perceived higher organizational support in turn had lower burnout levels (Kilo & Hassmen, 2016). From these findings, it seems that not only support, but lack thereof is an important element in coach burnout. Because social support is typically associated with positive outcomes, then coaches with high social support might perceive parents as displaying more supportive rather than controlling behavior.

Coach-Athlete Relationship

The coach-athlete relationship has been associated with burnout in coaches by way of working alliance and complementary goals. The working alliance between the athlete and the coach is an important aspect of their relationship, which consists of goals, tasks, and bonds between two people (Bordin, 1979). Myhre and Moen (2017) surveyed 299 coaches collecting data on coach perceptions of working alliance with their athletes, their affect, and burnout. Results indicated that the coach-athlete working alliance tied to coach burnout (Myhre & Moen, 2017). Diving deeper, a vital component of the working alliance between two individuals is goals. Research has demonstrated coaches and athletes whose goals align are associated with less burnout. On the other hand, coaches and athletes with conflicting goals are associated with more burnout (Westfall et al., 2018). Working alliance and complementary goals are both important factors in the coach-athlete relationship, and when coaches perceive that they have a solid relationship with their athletes, they will demonstrate need supporting behavior rather than need thwarting behavior towards them (Camire et al., 2019). This works in the athlete's favor because, if their needs are supported, they will more likely be in an optimal position to perform. When coaches have a solid relationship with their athletes, it might be possible that this could buffer the poor perceptions that they have of parents.

One particular downside of the coach-athlete relationship is that burned out coaches can affect athletes' sports experience. For example, athletes that perceived their coaches as emotionally exhausted, the core tenet of burnout, had outcomes including less instruction and social support (Price & Weiss, 2000). These two commodities are important to consider when coaching anyone, because instruction is needed to teach the technical aspects of the game while social support is needed to foster that connection between athlete and coach. Without either of

these, athletes could potentially be getting a subpar sport experience. In some cases, there may be a continuous cycle of burned out coaches providing ineffective guidance to athletes. While the coach athlete-relationship has been fruitful in terms of evidence for coach burnout, the same cannot be said for the coach-parent relationship.

Coach-Parent Relationship

There has been minimal evidence associating the coach-parent relationship with burnout in coaches; however, some studies suggest that parents exert pressure on coaches and can be a stressor to them. Pressure to perform is something that coaches struggle with (Lundkvist et al., 2012), and this pressure can stem from parents. In fact, Ong and Zhao (2019) confirmed that parents pressure coaches if they believe their child is not making sufficient progress in the sport. Pressuring coaches to give their athletes more playing time or more individualized one-on-one instruction are a few more instances where parents may pressure coaches.

Parents have also been examined more broadly as a source of stress to coaches (Knight & Harwood, 2009). Responses from 70 coaches indicated parent behavior and their demands on the coach were noted as direct coaching stressors. It seems that coaches are frustrated the most when parents are either too involved, or not involved at all. For example, one coach stated, "They're just there all the time, always wanting answers and information" (Knight & Harwood, 2009; p. 550). Again, yet another coach verified, "It's when you get that phone call, when it's in your own personal time and it's like 'Sorry to bother you on a Saturday but'...but don't call me on a Saturday!" (p. 552). Among other themes in this study included blaming coaches for loss, how parents approach coaches, and the parents' trust in the coaches' ability. Therefore, it is not only the parents, but the parent's behavior that factors into a coach's well-being.

Behavior can be broken down into autonomy supportive behavior and controlling behavior. Autonomy supportive behavior is conducive to psychological need satisfaction, while controlling behavior is linked to psychological need thwarting. Specifically, autonomy supportive behavior is characterized by minimizing pressure (Black & Deci, 2000). Parents display autonomy supportive behaviors when they tell their athletes to have fun while competing. Autonomy supportive environments are associated with increased motivation quality (Deci & Ryan, 2002). On the contrary, controlling behavior is characterized by the use of pressure (Sarrazin et al., 2006). Controlling environments thwart basic psychological needs, thus putting coaches in a place for non-optimal functioning (Altfeld et al., 2015). If coaches remain in environments where their psychological needs are thwarted, this increases the chances of burnout (Bentzen et al., 2016). Accordingly, behavior (i.e., supportive or controlling) can satisfy or thwart one's basic psychological needs, and whether needs are thwarted or satisfied leads to either adaptive or maladaptive outcomes. However, few studies have examined the role parent behavior plays in coach burnout. If coaches perceive that parents are supportive, this may have the ability to protect against burnout symptoms.

Theoretical Perspectives Linking the Social Environment and Burnout

Relationships exist in a social environment. The constant interaction, or lack thereof, between two individuals serves as the basis for a healthy working relationship or a toxic one. Essentially, the behavior of each individual plays an important role in the quality of the relationship. That being said, parent behavior has the ability to influence their relationship with the coach. Although parents can be supportive, they can also be something coaches must "deal with" on a daily basis, which is why parent behavior deserves attention in relation to coach burnout.

Two primary models that have been used to examine the social environment in burnout are Smith's (1986) cognitive affective model, and Deci & Ryan's (2000) self-determination theory. While the cognitive-affective model highlights the importance of situation appraisal in burnout, self-determination theory suggests that appraisal of one's psychological needs can be linked to others in the environment that either support those needs or frustrate them.

Interestingly, in a systematic review of stressors and well-being in coaches, 15 out of the 38 studies did not utilize a theory to guide their work (Norris et al., 2017).

Cognitive-Affective Model

There are multiple models that explain burnout, however Smith's (1986) cognitive affective model has been extensively used in sport psychology literature to examine the burnout process in sport (Norris et al., 2017; Olusoga et al., 2019). The cognitive-affective model suggests that burnout is a consequence of stress which consists of four interacting factors. First, there are the individual's situation demands (Smith, 1986). An example of this might be a competition against the team's biggest rival. This situation could be very demanding on a coach in terms of preparing his team, executing strategy, dealing with media scrutiny, etc. When a coach's demands exceed his resources to cope with these, stress results. The next stage is cognitive appraisal (Smith, 1986). Appraisal means interpreting something as positive (beneficial) or negative (threatening or detrimental). For example, one coach perceives the rivalry competition as an exciting challenge while another perceives it as a threat or a chance to fail. There are four different elements to appraisal which include appraisal of demands, resources, consequences if the demands are not met, and meaning of those consequences (Smith, 1986). Once the situation has been appraised, the next stage is physiological responses (Smith, 1986). One coach might experience eustress due to his positive appraisal of the rivalry

competition. Eustress is the interpretation of stress as beneficial to the individual (i.e., good stress). Eustress is beneficial physically as well as psychologically. On the other hand, more commonly known is distress which is the negative interpretation of stress. Another coach that perceives the rivalry competition as a threat or an opportunity to fail. The key is that stress becomes harmful when it is interpreted or appraised negatively. Perceiving something negatively leads to anxiety and fatigue. The final stage of the model includes the more long-term coping behaviors to these physiological responses (Smith, 1986). Some of these coping behaviors are decreased performance and withdrawal from activities. If the coach chronically perceives rivalry competitions as threatening and experiences persistent anxiety and fatigue, that coach may cope by withdrawing from the coaching profession. Smith's model illustrates that demands within a coach's social environment are important when looking at stress and burnout. Specifically, the perception of these demands is particularly important in shaping how one responds in positive or negative ways.

Interacting with others is a demand that coaches experience in sport. Coaches interact with a variety of individuals including athletes, administrators, and parents. Often, the interactions that coaches have with others may leave them feeling good. Athletes tell coaches of their desire to work hard in the off season, administrators congratulate coaches for a job well done, and parents make small talk when picking their children up from practice. However, there are also interactions that leave coaches feeling sub-par. In particular, parents are one social agent that can cause distress among coaches. Parent behavior can be demanding on coaches depending on how the coach interprets them. Because there is meager evidence concerning the relationship between parent behavior and coach burnout, one way to tackle this missing link is to consider the perceptions that coaches have of parents. A tool that can be used for this is Self-Determination

Theory (SDT; Deci & Ryan, 2002), a perspective that recently has become prominent in coach burnout research (Norris et al., 2017; Olusoga et al., 2019). Whereas Smith's model emphasizes the importance of a coach's social environment in burnout, SDT offers guidance specifically on how social interactions within the environment can translate into burnout.

Self-Determination Theory

Deci and Ryan's (2000) self-determination theory (SDT) is a tool that can be used to examine it in sport settings. SDT posits that motivation exists on a continuum. On one end of the continuum lies amotivation (complete lack of motivation), with external motivation in the middle, and intrinsic motivation on the other end. Specifically, people who display intrinsically driven behaviors do so out of their own curiosity or genuine interest (Deci & Ryan, 2000). Intrinsic motivation is associated with better outcomes such as effective performance and persistence (Deci & Ryan, 2008). On the other hand, external motivation is when, "people behave to attain a desired consequence such as tangible rewards or to avoid a threatened punishment" (Deci & Ryan, 2000; p. 236). Individuals who display extrinsically driven behaviors do so because they feel they have to, not because they want to. For example, coaches with extrinsic motivation continue their jobs for reasons other than their love for the sport, which might be due to money, status, or praise. Extrinsic motivation or amotivation would be expected to render someone susceptible to burnout.

Extrinsic motivation, intrinsic motivation, and amotivation have been shown to stem from different kinds of environments. Rocchi and Pelletier (2017) found that coaches' perceptions of the environment predict their type of motivation. Other individuals within the environment play an important role by either satisfying or thwarting basic psychological needs of coaches. Basic psychological needs theory (BPNT; Deci & Ryan, 2000), a subtheory within

SDT, posits that if three fundamental basic psychological needs are met, then the quality of motivation increases (i.e., relatively more self-determined or intrinsic motivation). Needs are defined as, "innate psychological nutriments that are essential for ongoing psychological growth, integrity, and well-being" (Deci & Ryan, 2000; p. 229). The first need, competence, entails knowing how to do something. Individuals feel competent when others tell them they are good at something. Autonomy means having a choice. Having a say in important decisions gives individuals autonomy. Relatedness is feeling connected to others. An example of relatedness would be caring for another person. These basic psychological needs can either be satisfied, dissatisfied, or thwarted.

Psychological Need Satisfaction. Psychological need satisfaction is when one's competence, autonomy, and relatedness needs are met. A common approach to satisfying basic psychological needs is through autonomy supportive behaviors. Coatsworth and Conroy (2009) identify autonomy supportive coaching behaviors to include providing non-controlling feedback, avoiding controlling behaviors, and providing choice. For example, head coaches are in a position to satisfy their assistant coaches' basic psychological needs through the behaviors they engage in. When head coaches ask the opinions of their assistant coaches, care about them, and recognize their assistant coaches' efforts, assistant coaches' psychological needs are satisfied and thus their motivation is enhanced (Zakrajsek et al., 2020). These behaviors would be considered autonomy supportive, and autonomy support has been shown to predict need satisfaction (Bartholomew et al., 2011). According to SDT, need satisfaction is linked with positive outcomes such as psychological health and well-being (Deci & Ryan, 2000).

Psychological Need Thwarting. Need thwarting, also known as need frustration, takes place when there is a perception that others are purposely hurting, blocking, undermining or

getting in the way of one's psychological needs. Need thwarting has been associated with illbeing in coaches (Stebbings et al., 2012) and could more effectively anticipate diminished functioning (i.e., burnout; Costa et al., 2015). This differs from need dissatisfaction because rather than competence, autonomy, and relatedness not being met, there is an interference with the satisfaction of those needs. One particularly common way that psychological needs can be thwarted is through the perception of others' controlling behavior. Some examples of controlling behavior are intimidation, excessive personal control, judging and devaluing (Bartholomew et al., 2011). Bartholomew and colleagues (2011) wanted to understand the relationship between controlling behaviors from coaches and need thwarting in athletes. They found that athletes who perceived need thwarting due to controlling behavior from coaches had negative affect, depression, and burnout as outcomes. Interestingly, researchers also measured a physiological marker S-Iga: an immunological protein indicative of stress. The athletes who perceived need thwarting also showed increased levels of S-Iga. Therefore, it is important to avoid controlling behavior in order to avoid thwarting others' needs, because the effects are seen both psychologically and physiologically.

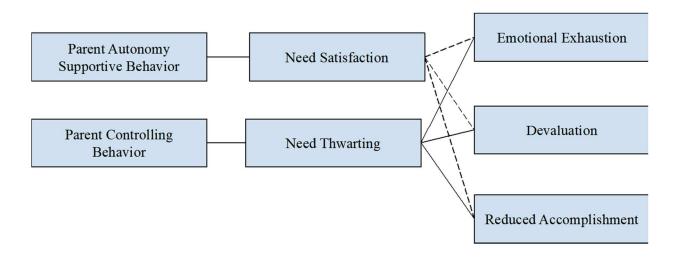
Summary and Purpose

Previous coach burnout literature does not come without its shortcomings. Olusoga et al. (2019) argued that one limitation of this research is the inconsistent use of theory to guide research studies. The current study aims to address this issue through the incorporation of self-determination theory as a framework. Additionally, only five studies have used the Coach Burnout Questionnaire (CBQ) to measure burnout (Olusoga et al., 2019). By using the CBQ in the current study (see methods section), information will be learned about this scale for future use. Finally, this study focuses on parents as a potential contributor to coach burnout. Although

studies have been conducted concerning parents as a stressor to coaches (Knight & Harwood, 2009), few have explicitly linked parents and coach burnout

Coaches have a variety of demands in their social environment that they must navigate. Due to the frequent interactions that coaches have with others, these interactions could be a possible factor in burnout. When coaches perceive supportive behavior from others, their basic psychological needs are met; however, coaches that perceive controlling behavior experience basic psychological need thwarting. Parents are specific social agents that have the potential to engage in supportive or controlling behavior around coaches. Because evidence is scarce linking parent behavior and coach burnout, the overall aim of this thesis is to examine this association within a theoretically-grounded framework that specifies how perceived social interactions may translate into ill-being. The BPNT subtheory within SDT offers the conceptual framework that informs the present research. Drawing on this framework, the purpose of this study is to examine if perceptions of supportive and controlling behavior from parents are associated with burnout in coaches by way of psychological need satisfaction or thwarting (see Figure 1). It is hypothesized that (a) controlling behavior from parents will positively associate with burnout perceptions in coaches, mediated by psychological need thwarting, and (b) supportive behavior from parents will negatively associate with burnout perceptions in coaches, mediated by psychological need satisfaction.

Figure 1.Proposed Burnout Model



Note: Dotted lines represent a negative relationship and solid lines represent a positive relationship.

CHAPTER III:

METHOD

Participants

A total of 233 coaches opened the electronic survey. Eleven individuals opened the survey but did not complete a single item and 30 individuals began the survey but discontinued, leaving a significant amount of missing data. After removing these 41 participants, a total of 192 participants were included in the final sample. The sample consisted of 143 male participants (74.5%), 48 female participants (25.0%), and 1 who preferred not to report gender. Coaches ranged in age from 21 to 72 years (M = 43.43, SD = 11.85). The sample predominantly selfidentified as white (94.3%), followed by Black or African American (2.1%), more than one race (2.1%), Hispanic or Latino (.5%), Native Hawaiian or Other Pacific Islander (.5%), and Unknown/Other (.5%). The ethnic makeup was largely not Hispanic or Latino (93.8%) while 4.7% did identify as Hispanic or Latino, and 1.6% preferred not to respond. Coaches represented a wide variety of sport types spanning more than 20 different team (e.g., baseball, basketball, soccer) and individual (e.g., gymnastics, skiing, wrestling) sports. Both head coaches (90.6%) and assistant coaches (9.4%) were featured in the sample. Further, 94.8% coached at a public school, whereas 5.2% coached at a private school. Teachers comprised 48.4% of the sample. Finally, 50% of the coaches surveyed were in their off-season, 49.5% were in-season, and 0.5% were in their preseason.

Procedure

After Institutional Review Board (IRB) approval from Michiga State University, an initial email was sent to athletic directors within the Michigan High School Athletic Association using publicly available contact information online (mhsaa.com). Major cities in the state were

identified, and then schools in the surrounding counties were contacted to account for larger schools. Major cities in the more remote area of the state (i.e., the upper peninsula) were also identified and contacted to account for smaller schools. If athletic directors agreed, they were asked to provide emails for their current high school coaches. Then, the primary investigator sent an official email to each coach that explained the study purpose and provided the survey link (See Appendix A). The survey link directed participants to the first page of an online survey where a consent form and overview of the study information was given (See Appendix B). By proceeding with the survey, participants indicated that they had given their consent to participate in the study. The survey took approximately 15 minutes to complete and consisted of demographic questions (See Appendix C), the Health Care Climate Questionnaire (HCCQ; See Appendix D), the Controlling Coach Behavior Scale (CCBS; See Appendix E), the Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS; See Appendix F) and the Coach Burnout Questionnaire (CBQ; See Appendix G).

Measures

Demographics

Participants were asked to indicate their age, gender, race, ethnicity, whether they coach at a public or private high school, what division the team is that they coach, if they are currently inseason or off-season, the primary sport they coach, if they coach boys, girls, or both, if they were a head coach or assistant coach, number of years coaching the current team, number of years coaching the sport, number of years coaching total, and their assessment of parent involvement.

Perception of Supportive Behaviors from Parents

A modified version of the Healthcare Climate Questionnaire (HCCQ; Williams et al., 1996) was used to assess perceptions of supportive behaviors from parents. The HCCQ assesses

perceptions of autonomy supportive behavior through a six-item short form. Phrasing of the HCCQ was modified from "my physician" to "the parents of my athletes". An example of a modified item is "my physician listens to how I would like to do things" changed to "the parents of my athletes listen to how I would like to do things". Responses from participants were on a 7-point scale with anchors of (1) strongly disagree, (4) neutral, (7) strongly agree. A higher score indicated a higher level of perceived parent autonomy support. Reliability and validity for the HCCQ has been supported by the work of Hadjistavropoulos et al. (2004). In the current study, the HCCQ demonstrated adequate internal consistency ($\alpha = .88$).

Perception of Controlling Behaviors from Parents

A modified short version of the Controlling Coach Behaviors Scale (CCBS; Bartholomew et al., 2011) was used to assess coaches' perceptions of parent controlling behavior. Due to the absence of a measure tapping coach perceptions of parent behavior, the use of the CCBS was deemed appropriate with revisions. To modify this measure, the authors independently screened the items for readability and to assess which items fit best with the study purpose. When multiple items seemed appropriate, comparison of factor loadings from similar empirical research were used to select the best item for each subscale. The modified short version of the CCBS assesses perceptions of controlling parent behavior through four items, one from each of the four subscales. These subscales include: controlling use of rewards (i.e., "The parents of my athletes try to motivate me by promising to reward me if I coach well"), negative conditional regard (i.e., "The parents of my athletes are less friendly with me if I don't make the effort to see things his/her way"), intimidation (i.e., "The parents of my athletes shout at me in front of others to make me do certain things"), and excessive personal control (i.e., "The parents of my athletes expect me to put my sport before other important parts of my life"). Responses from participants

were on a 7-point scale ranging from (1) strongly disagree (7) strongly agree. Validity has been supported for the original scale (Bartholomew et al., 2011); however, the modified CCBS did not demonstrate an adequate level of internal consistency (α = .53). As such, the controlling parent behavior scale was not included in further analysis.

Satisfaction and Thwarting of Psychological Needs

The Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS; Chen et al., 2015) was used to assess satisfaction and frustration of coaches' basic psychological needs. The BPNSFS assesses coaches' basic psychological need satisfaction through 24 items and six subscales. These subscales include: autonomy satisfaction (e.g., "I feel a sense of choice and freedom in the things I undertake"), autonomy frustration (e.g., "I feel pressured to do too many things"), relatedness satisfaction (e.g., "I feel that the people I care about also care about me"), relatedness frustration (e.g., "I feel the relationships I have are just superficial"), competence satisfaction (e.g., "I feel confident that I can do things well"), and competence frustration (e.g., "I feel insecure about my abilities"). Responses from participants were on a 5-point scale ranging from (1) completely untrue to (5) completely true. A global score for need satisfaction and frustration were created by averaging the scores on all items for their respective scale. Validity and reliability of the BPNSFS have been supported by the work of Chen et al. (2015). In the current study, the individual need satisfaction subscales (a= .80-.89) and need frustration subscales ($\alpha = .74-.81$) demonstrated adequate internal consistency. Reliability for the global need satisfaction scale was .87 and for the global need frustration scale was .83.

Coach Burnout

The Coach Burnout Questionnaire (Lundkvist et al., 2014), derived from the Athlete Burnout Questionnaire (CBQ; Raedeke & Smith, 2001), was used to assess coach burnout. The CBQ

assesses burnout through fifteen items and three subscales. These subscales are emotional/physical exhaustion (e.g., "I feel so tired from coaching that I have trouble finding energy to do other things"), devaluation (e.g., "I'm not into coaching like I used to be"), and reduced accomplishment (e.g., "I am not achieving much in coaching"). Responses from participants were on a 5-point scale with anchors (1) almost never, (2) rarely, (3) sometimes, (4) frequently, and (5) almost always. Reliability and validity have been supported by the work of Lundkvist et al., (2014). Reliability for the three burnout dimensions ranged from .81to .93 and was .92 for the global burnout scale in this study.

Data Analysis

SPSS Version 27 (IBM Corp., 2020) was used to conduct preliminary data screening to assess for missing data, non-normality, and outliers (Tabachnick & Fidell, 2013). Descriptive statistics for the sample were calculated including means, standard deviations, reliability coefficients, and bivariate correlations between study variables. Assumptions of normality were assessed through skewness, kurtosis, and multicollinearity. Multivariate outliers were identified through examination of Mahalanobis distance. Given the moderate sample size (< 200) an observed variable path analysis was conducted. Analyses were performed in Mplus version 8 (Muthén & Muthén, 1998-2017) with maximum likelihood estimation to examine the proposed conceptual model where parent autonomy support predicts burnout dimensions by way of need satisfaction and need frustration (because the parent controlling behavior measure was unreliable, this variable was not included in the model). Parent autonomy support was specified in the model as an exogenous observed variable. Global need satisfaction, global need thwarting, and burnout dimensions were specified in the model as endogenous observed variables. Overall fit for the model was assessed using the exact fit chi-square test, Comparative Fit Index (CFI),

Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Residual (SRMR). Significance of direct paths and indirect paths were assessed to determine support for the primary study hypothesis.

CHAPTER IV:

RESULTS

Preliminary Data Screening

Skewness and kurtosis values were assessed and showed adequate values for normality with values predominantly ≤ 1 (Kline, 2011). The assessment of bivariate correlations between the study variables showed no evidence of multicollinearity (r < .85; Kline, 2011). Next, screening for missing data was conducted. A total of 43 participants that did not complete the survey were removed from the data set. Chi-square tests of independence were conducted to examine whether coaches who completed the survey versus those who did not complete the survey differed by gender or sport type (i.e., individual versus team sport). Analyses revealed that coaches' survey completion status did not significantly differ by gender ($\chi^2(2) = 1.18$, p = .55) or sport type ($\chi^2(1) = 1.08$, p = .32). From the remaining 192 participants, only three had missing values across all individual scale items and no more than two data points were missing per person (i.e., four total missing data values across the entire sample). Given the limited amount of missing data, the average value of a respective subscale was used to replace missing data. Finally, multivariate outliers were assessed using Mahalanobis Distance (p< .001), which revealed one outlier that was retained in reporting descriptive statistics but removed prior to the main analysis. Therefore, the main analysis included 191 participants in total.

Descriptive Statistics

Descriptive statistics are found in Table 1. Coaches reported moderate to high perceptions of parent autonomy support and on the need satisfaction subscales. Additionally, there were generally low scores on each of the need thwarting and burnout subscales.

Assessment of bivariate correlations revealed that autonomy supportive parent behavior was

positively correlated with markers of need satisfaction and negatively correlated with markers of need thwarting and burnout. Markers of need satisfaction were also negatively correlated with markers of need thwarting and burnout. Markers of need thwarting positively associated with markers of coach burnout. Accordingly, the overall pattern of correlations was consistent with theoretical expectations.

There were 4 individuals (2.1%) that reported a global burnout score of 4.0 or higher. They did not differ from the remainder of the sample by gender, $X^2(2) = .02$, p = .99, sport type (individual or team sport) $X^2(1) = .19$, p = .67, nor part of season, $X^2(2) = 1.07$, p = .59. There were 9 individuals (4.7%) that reported a global burnout score of 3.5 or higher. They did not differ from the remainder of the sample by gender $X^2(2) = .40$, p = .82, sport type $X^2(1) = .15$, p = .70, nor part of season $X^2(2) = 1.14$, p = .57.

Additionally, coaches were asked what percent of parents they felt were not involved, somewhat involved, and deeply involved on their team. The mean score for coaches that felt the parents on their team were not involved was 29.36%, somewhat involved was 37.14%, and deeply involved was 33.51%.

 Table 1.

 Variable Descriptive Statistics Including Mean, Standard Deviation, Skewness, Kurtosis, Cronbach's Alpha, and Correlations (N = 192)

Dimension	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1. Parent Autonomy Behavior	(.88)												
2. Competence Satisfaction	.19**	(.89)											
3. Autonomy Satisfaction	.44**	.40**	(.80)										
4. Relatedness Satisfaction	.44*	.34**	.42**	(.86)									
5. Competence Thwarting	34**	62**	38**	43**	(.82)								
6. Autonomy Thwarting	36**	25**	44**	45**	35**	(.74)							
7. Relatedness Thwarting	49**	23**	33**	52**	.48**	.35**	(.76)						
8. Exhaustion	22**	32**	19**	36**	.37*	.58**	.33**	(.93)					
9. Devaluation	19**	28**	37**	39**	.30**	.58**	.32**	.61**	(.84)				
10. Reduced Accomplishment	36**	53**	45**	53**	.59**	.48**	.52**	.55**	.62**	(.83)			
11. Need Satisfaction	.47**	.74**	.78**	.79**	62**	50**	48**	38**	45**	65**	(.87)		

Table 1 (cont'd)

12. Need Thwarting	50**	.49**51	**60**	.79**	.78**	.74**	.57**	.53**	.68**	69**	(.83)	
13. Global Burnout	29**	.42**37	**48**	.47**	.64**	.44**	.88**	.87**	.81**	56**	.68**	(.92)
Mean	5.02 4.	.51 4.37	4.32	1.70	2.13	1.46	2.43	1.85	2.64	4.40	1.76	2.31
Standard Deviation	1.10 .5	.56	.62	.72	.79	.56	.88	.72	.58	.44	.53	.62
Skewness	60	9379	86	.98	.65	1.09	.38	1.13	.48	75	.73	.74
Kurtosis	.56 .5	.45	.53	.50	.27	.36	14	1.29	.01	.51	.42	.96

Notes: *pp < .05, **pp < .01, ***pp < .001. Cronbach's alpha on diagonal.

Main Analyses

The main analyses were conducted in two ways. First, the conceptual model was tested using global burnout as the marker for coach burnout. Second, the conceptual model was tested with the three dimensions of burnout as distinct observed variables representing coach burnout. Observed variable path analysis was conducted to examine the conceptual model where perceptions of parent autonomy support predict global burnout perceptions by way of need satisfaction and need thwarting. Standardized beta coefficients are presented below and a summary of the analyses can be found in Table 2 and Figure 2.

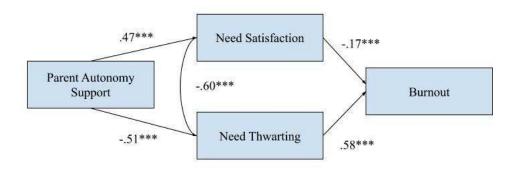
Table 2.Standardized Direct and Indirect Effects for Path Models 1 and 2 (N = 191)

Variables	Direct Effect	(SE)	Indirect Effect	(SE)
Autonomy Support				
Need Satisfaction	0.47***	0.06		
Need Thwarting	-0.51***	0.06		
Need Satisfaction				
Global Burnout	-0.17***	0.07	-0.04*	0.03
Exhaustion	0.02	0.09	0.01	0.04
Devaluation	-0.17*	0.08	-0.05*	0.04
Reduced Accomp.	-0.35**	0.07	-0.09***	0.05
Need Thwarting				
Global Burnout	0.58***	0.07	-0.16*	0.05
Exhaustion	0.57***	0.09	-0.24***	0.06
Devaluation	0.43***	0.08	-0.14***	0.05
Reduced Accomp.	0.45***	0.07	-0.12***	0.04

Note: *pp < .05, **pp < .01, ***pp < .001.

Figure 2.

Final Path Model – Global Burnout



Initial model fit indices suggested a poor fit of the data to the model: $\chi 2(2, N = 191) = 84.99$, p < .001; RMSEA = 0.47 (C.I.LB = 0.38, C.I.UB = 0.55); CFI = 0.74; SRMR = 0.16. Global need satisfaction and global need thwarting were allowed to covary based on examination of the modification indices and given their conceptual similarity. Model fit indices substantially improved and suggested a good fit of the data to the model: $\chi 2(1, N = 191) = 0.97$, p = 0.32; RMSEA = 0.00 (C.I.LB = 0.00, C.I.UB = 0.19); CFI = 1.00; SRMR = 0.01. Parent autonomy support positively associated with need satisfaction (β = .47, p < .001), and negatively associated with need thwarting (β = -.51, p < .001). Global need satisfaction negatively associated with global burnout (β = -.17, p < .05) while global need thwarting positively associated with global

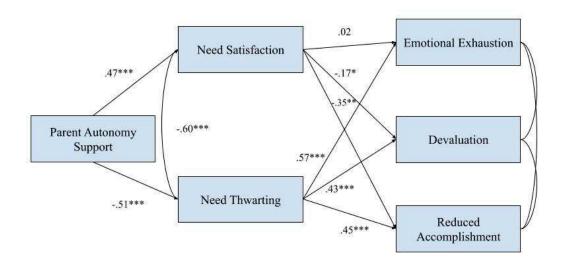
burnout (β = .58, p < .001). The indirect effects from parent autonomy support to burnout by way of need satisfaction (β = -.04, p < .05) and need thwarting (β = -.16, p < .001) were also significant. The analyses accounted for 22% of the variance of global need satisfaction, 26% of the variance of global need thwarting, and 51% of the variance of global burnout.

Observed variable path analysis was also performed to examine the model with inclusion of the respective burnout dimensions. A summary of the analyses can be found in Table 2 and Figure 3. Global need satisfaction and thwarting were allowed to covary, as were the residual terms for the three burnout dimensions. Model fit indices suggested a good fit of the data to the model: $\chi 2(3, N = 191) = 1.85$, p = .60, RMSEA = 0.00 (C.I.LB = 0.00, C.I.UB = 0.10); CFI = 1.00; SRMR = 0.02. Parent autonomy support positively associated with need satisfaction (β = .47, p < .001), and negatively associated with need thwarting ($\beta = -.51$, p < .001). Global need satisfaction negatively associated with perceptions of devaluation ($\beta = -.17$, p < .05) and reduced accomplishment ($\beta = -.35$, p < .001), but was not associated with emotional/physical exhaustion $(\beta = .02, p = .86)$. Global perceptions of need thwarting positively associated with perceptions of devaluation ($\beta = .43$, p < .001), reduced accomplishment ($\beta = .45$, p < .001), and with emotional/physical exhaustion ($\beta = .57$, p < .001). The indirect effects from parent autonomy support to devaluation by way of need satisfaction ($\beta = -.05$, p < .05) and need thwarting ($\beta = -$.14, p < .001) were significant. For reduced accomplishment, indirect effects through need satisfaction ($\beta = -.09$, p < .001) and need thwarting ($\beta = -.12$, p < .001) were also significant. Finally, the indirect pathway to emotional/physical exhaustion by way of need satisfaction was not significant ($\beta = .01$, p = .86) but was significant for need thwarting ($\beta = .24$, p < .001). The analyses accounted for 22% of the variance of global need satisfaction, 26% of the variance of global need thwarting, 31% of the variance of devaluation, 33% of the variance of

emotional/physical exhaustion, and 54% of the variance of reduced accomplishment. Thus, the model meaningfully predicted both the need constructs and burnout constructs.

Figure 3.

Final Path Model – Burnout Dimensions



CHAPTER V:

DISCUSSION

The purpose of this study was to examine if perceptions of supportive and controlling behavior from parents are associated with burnout in coaches by way of psychological need satisfaction or thwarting (see Figure 1). It was hypothesized that (a) controlling behavior from parents would positively associate with burnout perceptions in coaches and be mediated by psychological need frustration, and (b) supportive behavior from parents would negatively associate with burnout perceptions in coaches, mediated by psychological need satisfaction. We found partial support for our hypotheses such that parent autonomy supportive behavior predicted burnout indirectly through the pathways of need satisfaction and thwarting. Because the measure for controlling parent behavior did not demonstrate adequate levels of internal consistency, the construct was dropped from further analyses and therefore we could not test the hypothesis associated with controlling parent behavior.

In line with theoretical expectations, the current study revealed that perceived parent autonomy support was positively associated with need satisfaction. In other words, perceptions of autonomy supportive parent behavior were associated with the global satisfaction of coaches' basic psychological needs (i.e., competence, autonomy, and relatedness). In reference to SDT (Deci & Ryan, 2000), this finding was expected because autonomy supportive interpersonal styles have been associated with intrinsic motivation. The current study suggests that parents are a factor in the social environment that can provide autonomy support to coaches. This is aligned with other sport literature suggesting that athletes' need satisfaction was predicted by perceptions of autonomy supportive coach behavior (Bartholomew et al., 2011). Additionally, Leff and Hoyle (1995) demonstrated that adolescent tennis players' perceptions of parent supportive

behavior are linked with athlete enjoyment of the sport. Although they did not explicitly connect autonomy support with need satisfaction, enjoyment can be viewed as a potential downstream outcome of need satisfaction (Alvarez et al., 2009).

On the other hand, perceptions of parent autonomy support were negatively associated with need thwarting. In other words, as perceptions of parent autonomy support increased, coaches' perceptions of need thwarting decreased. In reference to SDT, this finding was expected because individuals that perceive support from others typically have their needs satisfied rather than thwarted (Deci & Ryan, 2000). This study suggests that supportive perceptions of those in the social environment are not likely to obstruct one's psychological needs. This adds to existing knowledge of coach burnout by showing that perceptions of autonomy support could be a protective mechanism by which coaches are less likely to have their needs thwarted by parents. Again, this finding aligns with Bartholomew et al. (2011), who showed that athletes' perceptions of coach autonomy support were negatively related to need thwarting. It is important to remember that need thwarting has been associated with many maladaptive outcomes and should be avoided. Previous findings in conjunction with this study show that need thwarting could be avoided by perceiving that people in one's social environment are supportive.

In line with the study hypothesis, parent autonomy supportive behavior predicted burnout by way of need satisfaction and need thwarting. From a theoretical lens, it would be expected that perceptions of autonomy supportive behavior from those in one's social environment would satisfy one's needs and, in turn, enable positive well-being. Thus, these findings fit with the expectations of the basic psychological needs subtheory of SDT (Deci & Ryan, 2000). Although few scholars have used SDT to understand burnout in coaches, this finding supports previous

SDT-based work where parent autonomy supportive behavior predicts basic psychological needs in athletes (Amado et al., 2015; Leff & Hoyle, 1995). Multiple studies have examined the effects of parent behavior on athletes and found that parental pressure is associated with lower basic psychological need satisfaction (e.g., Amado et al., 2015), whereas on the other hand parental support is associated with enjoyment and self-esteem in athletes (Leff & Hoyle, 1995). The current study extends these findings to coaching populations and demonstrates the potential salience of parents to coaches' need fulfillment and motivation. Broadly speaking, the way coaches perceive their context can support or thwart their psychological needs (Rocchi & Pelletier, 2017). Coaches that perceive parents as supportive may have their needs for competence, autonomy, and relatedness met and have reduced perceptions of need thwarting. This is expected to benefit well-being, or as examined in the present thesis, potentially reduce illbeing as expressed in burnout perceptions.

Burnout is comprised of multiple symptoms or dimensions, and therefore the distinct components of emotional/physical exhaustion, reduced accomplishment, and devaluation were examined. Though the findings of the dimension-specific model aligned with the global burnout findings, an interesting outcome was that need satisfaction did not predict emotional/physical exhaustion. This finding is consistent with the work of Quested and Duda (2010), who found that dancers' satisfaction of their basic psychological needs was not related to emotional and physical exhaustion. Considering this in concert with the results from the present study, this particular tenet of basic psychological needs theory may be weak within the context of sport burnout. The assumption that need satisfaction is vital to avoid instances of ill-being (i.e., burnout) is not supported within the current study. Quested and Duda argue that basic psychological needs might predict psychological functioning better than physical functioning markers such as

physical demands, amounts of sleep, and so forth. If this is the case, then devaluation and reduced sense of accomplishment are expected to be predicted because they are exclusively psychological in nature. Emotional and physical exhaustion is psychological, but in part draws on the experience of physical exhaustion. Our study measured exhaustion in this combined way, as is consistent with the sport burnout literature. Some scholars have argued that it might be beneficial to deconstruct emotional and physical exhaustion as separate entities within the sporting context (Lonsdale et al., 2007).

Another observation in both the global burnout and burnout dimension models is that need thwarting appears to be a stronger predictor of burnout than need satisfaction. This might be because need satisfaction would relate to more positive outcome variables reflecting well-being, whereas thwarting would relate to more negative outcomes reflecting ill-being. Our findings are comparable to a three-part study by Bartholomew and colleagues (2011), which showed that maladaptive outcomes in athletes were better predicted by need thwarting than need satisfaction. Part 1 of their study confirmed that depression and disordered eating were only predicted by need thwarting, whereas vitality was only predicted by need satisfaction. Although our study did not measure these exact outcomes, burnout is considered a maladaptive outcome. Part 2 of Bartholomew's study sought to examine need thwarting with the presence of a stress related immunological biomarker S-IgA and found that need thwarting did predict higher levels of S-IgA in athletes but need satisfaction did not. Their second study also highlighted that need thwarting predicted burnout better than need satisfaction did, which was the case in our study. Part 3 of their study revealed that need satisfaction did not predict maladaptive outcomes like negative affect and physical symptoms. Overall, the work of Bartholomew et al. (2011) makes a strong case that need satisfaction is a weaker predictor of maladaptive outcomes and need

thwarting is a stronger predictor of maladaptive outcomes. Because the results of our study suggest need thwarting to be a more salient predictor of burnout than need support, future research and practice should deliberately address need thwarting as a contributor to burnout.

Aside from the core study hypotheses, of interest was to see how the Coach Burnout Questionnaire performed in this study. It has only been used in a handful of previous studies (Olusoga et al., 2019), and was originally developed for use with athletes. The results of the current study aligned with theoretical expectations, offering some support for the validity of the CBQ. The patterns of association with other variables like need satisfaction and need thwarting were expected, as the relationship between need satisfaction and burnout was negative while the path from need thwarting to burnout was positive. Previous research has also demonstrated that it is the measure of choice in comparison to the Maslach Burnout Inventory and the Oldenburg Burnout Inventory (Lundkvist et al., 2014). Altogether, the findings of the current study suggest that it would be useful to continue utilizing the CBQ in coach burnout research.

This study had various strengths including a broad participant age range, well-performing measures, a theory-based hypothesis, and focusing on a topic of practical concern. Participants ranged from 21-72 years of age and coached a variety of sports. This span of representation suggests that the findings are generalizable to a range of coaches. Also, there was very little missing data from the survey responses in this study as only four points were missing from the 192 respondents who completed the survey. The survey measures including the HCCQ, BPNSFS, and CBQ all exhibited acceptable reliability ($\alpha\alpha > .70$) as seen in Table 1. Next, the study was grounded in SDT to guide hypotheses and interpretation of results. As noted previously, some coach burnout research has not used theory, which can be problematic when proposing explanations for the phenomenon that is being observed. Finally, in high school

athletics often parents and coaches must work together to best meet young athletes' needs and requirements. Therefore, research on the interpersonal dynamics of parents and coaches is a topic of practical concern.

As with any study, there are also limitations that should be considered. First, the sample included coaches from a high school sport population. While this study suggests that coaches' perceptions of parent behavior are an important factor in coach burnout, this may not generalize to other sport populations (e.g., recreational youth sport, club-based/private sport, college sport). This study was cross-sectional and correlational, which limits the ability to make inferences about causality. However, the results are in line with theoretical expectations and suggest there is value in continued work that can help establish causality. Additionally, because the controlling parent behavior measure showed inadequate internal consistency reliability, the authors were unable to include the measure in the study. Although the study demonstrated that perceived autonomy supportive behavior from parents negatively associates with burnout perceptions in coaches through need satisfaction and thwarting, we cannot interpret how controlling behavior from parents associates with these constructs. To the author's knowledge, there is no measure in the literature that specifically targets controlling parent behavior. It could be helpful to conduct future research that develops such a measure. Finally, the coaches that were surveyed in this study had generally low burnout scores. Although this can be considered a positive finding from the standpoint of coach well-being, a larger range of burnout responses might have led to a different understanding of how parent autonomy support, need satisfaction, and need thwarting contribute to the burnout syndrome.

It is important to note that this study was completed during the covid-19 pandemic. This may have impacted the likelihood that coaches participated in the survey due to pressing issues

such as exhaustion in managing home life, possible extra administrative work, degree of interaction with parents, and whether or not they were also a teacher. Covid-19 required many families to adjust their schedules, and so it could be possible that coaches' time and energy was better spent elsewhere aside from taking an online survey. This may have limited study access to those coaches with relatively higher burnout perceptions. Also, because of the limited in-person interactions, increases in administrative work such as covid-screening forms to participate in practice and taking temperatures may have taken a toll on coaches such that they did not have time to fill out a survey. Finally, about 50% of the sample consisted of coaches who were teachers. It is possible that teacher-coaches may have had increased overall job burnout because they interact with parents in both the school-setting and athletic setting. The effects of this on coach burnout perceptions specifically is unknown.

Considering these limitations, future research should aim to create a measure that taps into coach perceptions of controlling parent behavior, conduct longitudinal studies, ensure the inclusion of participants with high burnout perceptions by actively seeking them out, and use purposefully selected samples. A more robust measure for controlling parent behavior may provide a more holistic view of parents' impact in the social environment for coaches. Although this study offered a starting point for examining perceptions of parent behavior in relation to coach burnout, future studies should also seek to conduct longitudinal investigations to enable causal inferences to made. This is also important because burnout in sport and in other settings is considered to occur from chronic exposure to stressors and failure to cope with them (Smith, 1986). Future burnout studies should aim to establish and use clinical cut off values (Gustafsson et al., 2017). As of right now, it is difficult to determine what values define low, moderate, and severe burnout. If nothing else, researchers should seek to include participants who are likely to

score high on the burnout measure (i.e., averages above the midpoint of the scale). Finally, using a purposeful sample of "burned out" coaches may give better insight as to how parents are a factor in their ill-being. Locating coaches currently experiencing burn out may be challenging, however they are vital in progressing this area of research forward.

There are some practical implications that can be taken away from this study. The results of this study increase understanding related to the role of perceptions about parent behavior. Parents may have positive implications for coach burnout levels depending on whether their behavior is perceived to satisfy or thwart coaches' basic psychological needs. Based on the results of this study, parents may wish to support coaches' basic psychological needs by genuinely connecting with coaches and giving words of appreciation and encouragement. If perceptions of supportive parent behavior are linked with need satisfaction, and need satisfaction is linked with lower levels of burnout in coaches, it is important for coaches to pay attention to their own perceptions. Perhaps self-monitoring perceptions of parents could give coaches a general idea of where they stand in regard to burnout. There are many key factors that come into play when assessing coach burnout, however perceptions of parents are now another piece of the equation to consider. Whether parents know it or not, the way their behavior is perceived by coaches plays an important role in coach burnout because, "Whether a behavior causes need thwarting is not based on the intent of the individual initiating the interaction but rather the perception of said behavior by the person whose needs are affected" (Zakrajsek et al., 2020, p. 45). Parents may not intend to frustrate coaches' basic psychological needs, but coaches may indeed perceive it that way. Ideally, parents should aim to be supportive in their interactions with high school coaches in order to avoid increasing their burnout levels.

In conclusion, perceptions of parent autonomy support are linked with burnout in coaches through need satisfaction and thwarting. If a coach is experiencing burnout symptoms, then it may be of interest to gauge their thoughts and feelings towards the parents on the team they coach. Although perceptions of parents are only one factor among many that are linked with burnout in coaches, they warrant consideration in assessing why coaches burn out. Clearly the way coaches view their social environment has an impact on their psychological well-being, and parents are an important part of the social context of high school sport.

APPENDICES

APPENDIX A

Email to Participants

Dear MHSAA Coach,

I write to you as an affiliate of the Michigan State University Institute for the Study of Youth Sports who is completing her master's thesis. Because of your commitment to coaching high school athletes in Michigan, I seek your participation in our study that examines how parents can impact the motivation of coaches. The study involves completing an online survey that takes about 15 minutes to complete.

In order to participate in this study, you must be 18 years of age or older and coach at a high school in the MHSAA. If you would like to participate in this study, you can access the survey at the link below.

Survey link: https://msu.co1.qualtrics.com/jfe/form/SV_0uNrjmCRBpxgKFM

You make a difference in the lives of student-athletes and it is important to us to better understand what affects your motivation to coach. Thank you for your consideration of this important project!

Please feel free to contact me or my supervisor, Dr. Al Smith (alsmith@msu.edu), if you have questions about the project.

Warm regards, Genevieve Gottardo

APPENDIX B

Information and Consent Form

Parent Impact on Coach Motivation

Primary Researcher: Genevieve Gottardo, B.S., Master's student, Department of Kinesiology, Michigan State University, IM Sports Circle, 308 W. Circle Dr., East Lansing, MI 48824, gottardo@msu.edu or 231-301-2725

Supervisor: Alan L. Smith, Ph.D., Professor and Chairperson, Department of Kinesiology, Michigan State University, IM Sports Circle, 308 W. Circle Dr., East Lansing, MI 48824, alsmith@msu.edu or 517-355-4731.

You are invited to participate in a research study of MHSAA coaches ages 18 and over.

Purpose of the Research: We wish to better understand coaches' motivation based on perceptions of parents in sport.

What You Would Do: You will be asked to complete a survey that contains general questions about the parents of your athletes as well as questions about your coaching environment. Completing the survey takes about 10-15 minutes.

Potential Benefits: There are no direct benefits of participation to you, though you may enjoy the opportunity to share your views. We believe the information from this study could improve our understanding of factors tied to coach motivation.

Potential Risks: The risks of participation in this study are minimal. In rare instances, you may feel uncomfortable answering certain questions. You may skip any question and can withdraw from participation at any time. Loss of confidentiality is a risk of most research, including this study. However, we have taken careful steps to ensure that your confidentiality is protected (please see next section on privacy and confidentiality).

Privacy and Confidentiality: Survey responses will be kept strictly confidential. Your name will not be on the survey and we do not retain a signed consent document from you. This way we have no record anywhere that you participated in the study. We will use your data for research purposes only. All records will be kept for a minimum of 3 years after the close of the study in a locked, secure location and confidentiality will be protected to the maximum extent of the law. When required by law, government representatives and the Michigan State University Human Research Protection Program (HRPP) may deem it necessary to look at our study records. However, there will be no way to link you with those records because we do not retain your name in any database and you do not include your name on the survey.

Your Right to Participate, Say No, or Withdraw: You do not have to participate in this research project. Participation in this research is entirely voluntary. You can decline to participate, or change your mind and withdraw at any time. Your refusal to participate will involve no penalty to you.

Compensation and Costs for Being in the Study: You will not be compensated for participating in the study. There is no cost to you for participation in the study, beyond the time to complete the survey.

Contact Information: If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report injury, please contact the researcher, Genevieve Gottardo, Department of Kinesiology, Michigan State University, IM Sports Circle, 308 W. Circle Dr., East Lansing, MI 48824. Genevieve can be reached at gottardo@msu.edu or 231-301-2725.

If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 4000 Collins Road, Suite 136, Lansing, MI 48910.

Thank you for your consideration. If you wish to participate in this study, please remove this information and consent page from the survey packet and keep for your records. You may begin answering the survey questions. Proceeding with the survey constitutes your consent to participate in this research.

Remember – please do NOT include your name anywhere on the survey. When you have completed the survey please check to be sure that you answered each item (except any that you choose not to answer) and then hand to the researcher.

Thank you again for your consideration.

APPENDIX C

Demographics

1.	Gende	r
		Male
		Female
		Other
		Prefer not to say
2.	Age (y	rears):
3.	Race	
		American Indian/Alaskan Native
		Asian
		Black or African American
		White
		More than one race
		Unknown/Other
4.	Ethnic	ity
		Hispanic or Latino
		Not Hispanic or Latino
5.	What t	ype of high school do you coach in?
		Public
		Private

6.	What division is the team you coach?												
7.	Are you currently coaching in season or off season?												
	☐ In-season												
	☐ Off-season												
8.	What sport do you coach? If multiple, please choose your <i>primary</i> sport.												
	□ Baseball												
	☐ Basketball												
	☐ Bowling												
	☐ Competitive cheer												
	☐ Cross country												
	☐ Football												
	☐ Football (8-player)												
	□ Golf												
	☐ Gymnastics												
	☐ Ice hockey												
	☐ Lacrosse												
	□ Skiing												
	□ Soccer												
	□ Softball												
	☐ Swim & dive												
	☐ Tennis												

☐ Track & Field
□ Volleyball
☐ Wrestling
9. Do you coach boys, girls, or both?
□ Boys
☐ Girls
□ Both
10. Are you a head coach or assistant coach?
☐ Head coach
☐ Assistant coach
11. How long have you coached your current team (years)?:
12. How long have you coached this sport (years)?:
13. How long have you coached total, regardless of the sport (years)?:
14. Considering the parents associated with your team, what % do you estimate you never
hear from (i.e., are not involved)
to 100%)

APPENDIX D

Modified Healthcare Climate Questionnaire 6-item version (HCCQ)

This questionnaire contains items that are related to interactions with the parents of your athletes. Parents have different styles when interacting with coaches, and we would like to know more about how you have felt about your encounters with them. Your responses are confidential. Please be honest and candid.

1.	I fee	el that	t the p	parents	of n	ny ath	aletes provide me with choices and options	
	1	2	3	4	5	6	7	
Strongly	disagree	;		Neutral			Strongly agree	
2.	I fee	el und	lersto	od by	the p	arent	s of my athletes	
	1	2	3	4	5	6	7	
Strongly	disagree	;		Neutral			Strongly agree	
3.	The	parei	nts of	my at	hlete	s con	vey confidence in my ability to make changes	
	1	2	3	4	5	6	7	
Strongly	disagree	;		Neutral			Strongly agree	
4.	4. The parents of my athletes end						ourage me to ask questions	
	1	2	3	4	5	6	7	
Strongly disagree Neutral							Strongly agree	
5.	5. The parents of my athletes list						en to how I would like to do things	
	1	2	3	4	5	6	7	
Strongly	disagree	;		Neutral			Strongly agree	
6.	The	parei	nts of	my at	hlete	s try	to understand how I see things before suggesting	ıg a new
	way to do things							
	1	2	3	4	5	6	7	
Strongly	disagree	;		Neutral			Strongly agree	

APPENDIX E

Modified Short Version Controlling Coach Behaviors Scale (CCBS)

1.	The	parer	nts of	my at	hletes	s try	to motivate me by promising to reward me if I coach well	
	1	2	3	4	5	6	7	
Strongly	disagree						Strongly agree	
2.	The	parer	nts of	my at	hletes	s are	less accepting of me if I have disappointed them	
	1	2	3	4	5	6	7	
Strongly	disagree						Strongly agree	
3.	Pare	ents ir	ntimic	date m	e into	doir	ng things they want me to do	
	1	2	3	4	5	6	7	
Strongly	disagree						Strongly agree	
4. Parents try to interfere in aspects of my life outside of sport								
	1	2	3	4	5	6	7	
Strongly	disagree						Strongly agree	

APPENDIX F

Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS)

1.	I feel a sense of choice and freedom in the things I undertake								
	1	2	3	4	5				
Complete	ely untru	e			Completely true				
2.	I fe	el tha	t my	decis	ions reflect what I really want				
	1	2	3	4	5				
Complete	ely untru	e			Completely true				
3.	I fe	el my	choi	ces ex	xpress who I really am				
	1	2	3	4	5				
Complete	ely untru	e			Completely true				
4.	I fee	el I ha	ive be	en do	oing what really interests me				
	1	2	3	4	5				
Complete	ely untru	e			Completely true				
5.	Mos	st of t	he thi	ngs I	do feel like "I have to"				
	1	2	3	4	5				
Complete	ely untru	e			Completely true				
6.	I fee	el forc	ced to	do n	nany things I wouldn't choose to do				
	1	2	3	4	5				
Complete	ely untru	e			Completely true				
7.	7. I feel pressured to do too many things								
	1	2	3	4	5				
Complete	ely untru	e			Completely true				
8.	My	daily	activ	ities 1	feel like a chain of obligations				

1 2 3 4 5

9.	9. I feel that the people I care about also care about me								
	1	2	3	4	5				
Complete	ly untrue	;			Completely true				
10	. I fee	el con	nected	d wit	th people who care for me, and for whom I care				
	1	2	3	4	5				
Complete	ly untrue	;			Completely true				
11	. I fee	l close	and	conn	nected with other people who are important to me				
	1	2	3	4	5				
Complete	ly untrue	;			Completely true				
12	. I exp	erienc	ce a w	arm	feeling with the people I spend time with				
	1	2	3	4	5				
Complete	ly untrue	;			Completely true				
13	. I fee	l exclı	ided 1	from	the group I want to belong to				
	1	2	3	4	5				
Completely untrue					Completely true				
14	. I fee	l that _l	peopl	e wh	to are important to me are cold and distant towards me				
	1	2	3	4	5				
Complete	ly untrue	;			Completely true				
15	. I hav	e the	impre	essio	n that people I spend time with dislike me				
	1	2	3	4	5				
Complete	ly untrue	;			Completely true				
16	16. I feel the relationships I have are just superficial								
	1	2	3	4	5				
Complete	Completely untrue Completely true								
17	17. I feel confident that I can do things well								

	1	2	3	4	5				
Complete	Completely untrue Completely true								
18. I feel capable at what I do									
	1	2	3	4	5				
Complete	ly untrue				Completely true				
19. I feel competent to achieve my goals									
	1	2	3	4	5				
Complete	ly untrue				Completely true				
20.	I feel	I can	succe	essfi	ally complete difficult tasks				
	1	2	3	4	5				
Complete	ly untrue				Completely true				
21.	I hav	e seri	ous do	oubt	s about whether I can do things well				
	1	2	3	4	5				
Complete	ly untrue				Completely true				
22.	I feel	disap	point	ed v	vith many of my performance				
	1	2	3	4	5				
Complete	ly untrue				Completely true				
23.	I feel	insec	eure al	bout	my abilities				
	1	2	3	4	5				
Complete	ly untrue				Completely true				
24.	24. I feel like a failure because of the mistakes I make								
	1	2	3	4	5				

Completely true

Completely untrue

APPENDIX G

Coach Burnout Questionnaire (CBQ)

Please read each statement carefully and decide if you ever feel this way about your current coaching situation. Your current sport participation includes all the training you have completed during this season. Please indicate how often you have had this feeling or thought this season by circling a number 1 to 5, where 1 means "I almost never feel this way" and 5 means "I feel that way most of the time." There are no right or wrong answers, so please answer each question as honestly as you can. Please make sure you answer all items. If you have any questions, feel free to ask.

How often do you feel this way?

1	2	3	4	5					
Almost Never	Rarely	Sometimes	Frequently	Almost Always					
1. I'm accomplishing many worthwhile things in coaching. 1 2 3 4 5									
2. I feel so tired from coaching that I have trouble finding energy to do other things									
1 2 3 4 5									
3. The effort I spend coaching would be better spent doing other things. 1 2 3 4 5									

- 4. I feel overly tired from coaching. 1 2 3 4 5
- 5. I am not achieving much in coaching. 1 2 3 4 5
- 6. I don't care as much about my coaching performance as I used to. 1 2 3 4 5
- 7. I am not performing up to my ability in coaching. 1 2 3 4 5
- 8. I feel "wiped out" from coaching. 1 2 3 4 5 $\,$

- 9. I'm not into coaching like I used to be. 1 2 3 4 5
- 10. I feel physically worn out from coaching. 1 2 3 4 5
- 11. I feel less concerned about being successful in coaching than I used to 1 2 3 4 5
- 12. I am exhausted by the mental and physical demands of coaching. 1 2 3 4 5
- 13. It seems that no matter what I do, I don't coach as well as I should. 1 2 3 4 5
- 14. I feel successful at coaching. 1 2 3 4 5
- 15. I have negative feelings toward coaching. 1 2 3 4 5

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