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Helping Your Clients and Patients Take Ownership Over Their Exercise: Fostering Exercise Adoption, Adherence, and Associated Well-Being

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Helping Your Clients and Patients Take Ownership over their Exercise: Fostering Exercise Adoption, Adherence and Associated Well-Being

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Key words: Autonomy support, structure, interpersonal involvement, psychological need satisfaction, exercise motivation, well-being.

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Learning statement: This feature article emphasizes the need for physical activity and exercise interventions to be developed and delivered in accordance with psychological theory. Pulling from a contemporary theory of human motivation called Self-Determination Theory, this article demonstrates how delivering an exercise message, consultation, or program in an autonomy supportive, well structured and interpersonally involved way may benefit participant's attempts to become and stay more active. Practical strategies which may be used by a health and fitness professional to create an autonomy supportive, well structured and interpersonally involved exercise environment are also presented.

Bottom line: This article proposes that it is possible for health and fitness professionals to deliver exercise messages, consultations and programs in line with the basic propositions of Self-Determination Theory, and thus, support individuals' volitional choice to be more active. In addition, we suggest that exercise messages, consultations and programs which are delivered in a self-determination enhancing way will be more likely to bring about positive outcomes in terms of exercise adoption, adherence and well-being.

Summary statement: This article demonstrates how theory-based strategies may be utilized by a health and fitness professional to deliver exercise messages, consultations or programs in a way that benefits participants' attempts to regularly engage in physical activity and their well-being.

Helping Your Clients and Patients Take Ownership over their Exercise: Fostering Exercise Adoption, Adherence and Associated Well-Being.

Promoting physical activity: The role of psychological theory

Despite the well publicized array of health benefits associated with a physically active lifestyle, over half of adults in the USA and UK remain insufficiently active to protect their health.[1, 2] To effectively enhance levels of population physical activity, interventions must target the environmental, social and psychological factors underpinning physical activity and exercise engagement. While the tackling the wider 'environmental' or 'social' constraints on physical activity may be beyond the scope of health and fitness professionals working with clients/patients on a day-to-day basis, addressing and utilizing psychological constructs is a task highly relevant to their role.

One key aim of exercise psychology is to explain why people adopt physically active versus inactive lifestyles. A number of psychological frameworks now exist (e.g., social cognitive theory,[3] the theory of planned behavior,[4] and the Transtheoretical Model,[5]) which try to identify the psychological factors/processes underpinning physical activity adoption and sustained engagement. It is commonly argued that effective interventions targeting change in physical activity patterns should be guided by a theoretical framework that specifies how and why they will elicit health behavior change.[6] Unfortunately however, the majority of exercise interventions delivered in applied settings are weak in terms of their theoretical content or foundations. This limitation may be related to the fact that many of the commonly-used theories do not provide detailed information about the specific techniques that can be used to promote exercise adherence. Thus, they do not provide exercise and health professionals with cogent

strategies which they can readily utilize to enhance exercise-related experiences and facilitate the adoption of an active lifestyle.

Self-Determination Theory (SDT),[7] a contemporary theoretical model of human motivation, appears to overcome the aforementioned shortfalls. Indeed, SDT may be considered a particularly attractive theory for health and exercise professionals attempting to facilitate and maintain health behavior change, as it specifies three variables (i.e., autonomy support, structure and interpersonal involvement) which, if present in the exercise environment/context, could facilitate physical activity adoption and maintenance.

Understanding Self-Determination theory

Autonomy support involves individuals in a position of authority providing choice, and when choice is limited, a meaningful rationale for any behavioral requests that are being made. Autonomy support is also concerned with acknowledging the perspective of others (e.g., their positive and negative feelings, their style of learning, their past experiences), as well as the minimization of pressure. An autonomy supportive health and fitness professional would not try to impose his/her own views on the client/patients, or attempt to force them to change. *Structure* relates to whether those in a position of authority make their expectations clear and provide relevant and understandable informational feedback. Importantly, to foster self determination for behavioral change, it is imperative that messages and attempts to create a well structured environment are delivered in an autonomy supportive way. Finally, *interpersonal involvement* refers to the quality of the relationship between those in a position of authority and the individuals with whom they interact. This dimension of the environment/interaction represents the former's willingness to dedicate psychological and emotional resources (e.g., time, energy and caring) to the latter.

SDT suggests that exercise interventions which are delivered in an autonomy supportive, optimally structured and interpersonally involved manner will facilitate the satisfaction of three basic psychological needs; namely, the need to feel autonomous (e.g., “I exercise because I want to, rather than because I feel I have to”) the need to feel competent (e.g., “I think I am pretty good at the exercises that I do”), and the need to feel related to others (e.g., “I feel that I am supported by the people I exercise with”). SDT also holds that the extent to which these basic psychological needs are satisfied will determine the type or quality of motivation guiding behavior.

If the social environment/interaction is marked by high autonomy support, structure and interpersonal involvement, SDT assumes that the needs will be supported, and more autonomous forms of motivation will guide behavior (see Figure 1). These forms of motivation can be identified (e.g., “I exercise because I value its benefits for my health”), integrated (e.g., “I exercise because it is consistent with what I value”) or intrinsic (e.g., “I exercise because it is fun”). However, if the social context lacks autonomy support, structure and interpersonal involvement, the needs will be thwarted, and more controlling forms of motivation (i.e., introjected (e.g., “I exercise because I feel guilty if I don’t”) and external (e.g., “I exercise other people tell me I should”) regulation), or amotivation (e.g., “I don’t know why I bother exercising”), are expected to arise.

Finally, SDT suggests that if the three psychological needs are satisfied by the social context, and more autonomous forms of motivation (i.e., I like/I value physical activity) are held by the individual, that person will take responsibility for, and ownership of, their exercise engagement. As a consequence, positive behavioral (i.e., exercise adoption and adherence), cognitive (i.e., positive thoughts about exercise) and well-being (e.g., positive affect, feelings of vitality) outcomes will result. In contrast, if the needs are thwarted by the social context, and

more controlling forms of motivation (i.e., I feel guilty about/I have been told to exercise) or amotivation are held by the individual, the individual will not take ownership of his/her physical activity behavior. As a result, less adaptive behavioral (i.e., dropping-out), cognitive (i.e., negative thoughts about exercise) and well-being (e.g., negative affect) outcomes will be evidenced. Figure 1 summarizes the main assumptions of SDT.

Research supporting the relevance of self-Determination theory to the exercise domain

A number of recent studies have offered support for the applicability of SDT to the quality and extent of one's exercise engagement. For example, Edmunds et al.[9] have shown that satisfaction of the need for competence and identified regulation (i.e., valuing the benefits of exercise) are important predictors of strenuous exercise behavior. In addition, feelings of relatedness have been shown to predict exercise adherence among overweight and obese individuals.[10] Relevant to intervention efforts, research has also demonstrated a link between the social contextual factors emphasized by SDT and the psychological mediators assumed to be underpinning behavior (i.e., need satisfaction). For example, Edmunds and colleagues [8] found perceived autonomy support provided by an exercise instructor to positively predict autonomy, relatedness, and competence need satisfaction, as well as intrinsic motivation for exercise.

Advancing this cross-sectional evidence in support of SDT, Fortier and colleagues [11] recently conducted a field trial to test the benefits associated with delivering physical activity counseling in an SDT, versus standard, manner. The results of this study showed that participants who received brief autonomy supportive physical activity counseling from their health care provider, followed by a 3-month autonomy supportive physical activity counseling from a physical activity counselor, demonstrated greater exercise adoption that those receiving only brief counseling (i.e., that initially provided by their health care provider). Edmunds, Ntoumanis and

Duda [12] have recently conducted a study to examine the benefits of delivering a 10-week exercise class program in accordance with the principles of SDT. We found that, compared to the normal teaching style condition, the SDT-based class (which was designed to promote autonomy support, structure and interpersonal involvement) was perceived by participants as being higher in these three environment features. In addition, compared to an exercise class delivered in the exercise instructor's normal teaching style, the SDT-based exercise class led to greater feelings of relatedness and competence need satisfaction, positive affect and greater attendance among the students.

What does this suggest for health and fitness professionals?

The studies presented above indicate that it is possible for exercise instructors and health and fitness professionals to deliver exercise consultations and programs in line with SDT. In addition, these studies suggest that when exercise consultations and programs are delivered in a self-determining manner, positive outcomes in terms of exercise adoption, adherence and experienced well-being will ensue. The remainder of this article will present a number of suggestions which may be used by health and fitness professionals to enhance perceptions of autonomy support, structure and interpersonal involvement among their clients/patients. The majority of the proposed strategies (see Table 1) were utilized in the Edmunds et al. [12] study.

Creating an environment rich in autonomy support

Health and fitness professionals may enhance their clients'/patients' perceptions of autonomy support in a number of ways. Firstly, they need to provide their clients/patients with choices. One obvious way of doing this would be to involve the exerciser, or exercise class if the activity is group-based, in the overall design of the exercise program and activities. For example, in designing and delivering an exercise intervention to a hard-to-reach group, such as obese

women in the post-natal period for example, the health and fitness professional may benefit from an initial planning session with the clients/patients, to identify the most appropriate time of day to exercise, the most convenient location, and the type of exercises that they would feel more comfortable and confident in performing. Similarly, the provision of choice may be achieved on a session-by-session basis, by asking the participant(s) to make choices about the type or focus of the exercises performed. For example, when doing conditioning exercises at the end of an exercise class the health and fitness professional could ask "Would you like to focus on 'butt or abs' today?"

In creating an environment in which exercisers would feel that they are being given options and alternatives, it is imperative that the health and fitness professionals make themselves accessible; that they spend time listening and being responsive to the needs and concerns of their clients/patients. Again, this will involve allowing time for the exercisers/exercise class to discuss the types of exercise they are interested in, the preferred content of their program and allowing them to identify areas of weakness on which they want to focus. Using this information, the health and fitness professional can then tailor exercise programs to meet individual needs when and where possible. In doing so, the health and fitness professionals will be able to motivate their exerciser(s) through increased interest and personal relevance and the sense that the participants have input into the nature of their exercise engagement.

If the health and fitness professionals are unable to provide choice, and must specify the type of exercise that needs to be done (for example, the participant must engage in cardiovascular exercise to lose weight), it is imperative they provide a meaningful rationale for the exercise activities in question. They would need to explain why a particular activity is important, and how it will benefit the exercisers' fitness and/or health. All communication should be made in a non-

controlling and information rich language. For example, the health and fitness instructor could explain that:

'to lose weight you need to expend more calories per day than you consume. Exercise which gets you breathing faster, your heart beating faster and makes you sweat, such as jogging, is one of the best ways to expend energy, and so, it will help you burn off more calories than you take in…'

To foster self determination, health and fitness professionals also need to acknowledge and take into account individual's/the group's feelings and perspectives. This would involve being responsive to participants' areas of weakness or concern, and trying to be sympathetic about these areas whilst addressing the problem or challenge at hand. For example, if an older adult has just been referred to a cardiac rehabilitation program following a heart attack, he/she may be very scared about exerting himself/herself physically due to a perceived risk of having another heart attack. While listening to and acknowledging these concerns, a health and fitness professional would need to provide the client/patient with clear and reputable information as to why and how taking part in exercise would actually minimize the risk of him/her having another heart attack. The advisor may also introduce this client/patient to other individuals who expressed similar concerns, but who are now exercising regularly without any negative impact on their health.

In all self-determination enhancing exercise consultations/programs, it is important that the perceived or overt pressure to become more active is minimized. This may be achieved by the health and fitness professional not using controlling (i.e., must/should) language. For example, instead of simply stating 'you must do 15 repetitions of each leg exercise,' the health and fitness professional could ask whether the clients/patients are willing to attempt this number of

repetitions and provide a clear explanation as to how this activity will assist them in reaching their desired goal. This will help the exercisers to endorse and internalize the activity and understand the value that it will bring in terms of fitness, health and well-being.

Once an individual or group has begun to increase their physical activity level, health and fitness professionals should praise this attempt at behavioral change. Giving positive and accurate feedback to those doing exercises well will also nurture competence. It is important to try and identify and emphasize self-improvement in terms of a participant's/client's efforts to be more active. On the other hand, it is best for health and fitness professionals to refrain from giving rewards (whether material or based on contingent praise) to regulate behavior, such as on completion of an exercise task. This is because the aim of a SDT-based approach would be to make an individual(s) internalize their motivation towards exercise (so that they are identified, integrated or intrinsically motivated), rather than to have behavior linked to or contingent upon any external reward system.

Creating an environment rich in structure

To create a well structured exercise environment, it is important for health and fitness professionals to provide clear expectations. For example, they make take time at the start of an exercise session to explain its content and what will be required of participants. This will ensure the session or class is well organized and participants will know what they will be doing that day. Added to this, it is also desirable for the health and fitness professional to answer questions well and directly throughout the course of the exercise session/class. This will make sure that their expectations are clear and that participants know exactly what they are being asked to do and how to meet the task demands in question. Another example of good leadership, and a way to create an optimally structured environment, would be to provide clear plans and goals for the

session/class. For example, the health and fitness professional helping an obese child to learn to swim may start a session by saying “Today I’d like you to focus on improving your breathing, and, as a result, to be able to swim further and work harder than you have previously….” Structure needs to be delivered in an autonomy supportive manner; for example, the health and fitness professional can aim to involve the participant/client in the goal setting process.

Exercise sessions/classes should also provide clients/patients with optimal challenge, by maintaining an appropriately (in terms of fitness gains) high workload and not making it more likely that individuals will disengage or ease off. The presentation of challenge is best accompanied by the provision of continual encouragement. If groups/individuals are genuinely struggling or fall short of their aim, then easier options or less demanding goals are best readily introduced. In such cases, it would be beneficial for the health and fitness professional to explain that setbacks do happen and indicate how perseverance by the participant/client will translate into further progress with time.

To foster optimal structure, it is also important that the health and fitness professional provides individuals with timely and informative feedback. For example, feedback is essential when an individual is not performing optimally, so that they can amend their technique and facilitate the benefits derived from the exercise. For example, in the case of an exercise instructor, this may be achieved by venturing out into a class and offering one to one support or feedback to those most in need.

Creating an environment rich in interpersonal involvement

Interpersonal involvement relates to showing participants/clients that their health and fitness professional is genuinely interested in them and concerned about their well-being. While maintaining their professionalism, exercise instructors should be warm, open, and attentive,

showing the exercisers that they sincerely care about their progress.

To create greater interpersonal involvement, the health and fitness professionals could, for example, spend time chatting with individuals before or after an exercise class. They could also try to learn participants' names and a little personal information about them. The health and fitness professionals should also try to demonstrate that they enjoy spending time with the individual/class. For example, this may be achieved by expressing how much they are enjoying seeing an individual's performance improve, or by joining in on an exercise drill/task and displaying their feelings of elation on completion of the complex task. Ensuring close physical proximity to participants, by mixing with the exercise class for example, should also help foster interpersonal involvement.

Finally, it is important to recognize the degree of interest and disinterest expressed by the participants/clients. If a problem does arise, the health and fitness professional should try to re-engage the individual or class, rather than ploughing on with same exercise. This may be achieved by regularly asking participants for their comments and feedback: what did they like and dislike? What would they like to change about the exercise program?

Summary

The evidence presented in this article suggests that when exercise messages, consultations, classes and programs are delivered in an autonomy supportive, structured and interpersonally involved way, exercise adoption, adherence and well-being is more likely to ensue. By utilizing the strategies described in this article, health and fitness professionals will hopefully be more able to empower their clients/patients to take ownership of their exercise involvement. Fostering an autonomous approach to physical activity engagement should subsequently improve exercisers' chances of achieving and maintaining the benefits associated

with a physically active lifestyle.

Figure 1. *Basic assumptions of SDT (adapted from Vallerand, 1997).*[8]

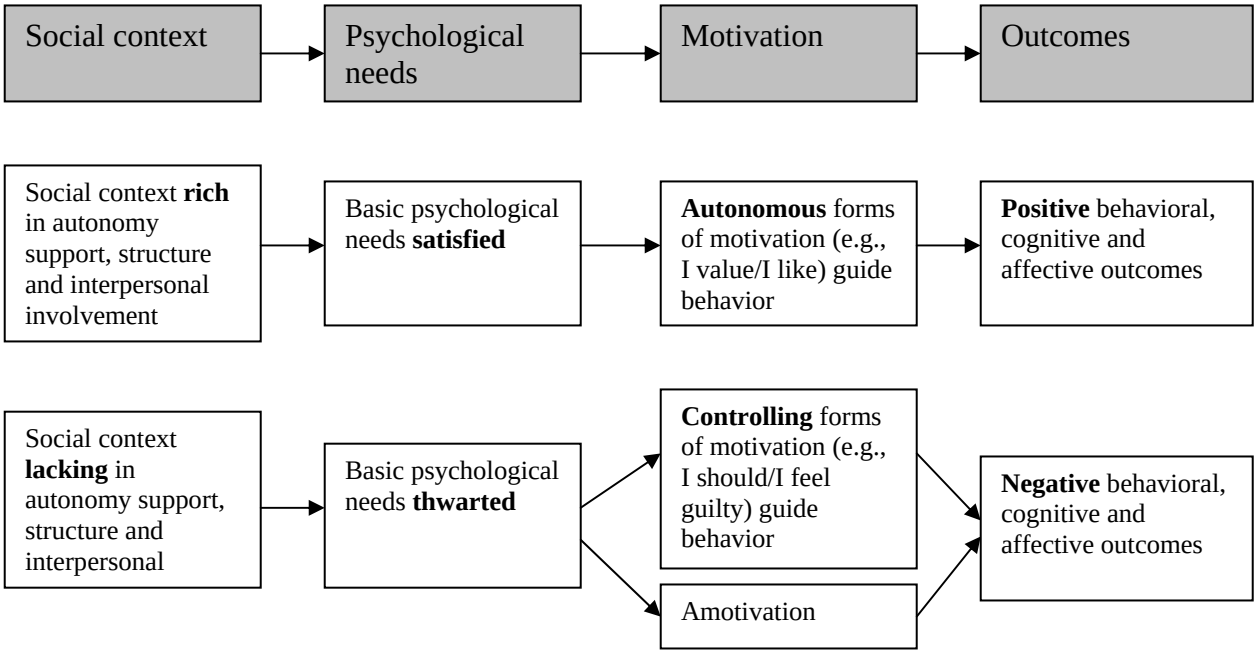

Table 1. The *different social-contextual characteristics proposed by SDT, and examples of how they can be incorporated into a health and fitness professional's instructional style.*

Characteristic	Dimension	An example of application
Autonomy support	1. Provide choice.	1. Provide options about the type of exercise when possible.
	2. Be supportive and praise improvement.	2. Praise improvement in techniques and fitness.
	3. Acknowledge and take into account exercisers' feelings and perspectives.	3. Be open to complaints and respond to them in a positive manner.
	4. Provide meaningful rationale.	4. Explain why each activity is beneficial, and what areas of fitness will improve.
Structure	1. Demonstrate good leadership.	1. Negotiate goals at the start of the class.
	2. Answer questions well and directly.	2. As stated.
	3. Provide optimal challenge.	3. Work at a level that pushes participants to the maximum but accommodate for those less able; provide easy and hard options.
Interpersonal involvement	1. Dedicate resources to participants.	1. Spend time chatting at the start of class, learn exercisers' names and show

		enjoyment.
	2. Ensure close proximity.	2. Mix with the class; don't dominate at the front.
	3. Recognize interest and disinterest.	3. If a problem arises, discuss and amend it; try and re-engage with the class and don't keep ploughing on regardless.

Multiple choice questions and answers:

1. SDT proposes that to facilitate and support exercise behavior, a health and fitness professional will need to provide:

    a. Autonomy support.

    b. Structure.

    c. Interpersonal involvement.

    d. All of the above.

Answer: d, All of the above.

2. SDT proposes that humans have 3 basic psychological needs, these are:

    a. Self-efficacy, control and social support.

    b. Autonomy, relatedness and self concept.

    c. Autonomy, relatedness and competence.

Answer: c, Autonomy, relatedness and competence.

3. SDT defines autonomous forms of motivation as:

    a. Introjected, identified and integrated.

    b. Introjected, external and amotivated.

    c. Identified, integrated and intrinsic.

Answer: c, Identified, integrated and intrinsic.

4. SDT suggests that autonomous forms of motivation lead to:

a. Positive behavioral, cognitive and well-being outcomes.

b. Negative behavioral, cognitive and well-being outcomes.

c. Both positive and negative behavioral, cognitive and well-being outcomes.

Answer: a, Positive behavioral, cognitive and well-being outcomes.

5. To create perceptions of autonomy support, a health and fitness professional could:

a. Offer social support.

b. Provide choice.

c. Tell exercise participants what they need to do.

d. All of the above.

Answer: b, Provide choice.

6. To create perceptions of structure, a health and fitness professional could:

a. Negotiate goals.

b. Make an exercise class challenging.

c. Provide feedback.

d. All of the above.

Answer: d, All of the above.

7. To create perceptions of interpersonal involvement, a health and fitness professional could:

a. Give lots of choices.

b. Give exercisers lots of time and attention.

c. Give exercisers rewards to say “well done” when they reach their goals.

d. All of the above.

Answer: b, Give exercisers lots of time and attention.

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