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CHAPTER 10

NEED SUPPORTIVE COMMUNICATION: IMPLICATIONS FOR MOTIVATION IN SPORT, EXERCISE, AND PHYSICAL ACTIVITY

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Introduction

Effective communication is a crucial element to support people's successful engagement in sport and physical activity settings. For example, in terms of the athlete-coach relationship, effective communication facilitates the development of the coach's and the athlete's shared knowledge and understanding about goals and beliefs (1). In relation to physical activity promotion, various forms of face-to-face and print/electronic communications are used to encourage diverse community groups to engage in physical activity (2). In developing practical guidelines for implementing communication interventions in different sport and physical activity contexts, researchers can draw from a variety of disciplines, including several fields within psychology (e.g., social, cognitive, developmental, educational).

In this chapter, we limit our discussion to communication interventions that have been based on a theory of motivation, namely self-determination theory (SDT [3]), to create satisfying experiences that motivate optimal engagement and facilitate health and performance in physical activity/exercise and sport settings. We first outline the major concepts and propositions of the theory. We subsequently offer illustrative examples of interventions guided by this theory in which motivationally-supportive communication styles in sport, exercise and physical education (PE) were applied. We then reflect on challenges in implementing such interventions, and identify potential solutions, applications, and directions for future research.

A brief overview of SDT-based communication styles

SDT is a contemporary theory of motivation that has seen a rapid growth in its applications in the sport and physical activity domain in the last 25 years (4). Researchers use SDT to understand how socio-contextual factors support or undermine inherent personal tendencies for growth and development, and the consequences of such processes on quality of motivation, psychological well-being, engagement, and performance. Based on the premises of SDT, researchers have implemented interventions aimed to facilitate motivationally-supportive communication between individuals in positions of authority and expertise (e.g., coaches, fitness

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instructors, family members, physical education teachers, health care professionals) and the individuals they seek to motivate. For example, Lonsdale and colleagues (5) trained physiotherapists to communicate information about exercise and rehabilitation in motivationally supportive ways when interacting with chronic low back pain patients. The premise of such SDT-informed interventions has been that the communication style used by individuals in positions of authority can vary in the degree to which it supports versus thwarts three basic psychological needs of the individuals they instruct. These are the needs for autonomy (i.e., the experience that one's behavior is self-regulated), competence (i.e., the experience of making progress and achieving mastery when striving for personally relevant and challenging goals), and relatedness (i.e., the experience that one is accepted by and meaningfully connected with others).

According to Deci and Ryan (3), the communication style utilized by authoritative individuals can satisfy or undermine these three needs in others. The former is called a *need supportive* style (also known as autonomy-supportive), examples of which include the provision of meaningful choices and rationales to others, the acknowledgment of their negative feelings, the offering of constructive feedback, and a genuine interest in their welfare. The latter style is called a *need thwarting* style (also known as controlling), and is evident in situations where individuals' opinions and feelings are trivialized, pressuring or guilt-inducing language is used, prescriptions and proscriptions are commonplace, and individuals are deprived of opportunities to develop their full potential. Although these two broad styles of communication were initially considered to be bipolar (6), more recent approaches (7) emphasize that the same individual in a position of authority can adopt either style depending on circumstances (e.g., time pressures, perceptions of others' motivation quality). Hence, both styles should be targeted in SDT-derived communication-based interventions, as these interventions routinely seek to promote a more need-satisfying communication style while simultaneously lessening a need-thwarting communication style.

Examples of key behaviors and modes of verbal and non-verbal communication that illustrate need supportive and need thwarting styles have been proposed in the health (e.g., 5As

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framework [5]), education (8), sport (9), and exercise (10) literatures; some illustrative examples are given in Table 10.1. Need supportive communication characterizes a coach, PE teacher or exercise professional as the other's ally and support system rather than a "leader and persuader". Unlike most attempts to influence someone else's behavior, need-supportive communications are empathic, flexible, and patient, rather than taking-charge, pressuring, and urgent. Need-supportive communication creates conditions for people to motivate themselves in ways that are rich in volition and personal causation. A meta-analysis (11) of 19 studies (20 effect sizes) from studies that have implemented need supportive interventions in diverse life domains has shown a moderate effect size ($d = .63$) in terms of their effectiveness (assessed via self-reports or independent observations) in developing such a style in individuals in positions of authority. Follow-up moderator analyses showed that such intervention programs were more effective when targeting multiple components of need support, focused on skill-based activities, utilized multiple types of media, and were offered to individuals with a predisposition toward autonomy. Challenges and solutions in implementing and translating successful SDT-based programs of communication are discussed later on in this chapter.

INSERT TABLE 10.1 ABOUT HERE

A meta-analysis (12) of correlational and experimental studies of the applications of SDT in the health domain found positive associations between leaders' need-supportive communication style and recipients' reports of psychological need satisfaction and indices of mental (e.g., depression, quality of life) and physical (e.g., exercise, healthy diet) health. Further, the associations between psychological need satisfaction and mental/physical health were partly mediated by the degree to which individuals had autonomous motivation (i.e., stemming from enjoyment or personal value of the activity), controlled motivation (i.e., based on internal and external pressures and contingencies), and amotivation (i.e., lacking intention to engage or sustain

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involvement) to engage in the health behavior in question. Such a pattern of results provides support for Vallerand's (13) integrative model of motivation, which incorporates many of the components of SDT. An adaptation of this model is shown in Figure 10.1. In this model, a need supportive communication style utilized by influential others is proposed to impact the extent to which the psychological needs of the individuals they interact with are satisfied. Psychological need satisfaction can predict positive cognitive, affective, and behavioral outcomes both directly and indirectly via impacting the quality of motivation engagement (i.e., more self-determined motivation). In contrast, a need thwarting communication style often predicts need frustration, which in turn is associated with negative cognitive, affective, and behavioral outcomes, both directly and indirectly via controlled motivation and amotivation. This model has served as the basis of many survey and experimental studies that have aimed to apply SDT in the sport, physical activity promotion/exercise, and physical education domains. Illustrations from this line of research are provided in the next section.

INSERT FIGURE 10.1 ABOUT HERE

Applying SDT-based communication training in sport, exercise/physical activity, and physical education settings

The popularity of using SDT as a framework to examine the social-psychological underpinnings of healthful engagement in exercise, sport, and PE, has inevitably led to the development and testing of interventions to promote SDT-based, need supportive communication styles. In this section of the chapter we describe examples of three such interventions, one from each of the aforementioned domains. We selected the three intervention programs featured below because they represent theory-based intervention programs, are methodologically rigorous, are evidence-based, and they are coalescent into a common set of recommendations (e.g., Table 10.1), despite their wide scope of application.

Intervention Program #1: Health and Exercise

The Promotion of Health and Exercise in Obesity (PESO [14,15]) intervention was designed to promote physical activity and weight loss among women in Portugal. The intervention was tested via a randomized control trial (RCT). The intervention structure consisted of 30 weekly or bi-weekly group workshops that were delivered over a 12 month period. The control group was exposed to a 'general health' treatment that covered a range of topics (e.g., preventative nutrition, self-care, effective communication) that drew from a range of educational courses. The intervention and control arm interventions were matched in terms of contact time.

The intervention was delivered by a team comprising 6 physiologists, nutritionists/dieticians, and psychologists educated to a doctoral or masters level. The delivery was predominantly face-to-face via workshops to groups of 25-30 participants. Prior to the implementation of the intervention, the PESO intervention deliverers received training in the form of workshops. These workshops were delivered by experts in SDT and motivational interviewing (MI) via formal and informal meetings (16). The intervention curriculum covered physical activity and exercise as well as nutrition and eating behavior. It also covered the topic of motivation and overcoming barriers to behavior change as well as increasing knowledge, improving body image, and promoting self-determination. A dance class and a physical activity challenge program were also offered to promote fun and enjoyment of exercise and to increase intrinsic interest. The intervention was supported by a workbook and companion manual.

The intervention team offered clear rationales for the adoption of recommended behaviors, acknowledged internal conflict as both valid and understandable, provided a menu of options, promoted competence, avoided the use of external incentives, and gave positive feedback. These strategies were employed to help establish a need-supportive climate for the participants in terms of supporting their personal causation, autonomous decision making for change, building new goals and skills, and coping with challenges in regard to goal accomplishment. The authors highlighted the parallels and overlap with features of MI (17) that are inherent in the strategies included in the

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PESO intervention. MI was described as a way to enhance the possibilities of internalization in practice. The goal of the intervention was to create a more autonomy supportive environment. However, Silva et al. (15) report that there were also elements of creating a structured environment within the intervention content, for example by arranging intervention content into modules. Fortier et al. (16) further noted that the features of the PESO intervention that focused on creating a more structured environment were the provision of positive, informational feedback, goal setting, physical activity monitoring, addressing personal barriers to PA and exercise, and topics surrounding skills and safety. The PESO intervention was effective in promoting intervention participants' weight loss and physical activity/exercise engagement. The intervention group showed weight loss at 6 months (-6%) and 12 months (-7.29%) when compared to the control group. Levels of moderate and vigorous physical activity/exercise ($+138 \pm 26$ min/day) as well as step count ($+2,049 \pm 571$ steps/day) were higher among those in the intervention group than those in the control at 12 months.

An important consideration in SDT-informed interventions is whether the intervention effect is mediated by the proposed motivation-related psychosocial mechanisms that underpin SDT's approach to behavior change. It is these results that help to clarify whether the SDT-informed communication style used within the delivery of the intervention functioned as the hypothesized catalyst for change in basic need satisfaction leading to physical activity behavior change and weight loss. In the PESO trial, between-group differences in autonomous and controlled forms of self-regulation supported the expectation that the more need supportive communication style in the intervention promoted greater autonomous motivation that, in turn, promoted greater behavioral engagement at four and twelve months post intervention.

Intervention Program #2: Sport

With a view towards promoting sustainability of need supportive interventions, it is important to ensure that programs designed to train others (e.g., coaches, teachers) in need supportive behaviors can be delivered not only by those who created them but also by practitioners

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working in the setting in 'real life'. As such, in addition to examining whether interventions are effective in enabling coaches and teachers to be trained to implement need supportive approaches, it is also essential to determine whether it is possible to effectively train those working in coach or teacher education to deliver the need supportive training to practitioners. If this is achieved, there is less dependence on the intervention designers to deliver the training and widespread implementation can be a more realistic goal.

The PAPA (Promoting Adolescent Physical Activity) project (18) is an example of a project that set out to accomplish this aim. The broad aim of the PAPA project was to capitalize on the potential of sport as a vehicle to empower young people to sustain engagement in youth sport. The goals of the PAPA project were to further develop and test a theory-informed and evidence-based coach education intervention, Empowering CoachingTM (19). This intervention was designed to support coaches in fostering sport environments that would nurture autonomy, relatedness, and self-referenced perceptions of competence. As a consequence, autonomous motivation to engage in sport and physical activity as well as mental/emotional well-being and intentions to remain physically active were expected to ensue.

The Empowering CoachingTM (19) intervention is an interactive workshop that focuses on increasing coaches' awareness of the nature of high-quality motivation and ways to enhance it. The program draws from SDT and achievement goal theory (AGT [20,21]) specifying the potentially influential features of the environment on the quality of the athlete's experience. The intervention workshop and associated materials are designed to support coaches to develop and implement strategies that will help them to create a more empowering atmosphere (18). Duda (19) described the key features of the Empowering CoachingTM program. These include highlighting to coaches the influence of the climate they create on the quality of experience sport participants have, emphasizing the multi-dimensional nature of the motivational environment, and facilitating discussion around techniques to be more empowering (i.e., autonomy supportive, task-involving, and socially supportive) and less disempowering (i.e., controlling and ego-involving) in both sport

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practice and competitive scenarios. The nature of the intervention content itself and how it is delivered is deliberately intended to be empowering for the coaches themselves (19). In other words, a key feature of the program is the development of coaches' conceptual understanding of motivation, motivational processes, and the related consequences. There is a focus on ensuring coaches understand *what* they might emphasize (e.g., to foster more intrinsic goal content), *why* children participate in sport (highlighting the advantages of more autonomous regulation that is likely when coaches are more empowering), and *how* coaches can effectively motivate their athletes (i.e., via creating climates that support autonomy, self-referenced competence, and relatedness [19]). The Empowering CoachingTM intervention utilizes illustrative video clips and other learning aids and activities to facilitate the coaches' integration, internalization, and interest in the motivational principles central to the intervention.

Empowering CoachingTM was customized for youth football (soccer) and tested in five European countries (England, France, Greece, Norway and Spain). Coaches of male and female youth soccer teams aged 10-14 were recruited in collaboration with their clubs (18). In an effort to sustain consistency across countries, a rigorous translation procedure was adopted, which is described in detail by Duda et al. Within each country, football coach educators were trained to deliver the intervention to grassroots soccer coaches. The intervention was tested across one competitive season via a clustered randomized control trial in which coaches within the same club were allocated either to the intervention or to the control arm. The aim was to include between 12 and 20 clubs in each arm (intervention/control) in each country, with a minimum target of 50 teams for the intervention arm and 30 teams in the control arm, per country (18). The intervention arm coaches received six hours of education in principles of need support and were also able to access e-learning materials.

In PAPA, the evaluation of Empowering CoachingTM was also theory-informed, and as such, the project included measures designed to capture the central social-psychological mechanisms via which the intervention was anticipated to take effect. The evaluation of the

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program was multi-dimensional, including observation (22), self-report (23) and accelerometry measures (24). Results from this multi-country trial are not yet published; however, preliminary findings indicated that more empowering sport climates are associated with players' lower intentions to drop out of youth sport, as well as with health-related behaviors such as moderate to vigorous physical activity.

Intervention Program #3: PE Classrooms

The Autonomy-Supportive Intervention Program (ASIP) is a teacher-focused, workshop-based intervention program to help teachers create PE classrooms and teacher-student relationships that allow students to experience frequent and recurring psychological need satisfaction (of all three needs, not just that for autonomy) while engaged in PE activities (8, 25). The ASIP intervention has been tested in several clustered randomized control trials (RCT [25-31]), usually in South Korea. Typically, in these interventions PE teachers in the control arm motivate and engage their students throughout the semester or academic year by relying on their pre-existing and naturally-occurring communication style. In contrast, prior to the academic semester or year, teachers in the ASIP experimental arm participate in a 3-hour workshop (Part 1) in which they learn about a SDT-view of student motivation, what need supportive (autonomy-supportive) teaching is and the student and teacher benefits it brings, and what need-thwarting (controlling) teaching is and the student and teacher costs it brings. Soon thereafter, teachers in the ASIP experimental arm participate in a 3-hour workshop (Part 2) in which they learn the “how to” skill of need-supportive teaching. Specifically, teachers learn – through examples, modeling, practice, scaffolding, and feedback – how to present learning activities in ways that vitalize students' inner motivational resources (i.e., autonomy, competence, and relatedness). Teachers also learn how to utilize a need-supportive communication style by learning how to take their students' perspective, rely on informational (rather than pressuring) language, provide explanatory rationales for their requests, and acknowledge and accept (rather than counter and try to change) students' expressions of negative affect and resistance to the teacher's requests. Following this second workshop, teachers try out

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these need-supportive acts of instruction in their own classrooms for one month and observe how their students react to greater autonomy support and lesser control. Around the middle of term, teachers in the ASIP experimental arm participate in a third 2-hour activity (Part 3), in which they use peer-to-peer discussion and personal reflection to integrate the individual instructional strategies they learned in Part 2 into a coherent communication style.

The ASIP intervention has been found to be effective in producing three major effects. First, compared to teachers in the control arm, teachers in the ASIP experimental arm learn how to become significantly more autonomy-supportive and significantly less controlling during the delivery of their actual, in-class instruction. This is determined both by students' self-reports of teacher behaviors and by having trained raters visit the classrooms of all the teachers to score them on how much they rely on autonomy-supportive instructional strategies (25,26,29). Second, compared to teachers in the control arm, teachers in the ASIP experimental arm show gains in high quality teaching motivation (e.g., greater need satisfaction, passion for teaching, reliance on intrinsic goals, teaching efficacy) and their own well-being (e.g., greater job satisfaction, vitality from teaching, and lesser emotional and physical exhaustion after teaching [29]). Third, compared to the students of teachers in the control arm, students of teachers in the ASIP experimental arm report and display a wide range of motivational and performance-based benefits, including greater need satisfaction, lesser need frustration, greater autonomous motivation, lesser amotivation, as well as greater classroom engagement, learning, skill development, and achievement (8).

In an effort to explain why these student benefits occur, a motivational mediation model was tested (25). Intervention-enabled gains in autonomy-supportive teaching promoted students' greater need satisfaction and lesser need frustration, and these changes in students' psychological needs in turn explained why students experienced and displayed the wide range of motivational, engagement, learning, skill, and performance-based benefits. Follow-up research has also confirmed that these ASIP-enabled teacher and student benefits are long-lasting, as teachers who

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participate in ASIP continue to rely on a need-supportive communication style more than a year after the intervention ends (27).

Challenges and solutions in implementing SDT-based communication training: Practical implications

In this section we reflect on challenges and possible solutions in implementing SDT-based communication training. Some of the issues we discuss are based on our own reflections from trying to implement such training; other issues have been previously identified in the literature. This is by no means an exhaustive list of factors to consider when implementing such interventions, and in fact, some of the issues we highlight are also applicable to some extent with other types of interventions.

A frequent challenge to encounter when reading studies reporting interventions is the absence of sufficient detail in terms of how key components have been operationalized. Often, a reference is made to an indicative list of need supportive and need thwarting behaviors that were targeted; however, these lists often do not provide sufficient detail of exactly how such behaviors were enacted. For example, “providing explanatory rationale” gives a broad idea of what the aim of this intervention component was, but it does not provide sufficient context (e.g., how often was it delivered? was it delivered to justify task engagement or requests made upon others? was it delivered on a one-to-one basis or to a group basis? how brief/detailed was it?). Without such information, attempting to replicate the protocol of an intervention is difficult. Researchers should consider providing additional information in journal’s online supplements, or even better, offer access to training manuals via websites. Such free resources are available for other types of public health interventions (e.g., see <http://www.ffit.org.uk/page1/index.html> for access to training manuals for the Football Fans in Training weight loss intervention program).

To facilitate a more complete reporting of intervention components, and ultimately replication testing, researchers implementing SDT-based communication training could do well to utilize the Template for Intervention Description and Replication (TIDieR) checklist and guide (32).

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Such checklists are particularly useful given that an inspection of many interventions in the SDT literature indicates diversity in the operationalization of the two communication styles. Such diversity is often inevitable, if not desirable, given the need to customize the intervention to the idiosyncrasies of a particular context. For instance, reducing over-surveillance behaviors would make sense in a coach-focused intervention in competitive sport, but would be less relevant in an exercise promotion setting.

Quested and colleagues (33) have argued the need for more thorough and systematic process evaluations of SDT-based interventions in an effort to ascertain the quality and consistency in the training of individuals trained to adopt a SDT-based style of communication. This is particularly important in interventions which are not delivered directly by researchers to participants, but by researchers to others in position of authority (e.g., coaches, fitness instructors) who then are asked to adopt a SDT-based style of communication (i.e., ‘train the trainer’ approach). Variations in training may well explain differences in implementation, and potentially efficacy, of the intervention. Often, such evaluations are overlooked in the reporting of intervention outcomes (for an exception, see Sebire et al. [34]), and could be potentially limiting in terms of the future translation of findings into practice.

When implementing such evaluations it is important to be cognizant of the fact that communication training aims to upskill individuals to motivate those they interact with in ways that are need supportive and less need thwarting. Hence, checklists of treatment enactment should focus less on the frequency of communication and more on whether this was delivered in need supportive ways. For example, “well done” and “keep it up” are positive reinforcements, but from a SDT perspective these utterances are ‘motivationally empty’ and not sufficiently need supportive. Quested et al. (33) suggested that manuals, implementation guides, reflection journals, video demonstrations, peer networks, and mentoring can aid the quality of communication training and enactment of targeted behaviors. Further, from both conceptual and practical perspectives, it is also

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important to establish which need supportive and need thwarting communications are more likely to affect one versus several needs.

Often, SDT-based communication training is supplemented with training in behavior change techniques (35), such as planning, goal setting, and barrier identification. Such techniques can facilitate the effectiveness of communication training, as trainees need the skills to effectively implement need supportive interactions and reduce the use of need thwarting ones. Unfortunately, many SDT-based interventions have either neglected to report the behavior change techniques they utilized or have provided insufficient detail to facilitate replication. The employment of the Coventry, Aberdeen & London – Refined (CALO-RE) taxonomy (35) could be an important step forward in improving the implementation and reporting of behavior change techniques utilized in SDT-based communication interventions in the sport and physical activity domain. As an example, Hancox and colleagues (10) reported how and when behavior change techniques were incorporated in a communication training program for fitness instructors. As a further step, it would be interesting to attempt to map components of communication style (e.g., providing meaningful rationale) onto particular behavior change techniques (e.g., barrier identification, prompt self-monitoring of behavior, action planning).

A challenge when training coaches, PE teachers, and fitness professionals in need supportive communication, is that some harbor personality dispositions and beliefs about motivating style that are simply at odds with autonomy-supportive communication. These individuals believe that controlling communication is effective (“it works!”) and easy to do, while they simultaneously believe that autonomy-supportive communication is ineffective (“sounds nice, but it won’t work”) and idealistic, impractical, and too time consuming (difficult to do). One ASIP intervention tracked PE teachers’ initial beliefs about autonomy-supportive communication over the course of a semester-long intervention and showed that teachers benefitted most from the ASIP intervention when they changed their beliefs about autonomy-supportive teaching from “it is too hard to do” to “it is actually easy to do, once you know how to do it!” (30). Hence, training others in need

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supportive communication is effective to the extent that such training fosters the beliefs that autonomy-supportive communication is both effective and easy-to-do. Some leaders also harbor highly controlling personality dispositions, such as a dominance orientation, authoritarianism, and closed-mindedness (i.e., need for closure). One personality-based ASIP intervention showed that while these teachers do possess a lower baseline level of autonomy-supportive communication, these same teachers nevertheless do benefit from the intervention to become more autonomy supportive and less controlling (compared to their baseline levels [36]).

Another challenge in training others in SDT-informed communication is that members of some cultures view autonomy-supportive communication as a non-normative approach to motivating and communicating with others, especially for authority figures (37). Culture influences what people believe to be true, and culture establishes what is most expected, accepted, and common (i.e., what is normative) among teachers, coaches, and other leaders. When culture leads people to see controlling (rather than autonomy-supportive) communications as expected, accepted, and commonplace, leaders may tend towards a controlling style. This is essentially the same challenge as the one mentioned in the previous paragraph regarding control-oriented beliefs about motivating style and controlling-oriented personality dispositions. A carefully designed and implemented autonomy-supportive intervention program could help members of controlling cultures develop a more autonomy supportive and a less controlling communication style; cross-cultural interventions and comparisons in this research area would be desirable.

Changing interpersonal styles of communication can be a time-consuming process, even for those who are willing to change. Often, an initial reaction to suggestions to try a particular communication strategy is “we are already doing that”. However, further discussions and observations often show that what is routinely done is either different or not sufficiently need supportive. For example, an exercise instructor may consider that he/she already provides task-related choices. But when probed further it may become clear that these are not meaningful to everyone who receives them. Another problem is that due to various logistical constraints, the

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trainees might not have sufficient practice to implement successfully what they have been taught (34). A potential solution to this problem is the delivery of ‘booster’ training sessions (8), or the blending of face-to-face training with online training via interactive websites and apps (38), or via using virtual technology training (39). Of course, technology-based training brings new challenges in terms of process evaluation and establishing the added value of such a component within a communication-focused intervention. Further, training, including additional training, comes at a cost; hence, SDT-based communication training programs need to be complimented by an economic evaluation in order to establish a cost-benefit analysis. Such evaluations, coupled with appropriate theoretical considerations, can help to establish what could potentially be ‘core’ material and what could be offered as ‘add on modules’ (8). A move to this direction is needed if policy makers and sport/health administrators are to support such types of training.

Conclusion

The past decade has seen a significant increase in the design, implementation, and evaluation of need-supportive communication style interventions. SDT has richly informed the design of these interventions, and empirical evidence obtained from RCTs has often supported the benefits of these interventions. As coaches, PE teachers, and health-care providers participate in these intervention programs, they are able to learn how to communicate in more need-satisfying and less need thwarting ways, and this intervention-enabled communication style increases athletes’, students’, and exercisers’ need satisfying experiences and decreases their need frustrating experiences. These changes in psychological needs then enable and explain subsequent gains in engagement, learning, skill, performance, and health. Challenges to implementation and reporting of such need-supportive interventions have emerged, and these should be addressed in the future. Overall, the future for need-satisfying communication style intervention programs represents a promising path forward to the applied effort to improve individuals’ sport engagement, physical activity and health.

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Table 10.1 Examples of Need Supportive and Need Thwarting Communication Styles

Need-supportive	Need-thwarting
1. Encourages initiative	1. Discourages initiative and questions from others
2. Allows participation in decision making	2. Trivializes and dismisses others' input and views
3. Provides meaningful explanations for task-engagement	3. Uses excessive monitoring and surveillance
4. Acknowledges any negative feelings	4. Uses a coercive, pressuring, or guilt-inducing communication in order to impose a preconceived way of thinking and behaving.
5. Communicates perspective taking statements	5. Uses intimidating behaviors (e.g., yelling, physical punishment)
6. Offers choices that are relevant to others' goals and values	6. Uses praise in an attempt to control others' behaviors and feelings
7. Gives specific and constructive feedback	7. Deprives others of opportunities to develop their potential
8. Takes personal interest in others	8. Isolates or rejects others

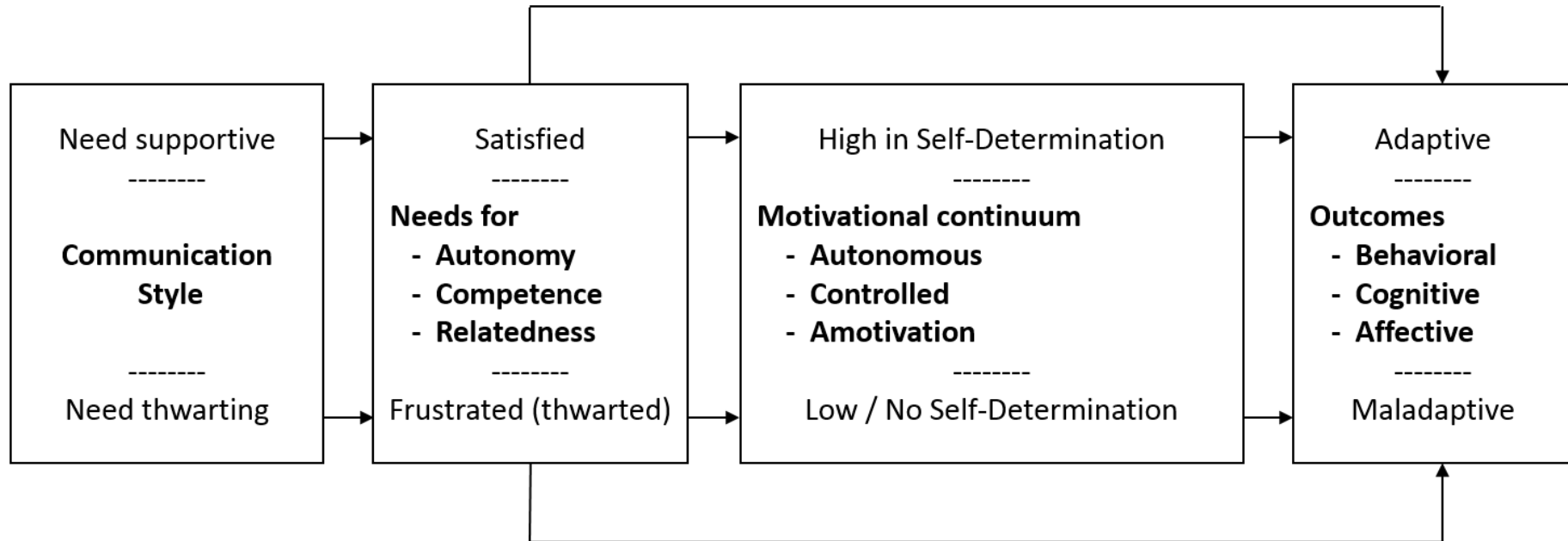


Figure 10.1 Adaptation of Vallerand's hierarchical model of motivation (13)