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The Gift of the Grind: Reframing Extra Exercise in Sport as Opportunity, Not Punishment

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Abstract:

Exercise is central to sport participation, yet coaches have frequently used additional exercise as punishment for mistakes, poor performance, lack of focus, or behavioral infractions. This article challenges that practice by proposing a conceptual exercise-as-reward (EAR) framework that reframes voluntary, developmentally appropriate extra exercise as an opportunity athletes may experience as beneficial rather than as a punitive consequence. Drawing from research on exercise as punishment, Self-Determination Theory, neuroplasticity, and autonomy-supportive coaching, we argue that the meaning athletes attach to extra exercise may shape motivation, competence, enjoyment, and long-term engagement in sport. Practical applications for the proposed REACH framework, shaped under the parameters of EAR frameworks, include specialized skill sessions, athlete choice, performance rationale, shared decision-making, and task-focused feedback. Potential concerns, including overtraining and the belief that punishment builds mental toughness, are also addressed. The article calls for coaches and coach education programs to reconsider disciplinary uses of exercise and adopt more positive uses of additional exercise to improve performance outcomes. While the REACH and EAR frameworks guide recontextualizing exercise as opportunities, they are conceptual in nature, and empirical studies are needed to evaluate coach adoption, behavioral and psychological outcomes, and performance effects.

Abstract

Exercise is central to sport participation, yet coaches have frequently used additional exercise as punishment for mistakes, poor performance, lack of focus, or behavioral infractions. This article challenges that practice by proposing a conceptual exercise-as-reward (EAR) framework that reframes voluntary, developmentally appropriate extra exercise as an opportunity athletes may experience as beneficial rather than as a punitive consequence. Drawing from research on exercise as punishment, Self-Determination Theory, neuroplasticity, and autonomy-supportive coaching, we argue that the meaning athletes attach to extra exercise may shape motivation, competence, enjoyment, and long-term engagement in sport. Practical applications for the proposed REACH framework, shaped under the parameters of EAR frameworks, include specialized skill sessions, athlete choice, performance rationale, shared decision-making, and task-focused feedback. Potential concerns, including overtraining and the belief that punishment builds mental toughness, are also addressed. The article calls for coaches and coach education programs to reconsider disciplinary uses of exercise and adopt more positive uses of additional exercise to improve performance outcomes. While the REACH and EAR frameworks guide recontextualizing exercise as opportunities, they are conceptual in nature, and empirical studies are needed to evaluate coach adoption, behavioral and psychological outcomes, and performance effects.

The Gift of the Grind: Reframing Extra Exercise in Sport as Opportunity, Not Punishment

Exercise occupies a paradoxical position within many sport environments. Although it is the primary means by which athletes train, improve, and engage in sport, coaches frequently use additional exercise as punishment for behavioral, technical, tactical, or attentional errors[1–3]. Push-ups, wind sprints, burpees, extended conditioning drills, additional repetitions, and extra workouts may be assigned in response to athletes' mistakes, lapses in focus, poor performance, lateness, lack of hustle, team conflict, or behavioral infractions[2,3]. These practices may be directed toward individual athletes, such as when a player is required to run laps after missed shots. Equally, they can be targeted at an entire team, such as when all athletes, or all athletes except the player at fault, complete wind sprints because one teammate arrived late to practice. Similar practices occur across all levels of sport, including volunteer and recreational coaching[4].

For conceptual clarity, we distinguish punishment, discipline, consequence, behavior management, and behavioral correction. Punishment refers to a consequence imposed with the intent of reducing an undesired behavior; consistent with operant conditioning, whether a consequence functions as punishment is ultimately determined by its effect on subsequent behavior rather than by the label applied to it[5]. Discipline, more broadly, refers to teaching and reinforcing responsibility, self-regulation, and agreed-upon expectations, and therefore need not be punitive. Consequence refers generally to an outcome or response following behavior and may be punitive, restorative, educational, or otherwise behaviorally related. Behavior management and behavioral correction refer to broader processes through which coaches respond to or seek to influence athlete behavior and are not treated as synonyms for punishment. Accordingly, when exercise is imposed in response to undesirable behavior with punitive intent, we refer to it as exercise as punishment or punitive exercise.

Additional exercise as a form of punishment may come in many forms, such as requiring athletes to run after missed free throws, perform push-ups for dropped passes, complete extra conditioning when equipment is not put away, or repeat drills when a coach perceives insufficient effort. Although these examples differ in severity and context, they reflect a broader tendency to use exercise as punishment in response to undesirable behavior, rather than as a purposeful component of athlete development and training[2,6]. Psychologically harmful environments are unintentionally created by coaches who use exercise as a punishment, where athletes who fail to meet performance or behavioral standards are subject to physical penalties and subsequently develop negative associations with exercise, decreased motivation, increased injury risks, and adverse mental health outcomes[1]. Instead, coaches may benefit from re-imagining "exercise-as-reward" (EAR) within their coaching practices; a conceptual framework, where exercise and additional exercise are reframed as planned, purposeful training opportunities with physical and mental advantages for athletes, rather than imposed as punishment for undesired behaviors[1,2].

It is not uncommon for disciplinary exercises to cross safety thresholds, and reliance on punitive exercises poses a fundamental safeguarding issue rather than simply a motivational or performance problem. Sport maltreatment literature explicitly categorizes coach-mandated physical exercise used to punish, humiliate, or enforce compliance as a form of non-contact physical abuse[7,8]. Severe cases reported in media and legal proceedings highlight acute physical harm, health exhaustion, rhabdomyolysis, and death resulting from punitive conditioning drills[9,10]. While extreme cases illustrate severe consequences, they exist along a continuum of abusive coaching practices rooted in power imbalances, coercion, and normalized harm[7,11]. Importantly, positively framing an activity, or describing it as an opportunity for growth, does

not by itself eliminate underlying coercion or physical risk; an activity tied to status, selection, coach approval, or future opportunity can remain controlling regardless of how positively it is presented.

Publicly documented cases across scholastic, collegiate, and professional settings further suggest that punitive exercise remains a recognizable feature of sport, including reports of punishment runs, team sprints, and high-volume push-up workouts that have been associated with athlete injury or hospitalization[12–14]. While the prevalence of exercise as a punishment varies across sports, media reports serve as illustrative, qualitative examples of specific incidents. Following extreme physical workouts administered by coaches in 2019, 12 members of the University of Houston women's soccer team were diagnosed with rhabdomyolysis: a breakdown of skeletal muscle occurring when athletes exceed physical capacities, which put them at a high risk for kidney failure and more serious medical problems[10]. In 2009, a Grambling State basketball player was forced to complete a four-mile outdoor run in the August heat, and after which he suffered a severe case of heatstroke that required hospitalization[9]. These practices are alarming because leading organizations have advised against administering exercise as punishment, emphasizing that exercise should be reframed as a positive, developmentally appropriate experience[1,3,15–17]. This guidance for reframing exercise as an opportunity expands current literature originating in physical education and school-based contexts to include recreational, youth, collegiate, and elite sport coaching practices.

Embedded within this conventional guidance is the assumption that athletes prefer to minimize coercive physical exertion, and that additional exercise is therefore a (supposedly effective) deterrent. In psychological and behavioral terms, additional exercise has traditionally been implemented by coaches to decrease the frequency of undesired behaviors, often relying on

aversion, fear, or shame (e.g., B.F. Skinner's Operant Conditioning)[5]. However, this assumption warrants reconsideration, as enjoyment of sport does not equate to blanket consent to behavior-contingent physical exercise. Many athletes enter sport precisely *because* they want opportunities to move, compete, test themselves, and fully engage in activities that demand endurance and strength[18,19]. To shift this perspective, exercise need not be understood primarily as an imposed punishment, but as planned, purposeful training through which athletes experience challenge, growth, competence, and belonging. When coaches understand and communicate the positive aspects of exercise, they can create environments that promote health, motivation, and teamwork, helping athletes view exercise as a valuable, planned training tool rather than as a health-related consequence[1]. Thus, reimagining exercise as a training opportunity may offer a more developmentally appropriate and philosophically coherent approach to coaching practice.

This duality reveals a central tension within coaching practice: extra exercise can be perceived either as a punishment or a privilege. Historically, the use of exercise as punishment has been an enduring feature of sports and physical education. For example, Aasland et al.[20] remarked that "PE [physical education] is rooted in ideas and practices derived from military, sports and exercise physiology discourses. PE teachers inculcated with these discourses have limited ability to discern the paradox of assigning vigorous exercise to their pupils as both a high-value activity and a punishment" (p. 490). These measures are commonly justified as mechanisms for developing an athlete's grit and mental toughness; however, alternative implementations of exercise remain an under-researched phenomenon in sport[6,21].

Exercise is widely recognized for its long-term health benefits. Under the right circumstances, it can be perceived as an immediate, consumable reward, processed by the brain in ways similar to other rewards, such as food or money[22]. However, if exercise is framed as

punishment, this association may diminish enjoyment in sport, lead to sport attrition, and ultimately shape athletes' long-term perceptions of exercise and reduce their motivation to engage in it[1,23]. We contend that athletes can develop more positive associations with additional exercise when it is reconceptualized as being beneficial to physical and mental performance outcomes. By educating athletes on how these training opportunities directly contribute to overall performance, coaches can leverage positive reinforcement strategies to help athletes strengthen their associations between effort, motivations, performance, and the cognitive perception of exercise as a valuable opportunity[1,5,22].

Coaches are uniquely positioned to shift this narrative toward one that inspires athletes by increasing perceptions of ownership and competence, thereby promoting positive team environments and optimizing athlete development, psychological safety, and overall team performance[24,25]. Alternatives to using exercise as punishment could include purposefully planning open discussions with athletes about game performance, skills, strategies, and physical training, and promoting athlete autonomy by including them in meaningful discussions about team goals and ways to achieve them[26]. However, it should be emphasized that shifting this narrative does not mean eliminating discipline or appropriate behavioral responses. Rather, it means decoupling additional exercise from punishment. Responses to inappropriate behavior should be proportionate and behaviorally related rather than involve withholding exercise, coaching support or appropriate developmental opportunities. Removing valued training privileges is not a logical consequence of most behavioral lapses, because the connection between the behavior and the withdrawn opportunity is rarely clear; a more defensible response is proportionate and behaviorally related, such as requiring an athlete who does not put equipment away to help organize it. This also positions additional exercise as periodized physical

work within athletes' existing training plans. Because instruction, coaching attention, and developmental opportunities are never withheld in response to behavior, the risk that such decisions might be applied inconsistently or shaped by favoritism or bias is directly avoided. This is especially important for youth and fee-paying participants, for whom withholding meaningful instruction would be particularly difficult to justify. Supplementary opportunities are allocated based on developmental need and training plans, and any selection decisions should be communicated transparently and applied consistently across athletes.

Coaches' efforts to frame voluntary exercise as personally meaningful and potentially valuable may support more self-determined motivation and help develop more resilient, optimistic athletes through autonomy-supportive behaviors. Coaches can make small changes to begin shifting this narrative, such as adjusting the language they use when speaking to athletes and incorporating autonomy-supportive phrases such as "get to," "choose to," and "opportunity" when explaining additional exercises. Coaches should also communicate the reasoning behind extra exercises and the physical, training, and developmental benefits for athletes' performance. These changes may help shift athletes' perceptions of extra work from a form of punishment to challenges and growth opportunities[4,27].

Exercise as a Reward (EAR) is defined here as an autonomy-supportive pedagogical approach that frames voluntary, developmentally appropriate supplementary physical training as a valuable opportunity for skill mastery rather than as a punitive penalty or a controlling transaction[1–3]. Within EAR, therefore, reward refers to the athlete's experience of voluntary training as personally valuable or satisfying, not to a coach-controlled incentive made contingent on prior behavior, task completion, or performance. However, a critical conceptual correction is required: physical training must not be viewed as a strict binary between punishment and reward.

For clarity, we distinguish three categories to separate routine training from genuinely additional activities. *Regular planned training* is the core work prescribed within the periodized training plan and is not optional. *Optional supplementary development* includes activities beyond the planned workload, such as extra skill work, film review, or specialized conditioning, which athletes can accept or decline without consequence. *Additional physical load* means any increase in training stress beyond the planned workload.

The key distinction is whether an activity's physical demands have already been counted toward the training plan. If so, it is planned training, even if the coach describes it as optional. Declining it would leave the athlete short of the planned workload, making the offer of choice misleading. Genuinely optional activities must be in addition to the plan, and declining them must incur no penalty, training shortfall, or loss of standing. Coaches can still support autonomy by allowing athletes to choose between planned activities, but this differs from choosing whether to take part in supplementary development.In sound athletic development, physical training is primarily a planned, periodized, and objective component of an athlete's training program, dictated by physiological, tactical, and developmental needs rather than behavioral compliance[1,6,21]. Additional physical work need not be imposed as punishment or made contingent on behavioral compliance[1,2]. Conditioning, repetition, and technical work should be integrated into practice because they are developmentally appropriate, aligned with athlete and team goals, and supported by training plans.

Failure of the Punitive Model

The persistence of punitive exercise in sport can be explained by the Theory of Reasoned Action, which posits that a coach's personal beliefs underpin their behavior[28]. Therefore, many coaches rely on exercise as a form of punishment because they believe it establishes their

authority, provides a subtle means of conditioning athletes, and builds athletes' mental toughness[26]. In addition, coaches may repeat their own experiences as athletes, creating a tradition of repeated behaviors[29]. However, while coaches might believe they are improving their athletes' fitness, disciplinary exercise is ill-advised because it increases fear, anxiety, and competitive stress, perpetuates ego-involved climates and social isolation that contribute to sport attrition, and exacerbates issues arising from overtraining[1,26].

The traditional use of exercise as punishment is more than an old-school practice; it also carries documented risks for athletes. The SHAPE America[3] position statement warns coaches and physical educators that using exercise as punishment is correlated with increased rates of sport dropout, the development of negative attitudes toward fitness, and a diminished value placed on exercise as a health-promoting behavior. Sport-specific consequences from using exercise as a punishment are similarly damaging. Punitive exercise can lead to resentment toward their coach among athletes, decreased overall motivation for their sport, long-term physical and mental health problems, and an increased risk of physical injury[4,6].

This traditional model may be problematic for several reasons. Punishment-based exercise has been associated with heightened stress responses and negative perceptions of physical exertion[1,30]. Such responses could, in some contexts, affect decision-making under pressure, adaptation, or performance; however, the available evidence does not establish a single causal sequence linking these outcomes. Therefore, using exercise as punishment may be counterproductive to the goals of promoting physical literacy and lifelong health through involvement in sport[2]. We propose a novel conceptual framework to reshape the landscape of sport and potentially lead to more favorable outcomes and perceptions of exercise among

athletes and coaches alike. Continuing to present exercise as a punishment is a disservice to athletes and their overall development and well-being.

Defining the "Exercise as Reward" (EAR) Framework

To address some of the issues presented above, coaches may benefit from adopting an "exercise-as-reward" (EAR) conceptual framework, which reframes voluntary extra exercise as an opportunity rather than a dreaded consequence and integrates developmentally appropriate exercises within athletes' goals and training plans[2]. Paulson and Knipe's article supported the broader idea that athletes should be encouraged to seek out exercise rather than avoid it. Although the article did not explicitly utilize an EAR framework, it suggested that additional exercise is productive when athletes view it as a developmental opportunity rather than a retributive response to error. Within this proposed framework, extra work is not conceived as a higher volume of labor or as "earned reps" awarded for compliance. Rather, supplementary practice is understood as voluntary to improve performance, build competence, and support athlete development.

The EAR framework moves training away from being a top-down enforced punishment and instead positions it as a collaborative investment (i.e., between coach and athlete) in athlete development. Central to this notion is shared decision-making, which suggests that players and coaches openly discuss game performance to identify specific skills or fitness training that would positively affect individual and team goals and outcomes[1,26]. When coaches and players engage in shared decision-making, coaches can positively influence athletes' autonomy and overall satisfaction with sport, which, in turn, may reframe extra exercise as a sought-after tool that athletes understand to be in alignment with their development in the sport but which does not detract from general care, consideration, and training[19,26].

For example, rather than threatening to respond to a lack of focus by demanding that athletes run laps, a coach might make a brief, specialized skill block available as an optional component of practice. In these specialized skill sessions, coaches might provide access to advanced training technology, individualized feedback, or one-on-one coaching when feasible. When supplementary work is appropriate in the training plan, coaches can offer it as an elective rather than make access contingent on prior behavior, task completion, or performance. This approach preserves the possibility that exercise is experienced as personally valuable without using it as a controlling incentive[22,31]. More generally, coaches can recontextualize the role of extra exercise in training to highlight the direct physical and mental advantages of exercises that athletes might otherwise perceive as unenjoyable[1]. This shift would transform athletes' perceptions of additional training from a consequence into an investment in their athletic development, while recognizing it to be voluntary and without impact on training resources, attention, or drills afforded to all athletes. Regarding training sessions where a losing team might traditionally be made to do push-ups or run laps, a coach could instead make any supplementary activity available based on the athlete's goals, physical readiness, and training plan, rather than on whether the team won or lost.

The EAR framework would not eliminate discipline or the need for coaches to respond to inappropriate behavior. Rather, it separates discipline from the use of exercise or developmental opportunities as punitive contingencies. When exercise or conditioning is prescribed in response to undesirable behavior, athletes may comply primarily to avoid punishment[6,24]. Instead, coaches and athletes should establish expectations and proportionate, behaviorally related responses at the beginning of the season. Such responses may include restorative or educational consequences that address the behavior without withholding exercise, coaching support, developmental

opportunities, or appropriate participation opportunities. In this sense, discipline is retained as a teaching process while developmental opportunities are not used as punitive contingencies. When coaches and athletes work together to create team climates that value open communication, collaboration, a strong work ethic, and focus, athletes may experience greater confidence, self-esteem, and self-endorsed adherence to team rules. At the same time, traditional punitive measures may become less necessary and less relevant[26].

While the EAR framework is compelling, it is conceptual in nature and not yet an empirically validated coaching intervention. We acknowledge that empirical research is needed to more critically evaluate athlete motivation, coach adoption, behavioral outcomes, performance effects, and long-term athlete development resulting from the intentional implementation of EAR frameworks in sport coaching.

Neurological and Behavioral Advantages

Success, frequently judged by winning and losing, is a central responsibility within coaching practice[32]. Thus, coaches should seek opportunities that enhance their chances of success and the successful development of their athletes. A tentative, explanatory possibility for the EAR framework is the brain's physiological capacity for neuroplasticity. In sports settings, neuroplasticity refers to the brain's ability to change its structure and function in response to varied training environments and coach-athlete experiences, both positive and negative[33]. Athletes' brains are context-sensitive, and because extra exercise is traditionally used as punishment, they may be conditioned to interpret additional reps or workouts negatively. If coaches adopt the EAR framework, tailor instruction and feedback to athletes' developmental and learning stages, and consistently present voluntary extra exercise as a potentially valuable

opportunity, they may help reshape athletes' shift their interpretation from punishment to a positive experience that represents an opportunity for growth[22,33].

This viewpoint aligns with Self-Determination Theory (SDT), which suggests that athletes have three basic psychological needs that must be met for them to experience high-quality motivation and well-being: autonomy, competence, and relatedness[31]. SDT has also been applied in kinesiology-based educational contexts to explain how autonomy, competence, and relatedness may support engagement and persistence[34,35]. Autonomy refers to athletes' sense of ownership over their actions, training, and/or overall goals. Competence refers to an athlete's need to feel effective, capable, and in control of mastering their athletic abilities. Finally, relatedness describes the need for athletes to feel connected to others, cared for, and to experience a sense of belonging within a group or team.

SDT does not treat motivation as a simple binary between intrinsic and extrinsic; rather, extrinsic motivation describes situations in which athletes are motivated by external rewards or by fear of punishment, such as traditional disciplinary approaches that prescribe additional exercise as a consequence[31]. Extrinsic motivation exists along a continuum, varying in relative autonomy from external regulation to more intrinsic, self-endorsed regulation (e.g., introjected, identified, and integrated regulation)[31]. Conversely, intrinsic motivation is considered a more self-determined form of motivation, in which athletes remain engaged and committed to sport because participation itself is experienced as enjoyable, meaningful, or personally satisfying[31].

An important qualification concerns the use of rewards within SDT. A meta-analysis of 128 studies found that expected tangible rewards, including engagement-contingent, completion-contingent, and performance-contingent rewards, can undermine intrinsic motivation[36]. SDT interprets this risk in part through the extent to which external contingencies are experienced as

controlling and therefore thwarting autonomy[31]. Accordingly, EAR should not be interpreted as recommending that coaches dispense additional exercise as an external incentive for behavioral compliance, task completion, or performance. Rather, the framework uses reward to describe how athletes may experience voluntary, developmentally appropriate training opportunities as personally valuable when those opportunities support autonomy, competence, relatedness, and self-endorsed goals. Athlete voice, choice, and access to appropriate developmental support should therefore not be contingent on meeting coach-defined expectations first.

When coaches better satisfy athletes' needs for autonomy (e.g., feeling in control) and competence (e.g., feeling capable), athletes may perceive exercise and training activities as more intrinsically motivating and valuable[24]. Athletes who are more intrinsically motivated show higher levels of persistence, perform better under pressure, and have significantly lower rates of burnout compared to those driven by external rewards or fear[37]. If coaches continue to use extra exercise as a punishment, they may undermine their athletes' autonomy, relatedness, and competence.

Practical Applications: Autonomy-Supportive Coaching

While Self-Determination Theory provides a roadmap for effective coaching and for structuring supplementary exercise so that it may be experienced as personally valuable rather than controlling, research has identified a specific coaching style, termed autonomy-supportive coaching, as a means of satisfying the psychological needs described by the theory[24,38]. Autonomy-supportive coaching involves more than offering a selection of predetermined activities. It also requires acknowledging athletes' perspectives, providing meaningful rationales for training, minimizing controlling language, supporting athletes' self-endorsed goals, and allowing genuine input into decisions that affect them. Effectively implementing an EAR

framework through an autonomy-supportive coaching lens would also require coaches to create motivational climates for their athletes. Such climates are characterized by developmentally appropriate, positive, and instructional feedback, and athletes training in these climates have been shown to report higher levels of intrinsic motivation, perceived competence, self-esteem, and team cohesion[18,25,26,30,39].

Autonomy-supportive coaching strategies can increase athletes' autonomy in several ways, including allowing athletes to make decisions about aspects of their training, such as the order in which drills are completed, the type of skill work emphasized during a session, the decision whether or not to participate in extra exercise without penalty, or the competitive constraints used within practice-based games. For example, athletes might be invited to choose between finishing practice with small-sided competition, position-specific skill stations, or a conditioning activity directly connected to performance goals. Similarly, athletes could help develop rules for practice-based games, such as scoring systems, communication expectations, effort standards, or consequences for unsafe or unsporting behavior. Involving athletes in these decisions does not remove the coach's leadership role; rather, it creates shared ownership of the training environment. When athletes are given appropriate voice and choice, they may be more likely to understand the purpose of training activities, commit to agreed-upon expectations, and view additional work as something connected to their own development rather than as something imposed on them.

Autonomy-supportive coaching emphasizes explaining the "why" behind drills, rules, and techniques rather than simply requiring athletes to comply with them[24]. This helps athletes understand that their coaches are committed to understanding and collaborating with them rather than relying on excessive pressure or criticism. If coaches rely on control and intimidation,

athletes may feel pressured to comply to avoid punishment. According to SDT, this external motivation may ultimately reduce athletes' long-term enjoyment and performance in sport[31,38]. However, if coaches adopt autonomy-supportive coaching styles, they can better foster team cultures that frame hard work and additional practice as valued opportunities for development rather than contingent on prior compliance or performance. In summary, a well-periodized program may include supplementary work, but that work should be selected according to developmental needs rather than because an athlete has earned it.

Imagining an "Exercise as a Reward" Framework for Application

Although the current literature offers no explicit guidance on using exercise as an opportunity in sport, there are recommendations for alternatives to using it as a punishment. These include, but are not limited to, letting a winning team pick an exercise for the entire group to do together at the end of practice, rewarding positive behaviors by allowing athletes to select the next exercise or drill, co-creating team rules and expectations, and reminding athletes about these guidelines, and communicating with athletes when these expectations are not met[3]. Some of these recommendations nevertheless make athlete choice or access to activities contingent on winning or displaying desired behavior. Because such contingencies can conflict with autonomy support, the REACH framework presented below modifies this approach by emphasizing voluntary opportunities and noncontingent athlete choice[31,36]. Due to limited evidence for practical strategies to reframe exercise outside punitive contexts, the following section presents practical ways to frame and implement voluntary additional exercise as potentially valuable for athletes, explained through the acronym REACH. We position EAR and REACH as an applied, domain-specific translation of Self-Determination Theory and autonomy-supportive coaching rather than as a new motivational theory. Their contribution is not the identification of new

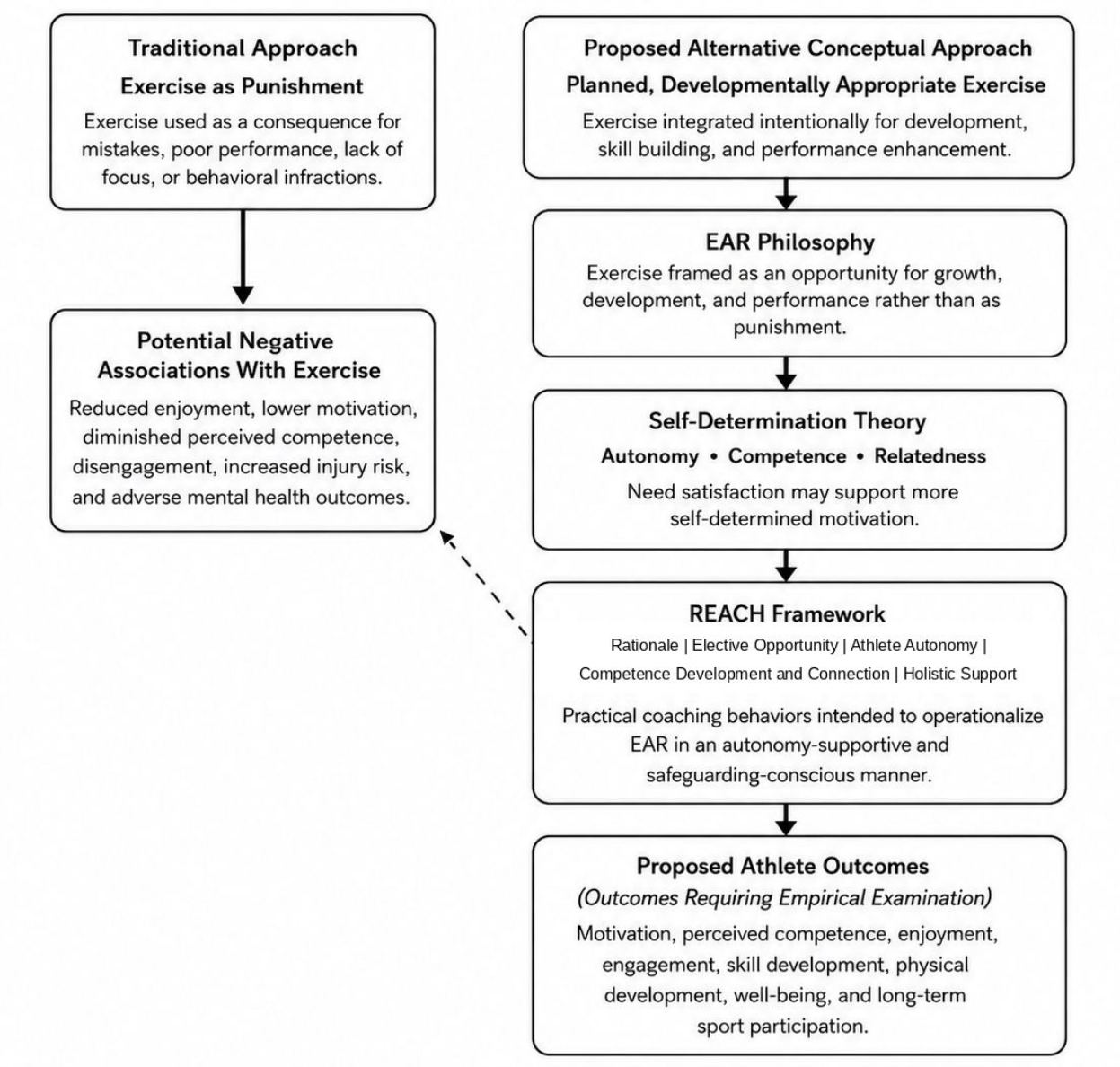
psychological needs but the application of established principles to a specific, persistent, and under-addressed problem: the use of supplementary exercise as punishment. Three features distinguish this contribution. First, EAR reframes the meaning of additional exercise. Specifically, it is a coaching practice that general motivational theory does not directly address. Second, REACH foregrounds a strict noncontingency principle. That is, access to supplementary exercise, coaching support, and developmental opportunity is never made contingent on compliance, effort, or performance. This distinguishes EAR from several existing autonomy-supportive and "alternatives-to-punishment" recommendations, which continue to make athlete choice or activity contingent on winning or desirable behavior. Third, REACH integrates SDT-based need support with contemporary safeguarding standards and holistic, athlete-centered practice into a single, point-of-practice heuristic for coaches. Accordingly, EAR and REACH are best understood as an applied coaching framework rather than a distinct theoretical model.

To operationalize autonomy-supportive pedagogy and relational safety while promoting intrinsic motivation, we propose the REACH framework as a conceptual model. The five components of the REACH framework were selected to align directly with SDT need satisfaction, athletic safeguarding standards, and holistic, athlete-centered coaching practices[3,6,26]. Additionally, these components were selected to assist coaches in recontextualizing the benefits of exercise within training and fostering positive associations, resilience, ownership, and motivation among athletes. Further research is needed to empirically validate the implementation of the conceptual REACH framework as a coaching intervention and to evaluate coach adoption, athlete motivation, and long-term athlete performance and development. Figure 1 illustrates the conceptual relationships among exercise as punishment, the

proposed EAR framework, Self-Determination Theory, the REACH framework, and the proposed athlete outcomes that require empirical examination.

Figure 1

Conceptual Relationship Among Exercise as Punishment, Exercise as Reward, Self-Determination Theory, REACH, and Proposed Athlete Outcomes



Note. This figure presents a conceptual model contrasting exercise as punishment with the exercise-as-reward (EAR) approach. The proposed pathway illustrates how EAR, informed by Self-Determination Theory (SDT) and operationalized through the REACH framework, may support positive athlete outcomes. In the EAR pathway, reward refers to the athlete's experience of voluntary, developmentally appropriate exercise as valuable rather than an externally controlled incentive. These outcomes are conceptual and require empirical investigation.

R – Rationale

Coaches should provide transparent, non-controlling physiological and tactical rationales for all assigned and optional training activities to ensure that athletes understand the developmental purpose and intention of physical training. To this end, coaches would benefit from providing athletes with an understanding of how these extra reps or training directly translate to their personal goals. For example, explaining how completing extra sprints can improve agility and reaction time can help make extra work feel like a more personalized investment. Similarly, a swim coach might explain how additional underwater work improves efficiency off the wall, a volleyball coach might connect extra serve-receive repetitions to in-game applications, or a baseball coach might link additional fielding repetitions to more consistent defensive execution. By educating athletes on the role specific exercises play in overall performance, coaches can instill a sense of ownership, in which exercise is understood as an integral part of training[1].

E – Elective Opportunity

Supplementary exercise should be offered as an elective, developmentally appropriate opportunity aligned with athlete goals and training plans, rather than something athletes must earn through effort, focus, behavior, or performance. Participation should be voluntary, and

access to appropriate developmental support should not depend on prior compliance with coach-defined criteria. Because judgments of effort, attitude, focus, readiness, and discipline are subjective and can inadvertently reflect coach preference or cultural, gendered, or ableist assumptions, removing them as prerequisites for access guards against biased or inconsistent decision-making. Coaches might offer a supplementary technical session to athletes who want additional high-level skill work when it is appropriate for their training load. For athletes who are unable to remain after scheduled practice times, coaches can foster equity by arranging alternative opportunities for individual instruction when feasible. Presenting high-intensity conditioning as something athletes earn is not inherently safer than presenting it as punishment. High-intensity conditioning or scrimmages should be prescribed only when appropriate within an individualized and periodized plan and never offered as a reward for discipline or performance. Framed in this way, optional extra work may be experienced as personally valuable because it aligns with athletes' own performance goals and supports more self-determined motivation[26,31]. Because athletes may feel implicit pressure to accept additional exercise even when tired or injured, if declining could be read as low commitment, participation is treated as genuinely voluntary: athletes may decline without penalty or loss of status, standing, or future opportunity.

Coaches might also offer team-based elective opportunities that emphasize collective development without making exercise punitive or contingent on prior compliance. For instance, athletes could choose from a preferred competitive activity, an additional challenge set, or a player-selected skill block, depending on which option is appropriate within the planned training session. In this structure, participation is not granted because the team has first met a coach-defined standard; rather, meaningful choice is embedded within the training environment. Making collective activities contingent on group compliance can generate peer pressure,

resentment, or blame toward athletes perceived as preventing the team from earning a preferred activity; offering these opportunities noncontingently avoids this dynamic. This distinction is central to the REACH framework because the same activity, such as sprints, relays, scrimmages, or repetition-based skill work, may be experienced differently depending on whether it is imposed as punishment or a controlling contingency or offered as a voluntary, purposeful opportunity.

A – Athlete Autonomy

Coaches could foster autonomy by giving athletes meaningful choices throughout practice and including athletes in the creation of team rules and expectations. Such choices should be available as part of autonomy-supportive coaching rather than earned through prior discipline or performance. Making the option to shape how practice ends contingent on prior coach approval would render autonomy conditional, which is inconsistent with autonomy-supportive coaching; athlete voice and choice should instead be ongoing features of the coaching environment. For example, a coach might routinely offer athletes opportunities to suggest how practice ends, including several high-intensity but potentially valuable options, such as a small-sided tournament in invasion games, relay races or start work in swimming, timed challenge sets in track or cross-country, target-based serving games in tennis or volleyball, or position-specific skill stations in field-based sports. By giving athletes a voice in selecting the extra work, coaches can satisfy their athletes' need for autonomy and shift the lens through which these extra training drills are presented. Autonomy is also understood to be built on athletes' understanding of the rationale for their training[26].

Engaging in shared decision-making is an important aspect of developing autonomy and could be accomplished by including athletes in the initial design and conception of voluntary

supplementary training opportunities to be used throughout the season. Some athletes might value extra time reviewing film, while others might value specialized position work more. Others may value access to equipment, such as timing systems, resistance tools, video analysis, wearable technology, pitching machines, ball machines, or individualized strength and mobility work. Not only do these collaborative conversations communicate the coach's investment in each athlete, but they also provide athletes with a space to voice opinions and offer input. Coaches can then make these identified, valued opportunities available as optional development choices rather than rewards for high-quality training efforts. Turning co-identified activities into valuable opportunities that can later be granted or withheld would reintroduce the controlling contingency the framework seeks to avoid. When the coach and athlete collaborate to identify which opportunities are personally meaningful, this directly supports the athlete's relatedness and autonomy[31,38]. Consequently, athletes may feel seen and respected, and their commitment to their coach and training may be strengthened.

C – Competence Development and Connection

Framing supplementary exercise as a potentially valuable opportunity could be effectively implemented in sport environments that use autonomy-supportive coaching, fostering relatedness, unconditional care, belonging, and relational trust. Access to the coach's support, positive feedback, and personal care is never conditional upon athletic performance or behavioral compliance; therefore, safeguarding connection as a foundation for competence development. Because sports differ substantially in structure[40], supplementary opportunities should be based on developmental relevance, athletes' interests, training load, and available resources rather than on coaches' judgments of compliance or performance to ensure contextually appropriate competence development. For example, a basketball player might choose specialized shooting work, a

swimmer might choose individualized start or turn instruction, a soccer player might choose position-specific finishing work (e.g., free kicks), a tennis player might choose additional serve-and-return practice, and a distance runner might choose a guided race-strategy session or individualized pacing feedback. The potentially valuable experience lies in athlete-desired skill development and individualized support, not in access being used as a status marker or reward for meeting behavioral standards. In contrast, punitive conditioning can reinforce negative associations with extra exercise and reduce athlete motivation to independently seek opportunities to engage with supplemental training.

H – Holistic Support

Taken together, a REACH or similar framework can be integrated into coaching and training to holistically support athletes and their basic psychological needs for autonomy, competence, and relatedness[24,31]. Central to this holistic integration is psychological safety, understood as a climate in which athletes perceive low interpersonal risk and feel able to voice concerns, decline optional work, admit mistakes, and disagree with a coach without fear of retaliation or loss of standing[41]. Moreover, as coach–athlete relationships involve inherent power asymmetries, psychological safety is a precondition for athletes to experience supplementary exercise as genuinely voluntary rather than implicitly coerced[41]. Therefore, coach training and development programs would benefit from teaching skills and strategies to foster psychologically safe environments that support the use of frameworks that help athletes experience voluntary supplementary exercise as valuable[3,38]. Not only would this help both coaches and athletes reimagine extra work and reps through a non-traditional, non-disciplinary lens, but it would also promote athletes' holistic development.

Addressing Counterarguments

Although the negative impacts of using exercise as punishment have been documented in research[2,3,6,26] and more publicly in the media[12–14], it would be unrealistic to assume that an EAR framework would be adopted without resistance from coaches.

First, coaches may raise concerns about the potential for overtraining when voluntary extra exercise is framed as potentially valuable, noting that this concern also applies to using exercise as a punishment. While this concern is valid, the EAR and REACH frameworks focus on quality and specificity in extra training rather than excessive volume. Coaches should use proper periodization to ensure that any optional supplementary work is physically safe and appropriate for their athletes' current training cycles. In doing so, coaches can provide athletes with additional specialized training without increasing their risk of injury or undermining recovery. However, quality and specificity alone do not eliminate the risks of excessive load, insufficient recovery, repetitive strain, or psychological pressure. Coaches should monitor cumulative load and recovery directly, and voluntary participation without penalty preserves athletes' ability to protect their own recovery. This is distinct from using exercise as a punishment, which is often reactive, less individualized, and less closely aligned with athletes' training programs or developmental needs. More fundamentally, training loads should never be made contingent on behavior. Supplementary work is determined by physiological, tactical, and developmental needs within a periodized plan, not allocated or withdrawn in response to conduct; addressing overtraining therefore requires decoupling training demands from behavioral contingencies, not simply emphasizing quality over volume. This dynamic can be illustrated by high-profile accounts, such as Coach Herb Brooks forcing the 1980 U.S. men's Olympic ice hockey team to perform grueling conditioning drills to the point of physical sickness and collapse following a loss in an exhibition game[42]. Pushing athletes to physical failure as

punishment highlights how punitive exercise disregards the limits of training and competition and increases their risk of injury and overexertion.

Second, exercise as punishment has traditionally been justified as a disciplinary practice and as a perceived means of increasing athletes' mental toughness[2,6,43]. Therefore, a coach might question why they should shift to an autonomy-supportive approach in which additional exercise may be experienced as valuable when they perceive benefits in a punitive approach. While coaches may use exercise as punishment for social control and/or to deter undesirable behaviors, using it with these intentions often fails to foster actual learning or self-discipline among athletes[6]. Additionally, even when policies exist to prevent the use of exercise as punishment, many coaches continue to implement penalizing exercises out of habit[2]. Such punitive measures may also negatively impact the coach-athlete relationship[38,44].

Mental toughness, understood here as an athlete's capacity to maintain focus, effort, and effective decision-making under pressure and adversity, is best developed by teaching athletes to challenge themselves and take responsibility for their decisions. This process can be achieved through collaboration between coaches and athletes to discuss values, motivations, and expectations[26]. This perspective aligns with autonomy-supportive coaching, which emphasizes athlete empowerment, shared understanding, and responsibility rather than fear-based compliance[38]. Using exercise as punishment does not foster an athlete's sense of internal responsibility; rather, it creates temporary, externally motivated adherence. An EAR or REACH framework may help coaches support athletes' self-regulation and internal responsibility by replacing punitive habits with more proportionate, behaviorally grounded responses. However, we note that this is a conceptual proposition, and the claim that EAR or REACH develops mental toughness requires empirical validation. For example, an alternative consequence for an athlete

who does not put away equipment after practice could be organizing equipment before the next practice. At the same time, a conversation with an athlete who repeatedly demonstrates tardiness may be warranted to discuss established expectations.

Implementation of the EAR and REACH frameworks may also vary across coaching contexts. In elite and high-performance environments, tightly structured training schedules, substantial existing training demands, and limited recovery opportunities may restrict the feasibility of supplementary exercise, regardless of how it is framed. Adoption may also be more challenging in highly controlling or traditionally authoritarian coaching cultures, including those characterized as military-style, where punitive exercise may be normalized as a disciplinary practice. Application may differ between team and individual sports because opportunities for athlete choice, individualized training, and shared decision-making may be easier to accommodate in some settings than others. Athletes may also differ in what they perceive as valuable or personally meaningful; therefore, additional exercise should not be assumed to hold equal motivational value for all athletes. Coaches should further recognize that athletes who are anxious, neurodivergent, injured, fatigued, or unfamiliar with a training environment may be misperceived as lacking focus or readiness, even when they are genuinely trying to engage. Because access to supplementary opportunities does not depend on such judgments, these athletes are not disadvantaged. Finally, limited practice time, staffing, facilities, and other logistical constraints may restrict coaches' ability to provide supplementary training opportunities. Coaches may also lack the expertise to prescribe and monitor extra exercise, particularly in volunteer, recreational, school, and community settings. Where available, such work is best designed and monitored in consultation with qualified strength and conditioning professionals, athletic therapists, and medical staff, and in accordance with established return-to-

play protocols when athletes are returning from injury. These contextual differences further reinforce the idea that coaches should not assume that additional exercise will serve as an opportunity for every athlete or make autonomy-supportive choices contingent on prior compliance. Accordingly, EAR and REACH should be viewed as adaptable conceptual frameworks rather than prescriptive approaches applied uniformly across athletes and sport settings.

Conclusion

Reimagining voluntary exercise as potentially valuable opportunities is a move toward a more ethical and effective coaching standard. By shifting to an autonomy-supportive coaching model, coaches may be better positioned to foster resilience and autonomy and support their athletes' long-term development[38]. Traditional approaches that use extra repetitions or conditioning as punishment foster ego-involved sport climates and damage athletes' relationships with exercise and sport. In contrast, autonomy-supportive approaches that allow voluntary training to be experienced as valuable may help preserve athletes' intrinsic motivation, sense of competence, and long-term engagement[6,24,26,30]. Intrinsic motivation remains a key determinant of long-term sport involvement and performance[24].

By transitioning away from using exercise as punishment and toward offering voluntary, developmentally appropriate exercise as a potentially valuable opportunity, coaches may help athletes come to value training not only as a means of winning but also as a meaningful part of athletic and developmental growth itself. Therefore, we encourage coaches and coaching education programs to cautiously consider an exercise-as-reward philosophy, using the REACH framework as a conceptual guide for player development pending empirical evaluation, ensuring

that the "grind" is never positioned as punishment or made contingent on compliance, but instead understood as a voluntary opportunity for continued growth.

Statements and Declarations

Ethical considerations

Not applicable. This conceptual article did not involve human participants, human data, or human tissue, and institutional ethics approval was not required.

Consent to participate

Not applicable. No human participants were recruited or enrolled in this conceptual article.

Consent for publication

Not applicable. This article does not include identifiable individual participant data, images, or videos requiring consent for publication.

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