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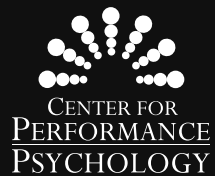
Relatedness Factors Defining a Mutual Personal Trainer-Client Relationship to Realize Success: **A Qualitative Descriptive Study**

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ABSTRACT

The purpose of this qualitative descriptive study was to explore the experiences of millennial personal training clients regarding relatedness with their trainer in connection to achieving their personal training goals. The sample was composed of millennials who worked with a personal trainer at least once a week within the last six months. Data collection for this qualitative descriptive design included a demographic questionnaire, the Basic Psychological Need Satisfaction and Frustration Scales (BPNSFS) survey, and semi-structured interviews. Data analysis, which included descriptive statistics and thematic analysis, led to the creation of the "Factors Defining a Mutual Personal Trainer-Client Relationship to Realize Success" model for personal trainers to help motivate their clients to attain their personal goals. Recommendations for future studies include quantitative studies on how self-determination predicts personal training goal attainment, as well as further research on the components of autonomy, competence, and relatedness.

Keywords: self-determination, millennials, obesity, personal training, relatedness, goals



INTRODUCTION

The purpose of this qualitative descriptive study was to explore the experiences of millennial personal training clients regarding relatedness with their trainer in connection to achieving their personal training goals. This research led to the “Factors Defining a Mutual Personal Trainer-Client Relationship to Realize Success” model for personal trainers to help motivate their clients to attain their personal goals. Self-determination theory (SDT) describes motivation in three components: relatedness, autonomy, and competence. This article focuses on the relatedness dimension, which provided a set of unique findings contributing to the profession of personal training and the current literature.

The need for this study was bounded by several unique perspectives. One of the primary perspectives, the growing epidemic of obesity, has led to significant problems in the United States for decades. Obesity is a quickly evolving public health problem due to the detrimental health effects, rising prevalence, and increased costs impacting the U.S. (Agha & Agha, 2017).

Another perspective bounding this research is the potential solution of personal training, which has been widely accepted in addressing the problems caused by obesity. Fitness professionals, such as personal trainers, are an appropriate solution for delivering health-focused exercise interventions to obese individuals (Jeffery et al., 1998). A third perspective defining the need was the millennial generation born in the early 1980s through the mid-1990s (Glick, 2020), which previous studies have suggested should be further explored (Porter et al., 2019).

A fourth perspective was a psychological theory, self-determination theory (SDT), to provide the theoretical framework used to explore the problem. Self-determination is individuals having basic psychological needs driven by their integration and self-motivation (Deci & Ryan, 1985). Relatedness, one of three main components of SDT, was discovered through this research to influence the goal attainment of personal training clients in dynamic and unique ways.

To address the primary research question, self-determination theory (SDT) provided the theoretical foundation for developing the research questions and guiding the data collection. According to Deci and Ryan (1985), an individual is motivated to initiate behavior and specify internal drivers required for their well-being and psychological health. Self-determination is the concept of individuals having basic psychological needs driven by their integration and self-motivation. The three components within SDT are autonomy, competence, and relatedness. Deci and Vansteenkiste (2004) defined autonomy as “the desire to be causal agents of one’s own life and act in harmony with one’s integrated self.” Competence means “to seek to control the outcome and experience mastery” (White, 1959). Baumeister and Leary (1995) defined relatedness as “the will to interact with, be connected to, and experience caring for others.” Ball et al. (2017) suggested that motivation could help drive individuals to participate in exercise more frequently. Prior research has recommended how SDT could have greater opportunities of contributing positive influence on future research related to this study (Chicote-Lopez et al., 2018; Eynon et al., 2017; Haslem et al., 2016).

The SDT model helped develop the overarching research question and supporting research questions. The combination of millennials, self-determination, and personal training provided direction toward creating the overarching research question: How do millennials describe self-determination as a contributor to realizing their current personal training goals? While the other two basic needs of SDT – autonomy and competence – were included in the study, the researcher focused on relatedness in deeper detail. Doğan (2017) administered a qualitative study, which suggested greater emphasis was prevalent on the relatedness between personal trainers and their trainees. Two central, emerging themes described the trainer-trainee relationship as an emotionally significant encounter. Doğan conducted interpersonal interviews indicating how relatedness was mutually strong between both parties. One of the personal trainers claimed that his relationship was “deeply personal” with his client. Therefore, the powerful factor that this relatedness component embodies is open for further examination in similar studies. A supporting research question specifically focused on the relatedness component of SDT. This supporting question was: How do millennials describe relatedness as a contributor to realizing their current personal training goals? The problem statement was: It is

unknown how millennials describe self-determination as a contributor to realizing their current personal training goals. The research questions and problem statement were addressed in understanding the self-determination factors motivating millennials to achieve their personal training goals.

With the growing national obesity epidemic, it is important to develop a better understanding of which resolutions are available from different perspectives to address this societal issue (Ward et al., 2019). The increase in obesity in the United States has led to major underlying problems prevalent generation after generation (Agha & Agha, 2017). Few studies have been conducted on the millennial generation, and this study intends to explore the problem space by contributing new data on millennials and their engagement in personal training.

Therefore, the problem statement guiding this research was: It is not known how millennial personal training clients describe their experiences regarding relatedness with their trainer to achieving their personal training goals. Studying millennials provided vital insight into which motivational factors are involved in contributing to their self-determination, as well as their degrees of relatedness. This study produced qualitative descriptive data on how motivation working with personal trainers led to goal attainment.





METHOD

The purpose of this study was to explore how millennials describe the importance of relatedness in helping them realize their personal training goals. The study used a qualitative descriptive approach, described by Sandelowski (2000, 2010), allowing the researchers to obtain detailed descriptions of experiences of millennials with their personal trainer. A demographic questionnaire (see Appendix A), a validated survey instrument (see Appendix B), and semi-structured interviews (see Appendix C) provided the data for this study. These sources were essential to obtain a complete picture of how self-determination played a role in millennials' personal training experiences and ultimately in the attainment of their personal goals. The degree of attainment of their training goals was directly collected using part of the demographic questionnaire. The validated survey described the nature and level of each participant's self-determination in the three dimensions of autonomy, competence, and relatedness.

The participants in this study were millennials in the Atlanta Metro area who worked with a personal trainer to attain personal training goals and registered in Amazon Mechanical Turk (MTurk) as research participants. MTurk is a relatively recent crowdsourcing platform, allowing researchers to collect data in an affordable, effective, and efficient manner (Ford, 2017; Sheehan, 2018). This resource was used in the data collection steps to recruit the participants for the study. To be included in the study, potential participants had to 1) be millennials (born between 1981 and 1996), 2) be actively involved in an exercise program with a personal trainer for at least six

months in the Atlanta Metro area, 3) be working out with a personal trainer at least once a week on average, and 4) have actively exercised under the supervision of a personal trainer within the last year.

The resulting sample included a diverse set of participants. 11 females and 39 males who met the inclusion criteria completed the first phase of data collection. This data collection included completing the survey, which provided their level of personal training goal attainment. The demographic questions included age, gender, and race length of time training with a personal trainer, number of times per week training with the trainer, body weight lost, and percent of body fat lost during personal training. These questions described the sample. In addition, the body weight loss and percent of body fat lost during personal training, which measured the participants' level of personal training goal attainment, were used to select interview participants. The average age of participants was 31. Reported ethnicities included White/Caucasian (n = 31), Asian/Pacific Islander (n = 13), Black/African American (n = 4), Hispanic (n = 1), and multiple ethnicity/other (n = 1). Of the 50 participants, the majority (n = 30) worked with a personal trainer for six months to a year, and most (n = 43) worked with their trainer once per week.

From the 50 who completed the survey, the individuals who had the highest relative combined score for level of relatedness and personal training goal attainment participated in the interview. This study

intended to examine the experiences of the individuals attaining this highest combined level because the researcher's rationale was to focus on those highest-relatedness clients who achieved their personal training goals. Phan et al. (2019) recommended researching the characteristics individuals uphold when optimally functioning, which provides best practices as an appropriate measure of producing both empirical and theoretical contributions. Thus, selecting the individuals in this study, which focused on goal attainment and self-determination, revealing individuals demonstrating best practices, would generate an output of a combination of the individuals exhibiting a composite of highest self-determination and highest goal attainment. Two females and eight males met the inclusion criteria for the second phase of data collection, which was the interview. Using purposive sampling, a subset of the survey participants participated in the interview. Recruitment of participants for the interview was based on the highest average scores of goal attainment and overall self-determination, as illustrated in the table below.

The descriptive questions from the questionnaire were used to measure goal attainment, and all responses from the BPNSFS calculated self-determination. Combining the goal attainment and self-determination scores resulted in the respective composite goal attainment and self-determination score. Ten participants with the highest composite score participated in the interview. All ten invited to this phase agreed to participate and were interviewed.





Starting weight: a lbs.
Ending Weight: b lbs.
Difference (a-b) = c lbs.
Weight Goal Attainment (c/a) = d%

Starting Body-Fat: e%.
Ending Body-Fat: f %.
Difference (e-f) = g%.
Body-Fat Goal Attainment (g/e) = h%

(Weight Goal Attainment: d% + Body-Fat Goal Attainment: h%) / 2= Composite Goal Attainment

Highest Possible Self-Determination Score: 120%
Self Determination Score: x
Difference (120 - x) = y.
Self-Determination % (y/120): z

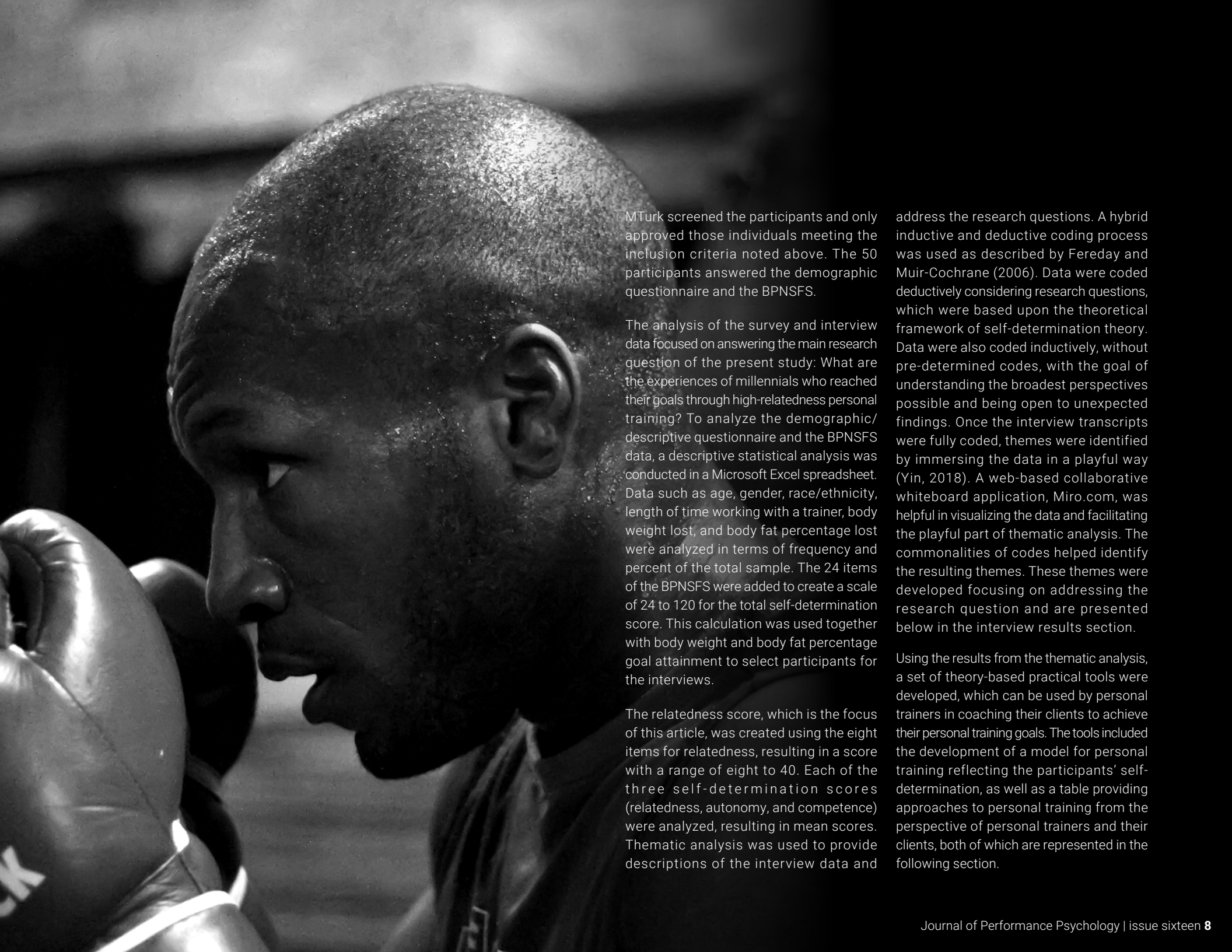
(Composite Goal Attainment % + Self-Determination %) / 2= Total Composite of both percentages

Data on the nature and level of the participants' self-determination were collected using a validated survey instrument, the Basic Psychological Need Satisfaction, and Frustration Scales (BPNSFS) and semi-structured interviews. The BPNSFS is composed of 24 items assessing the participant's perceived degree of autonomy, competence, and relatedness, based on self-determination theory (Deci & Ryan, 1985). Eight of the 24 items measure relatedness, with each item measured on a 5-point Likert scale. The survey instrument used for this study was based on the self-determination theory developed by Deci and Ryan in 1985. The BPNSFS was validated by Chen et al. in 2015 in a study that spanned four cultures. Researchers have continued to use the survey instrument in a variety of studies and geographical locations, including Portugal (Rodrigues et al., 2019), Italy (Costa et al., 2017), and Chile (Del Valle et al., 2018).

The semi-structured interview developed by the researcher was based on the problem

statement and the theoretical foundation. The interview questions were developed to obtain further depth regarding the participants' sense of relatedness, specifically regarding their interactions with their personal trainer. There were three primary questions pertaining to relatedness, with multiple prompts and follow-up questions. The researcher provided a clear definition of relatedness to the participants in laymen's terms, ensuring they understood how this term would be described in the interview questions. The goal was to obtain in-depth descriptions of their social connections associated with their personal training experiences. The interview questions focused on obtaining the participants' perspectives of relatedness between them and their personal trainer.

Convenience sampling was used to obtain the sample of 50 questionnaire participants. Due to the COVID-19 pandemic, face-to-face recruitment was not possible. MTurk was used to obtain the sample of 50 people meeting the study criteria to complete the survey as phase one of the study data collection.



MTurk screened the participants and only approved those individuals meeting the inclusion criteria noted above. The 50 participants answered the demographic questionnaire and the BPNSFS.

The analysis of the survey and interview data focused on answering the main research question of the present study: What are the experiences of millennials who reached their goals through high-relatedness personal training? To analyze the demographic/descriptive questionnaire and the BPNSFS data, a descriptive statistical analysis was conducted in a Microsoft Excel spreadsheet. Data such as age, gender, race/ethnicity, length of time working with a trainer, body weight lost, and body fat percentage lost were analyzed in terms of frequency and percent of the total sample. The 24 items of the BPNSFS were added to create a scale of 24 to 120 for the total self-determination score. This calculation was used together with body weight and body fat percentage goal attainment to select participants for the interviews.

The relatedness score, which is the focus of this article, was created using the eight items for relatedness, resulting in a score with a range of eight to 40. Each of the three self-determination scores (relatedness, autonomy, and competence) were analyzed, resulting in mean scores. Thematic analysis was used to provide descriptions of the interview data and

address the research questions. A hybrid inductive and deductive coding process was used as described by Fereday and Muir-Cochrane (2006). Data were coded deductively considering research questions, which were based upon the theoretical framework of self-determination theory. Data were also coded inductively, without pre-determined codes, with the goal of understanding the broadest perspectives possible and being open to unexpected findings. Once the interview transcripts were fully coded, themes were identified by immersing the data in a playful way (Yin, 2018). A web-based collaborative whiteboard application, Miro.com, was helpful in visualizing the data and facilitating the playful part of thematic analysis. The commonalities of codes helped identify the resulting themes. These themes were developed focusing on addressing the research question and are presented below in the interview results section.

Using the results from the thematic analysis, a set of theory-based practical tools were developed, which can be used by personal trainers in coaching their clients to achieve their personal training goals. The tools included the development of a model for personal training reflecting the participants' self-determination, as well as a table providing approaches to personal training from the perspective of personal trainers and their clients, both of which are represented in the following section.



RESULTS

The research question of this article was: What are the experiences of millennials who reached (their) goals through high-relatedness personal training? The mean relatedness score for the 50 participants was 27.10. The millennial participants described their relatedness in terms of how that component contributed to realizing their personal training goals. Thematic analysis of the open-ended interview questions brought up three primary themes: emotional connection, mutual caring relationship, and encouragement/dissonance toward stretch goals.

Some participants believed relatedness was unimportant, while others strongly felt it was the key component of their self-determination. Overall, the emotional connection between the participants and their trainer appeared to be a highly significant

contributor to goal attainment. Warmth and care were fundamental qualities that continued to reoccur within the interviews leading to a mutually caring relationship. The personal trainer's encouragement, balanced with an appropriate level of dissonance, was also a common underlying theme emerging throughout different interviews. These findings helped better understand how millennials describe their need for relatedness as a contributor to realizing their personal training goals.

Theme 1: Emotional Connection. The emotional connection was the first theme identified through the thematic analysis. The research participants explained how emotional connection played a significant role in their relationship with their trainer. Some participants felt a strong bond that organically grew over time with their trainer.

This bond was more than superficial and was rooted in a deep mutual relationship. The interview transcripts uncovered multiple examples of the emotional connection between the participants and their trainers.

For example, Participant 2 responded, "So, I always, in the back of my mind, I think like, 'Oh, it would be nice if there was an emotional connection there with my trainer.'" When asking Participant 5 to share details of his relatedness experience, he described how commitment was an important factor in his emotional connection to his personal trainer. He said, "Commitment is building a connection to somebody. We would be able to talk about these — the common social things and that just made the whole situation, for me, a little bit of a lighter, friendly, more relaxed." Participant 6 told the researcher how the emotional connection

is important to working with his trainer. He elaborated, "The overall effect I've had to go through different emotions to get to that point. I've had other trainers where they would not only give you about 70% of their attention, but they're always looking around. Many years ago ... I started with the trainer that would start to start me on an exercise. Then he would disappear. And I would find him looking at the girls during the aerobics class."

Theme 2: Mutually Caring Relationship.

A mutually caring relationship was identified as a second theme in response to the research question. This theme was defined as the symbiotic relationship of trust, warmth, and care toward one another. The word "care" was frequently used when discussing relatedness and the relationship to personal training throughout the interviews. Participants

expressed how they preferred their trainer to display the characteristics of warmth and care. In return, it was just as important to reciprocate mutual levels of warmth and care to their trainer. Interview transcripts detailed examples of mutual care. Participant 3 mainly focused on his caring relationship with his trainer. He expressed how the relatedness developed with his trainer greatly outweighed the other components of autonomy and competence in contributing to his achievement of personal training goals. Participant 3 said, "It was that close of a relationship, and if I'd had a trainer that didn't care, I wouldn't have gone that extra mile because I was doing it for myself. But underlying, I was also trying to please the trainer. I cared about my relationship with the trainer enough to want to do what they recommended." Participant 5 described how the level of mutual care between himself and his trainer built their relationship. He shared his example by stating, "Especially, you know, the ones around me, than the ones who I talked to and really care. You know, like, as we talked about the caring, the caring of other people meet, the more it positively influenced people around me to see better health." Participant 8 described this emotional connection as "mutual caring both ways, and that's how it works."

Theme 3: Encouragement/Dissonance Toward Stretch Goals. Encouragement/dissonance toward stretch goals was the third theme identified in response to the research question and defined as receiving positive reinforcement and support for superior performance. This study suggested that while most of the research subjects appeared

to have high levels of autonomy, there may have been signs of extrinsic motivation directly provided by their personal trainer's level of encouragement and dissonance.

Along with this motivation was the trainer's dissonance, which included an appropriate level of resistance and tension during their exercise sessions. Research participants explained the strategic balance of encouragement and dissonance in further detail. Participant 2 said, "He's been trying to encourage me to do some workouts on days where I don't do anything, like do some homework ... I felt bad not doing the homework exercises, and he would get onto me. He held me accountable to reach my goals." Encouragement and dissonance were highly evident in Participant 3's interview transcript. Participant 3 described this balance by stating, "The relationship with the trainer encouraged me to the point where I wanted to please the trainer ... There were times I disagreed with my trainer. It made me feel like he didn't see how hard I was working. But after thinking about it, I think it was like tough love ... Trying to push me to get the most out of me so that way we could achieve above and beyond." When describing the relatedness of her trainer, Participant 7 said, "My personal trainer is not like that at all. Like, they're very outgoing and they're very, very motivated. And if I'm not motivated for whatever reason, just being around them and just starting to work out just motivates me as well ... Sometimes, we went beyond our goals. He called them stretch goals. He said he pushed me beyond my limit, and that was the only way I could get better."

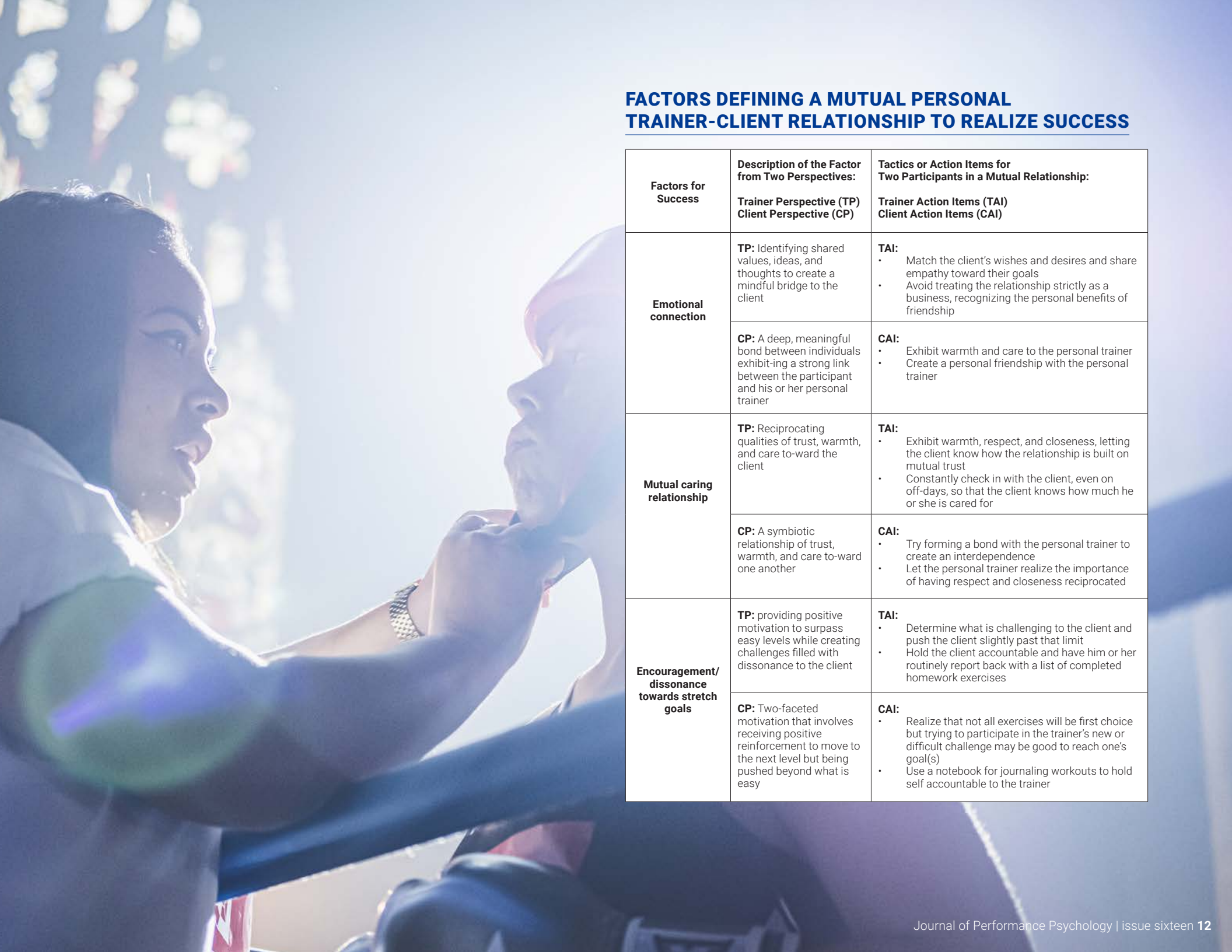




DISCUSSION

After the researcher completed the thematic analysis of all interviews, a table was created, which provides the factors defining a mutual personal trainer/client relationship to realize success. The factors are the relatedness themes, revealed above, and the descriptions of these factors are defined from the perspectives of both the personal trainer and the client.

While this study produced qualitative descriptive data from the different perspectives of clients, there is an equally important obligation from their respective clients to match the relatedness goals of these clients. Thus, personal trainers can follow the objectives they should uphold in a basic model, which helps enhance their abilities to satisfy the relatedness outcomes of their respective clients. This two-participant mutual relationship provides the tactics or action items needed from both parties to realize that focus. This table further illustrates a holistic description of the phenomenon.



FACTORS DEFINING A MUTUAL PERSONAL TRAINER-CLIENT RELATIONSHIP TO REALIZE SUCCESS

Factors for Success	Description of the Factor from Two Perspectives:		Tactics or Action Items for Two Participants in a Mutual Relationship:	
	Trainer Perspective (TP)	Client Perspective (CP)	Trainer Action Items (TAI)	Client Action Items (CAI)
Emotional connection	TP: Identifying shared values, ideas, and thoughts to create a mindful bridge to the client		TAI: <ul style="list-style-type: none"> Match the client's wishes and desires and share empathy toward their goals Avoid treating the relationship strictly as a business, recognizing the personal benefits of friendship 	
	CP: A deep, meaningful bond between individuals exhibiting a strong link between the participant and his or her personal trainer		CAI: <ul style="list-style-type: none"> Exhibit warmth and care to the personal trainer Create a personal friendship with the personal trainer 	
Mutual caring relationship	TP: Reciprocating qualities of trust, warmth, and care toward the client		TAI: <ul style="list-style-type: none"> Exhibit warmth, respect, and closeness, letting the client know how the relationship is built on mutual trust Constantly check in with the client, even on off-days, so that the client knows how much he or she is cared for 	
	CP: A symbiotic relationship of trust, warmth, and care toward one another		CAI: <ul style="list-style-type: none"> Try forming a bond with the personal trainer to create an interdependence Let the personal trainer realize the importance of having respect and closeness reciprocated 	
Encouragement/dissonance towards stretch goals	TP: providing positive motivation to surpass easy levels while creating challenges filled with dissonance to the client		TAI: <ul style="list-style-type: none"> Determine what is challenging to the client and push the client slightly past that limit Hold the client accountable and have him or her routinely report back with a list of completed homework exercises 	
	CP: Two-faceted motivation that involves receiving positive reinforcement to move to the next level but being pushed beyond what is easy		CAI: <ul style="list-style-type: none"> Realize that not all exercises will be first choice but trying to participate in the trainer's new or difficult challenge may be good to reach one's goal(s) Use a notebook for journaling workouts to hold self accountable to the trainer 	



CONCLUSION

The researcher studied how millennial personal training clients describe their experiences regarding relatedness with their trainer in connection to achieving their personal training goals. This phenomenon involved millennials living in Atlanta, Georgia, working out with a personal trainer to attain personal training goals. Data collection of the study began with 50 participants meeting the eligibility criteria by providing demographic information and numerical values of their goal attainment in an online questionnaire. These participants also completed a validated survey (BPNSFS) answering levels of autonomy, competence, and relatedness, which computed a score

of their overall self-determination. The researcher interviewed 10 of these 50 participants and conducted hybrid coding, which led to a thematic analysis of their interview transcripts. The relatedness component of self-determination theory derived three unique themes. By synthesizing the literature on these themes with examples from the interviews, the researcher managed to answer the research questions, arriving at a complete description of the phenomenon.

Three primary limitations challenged this research study, including the methodology, data sources, sampling strategies, and

COVID-19. First, the data sources, including demographic questionnaires, BPNSFS survey, and interviews, were all self-reported, thus leading to possibilities of bias (Althubaiti, 2016). The Zoom conference interviews were audio-recorded, thus limiting the researcher from some advantages video recording offer, including facial reactions and body language. However, the researcher deemed the transcriptions generated from the audio recordings still produced rich data leading to the analyzed themes. Second, the researcher used a deliberate set of sampling strategies in this study. These strategies included convenience sampling and purposive sampling. The researcher had initially considered alternative sampling methods, such as snowball sampling. After much consideration, the researcher dismissed other sampling measures since they received the necessary participants, meeting eligibility for the study. Third, and finally, the researcher became aware of all the limitations created by the COVID-19 pandemic. For example, initially, the researcher planned to meet and recruit participants in

person at local fitness centers and follow up with in-person interviews. This recruitment strategy was quickly removed from possibility since all fitness centers in Atlanta were closed for several months.

By considering the results of the study and implementing strategies to address each of these findings, personal trainers can better train and coach their clients, enabling them to realize their personal training goals regarding relatedness. The methods include acting upon the techniques to meet the client's needs for emotional connection, mutual caring relationship, and encouragement/dissonance toward stretch goals. This could lead to client retention, longer-term relationships, and overall client satisfaction. By being aware of clients' motivation and how and why they are influenced before the personal training process, personal trainers can achieve more success with clients. This can enable trainers to reach their clients' goals in addition to their own goals, as well.

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SUPPORTING APPENDICES

APPENDIX A

Instrument 1: Demographic Form

1. Your current age:

2. Your gender:

3. Which race/ethnicity best describes you? (Please choose only one.):

American Indian or Alaskan Native

Asian / Pacific Islander

Black or African American

Hispanic

White / Caucasian

Multiple ethnicity / Other (please specify)

4. How long have you been working out with a personal trainer?

6 months to 1 year

At least 1 year up to 2 years

At least 2 years up to 3 years

Greater than 3 years

5. On average, how many times do you work out with your personal trainer?

Once per week

Twice per week

Three or more times per week

6. How much body-fat percentage have you lost during your personal training program?

Beginning _____%

Ending _____%

Total loss _____%

7. How much body-weight have you lost during your personal training program?

Beginning _____lbs.

Ending _____lbs.

Total loss _____lbs.

APPENDIX B

Basic Psychological Need Satisfaction and Frustration Scale (BPNSNF)

Below, we ask you about the kind of experiences you actually have in your life. Please read each of the following items carefully. You can choose from 1 to 5 to indicate the degree to which the statement is true for you at this point in your life.

1 Not True at all	2	3	4	5 Completely True	
I feel a sense of choice and freedom in the things I undertake.	1	2	3	4	5
Most of the things I do feel like "I have to."	1	2	3	4	5
I feel that the people I care about also care about me.	1	2	3	4	5
I feel excluded from the group I want to belong to.	1	2	3	4	5
I feel confident that I can do things well.	1	2	3	4	5
I have serious doubts about whether I can do things well.	1	2	3	4	5
I feel that my decisions reflect what I really want.	1	2	3	4	5
I feel forced to do many things I wouldn't choose to do.	1	2	3	4	5
I feel connected with people who care for me, and for whom I care.	1	2	3	4	5
I feel that people who are important to me are cold and distant towards me.	1	2	3	4	5
I feel capable at what I do.	1	2	3	4	5
I feel disappointed with many of my performances.	1	2	3	4	5
I feel my choices express who I really am.	1	2	3	4	5
I feel pressured to do too many things.	1	2	3	4	5
I feel close and connected with other people who are important to me.	1	2	3	4	5
I have the impression that people I spend time with dislike me.	1	2	3	4	5

APPENDIX C

Research Questions: List each of the Research Questions separately since you will be developing two or more interview questions for each research question.	Theoretical Foundation Model or Theory or Concept: Describe it, identifying the subdimensions or components of the model or theory	Interview Questions: Develop primary interview questions for each RQ, using the Theoretical Model or Theory to guide their development	Probing Questions: Identify general or specific probing questions you can use to gain additional information or to keep the conversation going.
Overarching: How do millennials describe self determination as a contributor to realizing their current personal training goals?			
RQ1: How do millennials describe their self determination in terms of autonomy, competence?	Self-determination theory	Data collected through a quantitative validated survey.	n/a
RQ2: How do millennials describe autonomy as a contributor to realizing their personal training goals?	Self-determination theory: Autonomy	IQ2.1 Can you describe whether you had some degree of autonomy or to what degree your autonomy was (large, moderate, small, none)?	Describe an example of the autonomy you had in the personal training process.
	Questions on autonomy from the quantitative survey:	IQ2.2 Did you experience a sense of your own choices, freedom, and decisions in your personal training program?	Give a couple of examples of how your own choices, freedom, and decisions were either considered or not considered in your personal training program.
	I feel a sense of choice and freedom in the things I undertake. Most of the things I do feel like "I have to".	IQ2.3 Was your personal training program aligned to what really interested you?	Give a couple of examples of how your personal training program were either aligned or not aligned to your interests.
	I feel that my decisions reflect what I really want.	IQ3.1 Can you describe whether you had some degree of competence or to what degree your competence was (large, moderate, small, none)?	Describe an example of the competence you had in the personal training process.
	I feel forced to do many things I wouldn't choose to do.	IQ3.2 How confident and capable did you feel in performing the exercises in your personal training program?	Give a couple of examples that illustrated your confidence and capability or lack there of.
	I feel my choices express who I really am.	IQ3.3 How successful were you in achieving your personal training goals?	Give a couple of examples of either succeeding or failing in particularly difficult tasks.
	I feel pressured to do too many things.	IQ4.1 Can you describe whether you had some degree of relatedness or to what degree your relatedness was (large, moderate, small, none)?	Describe an example of the relatedness you had in the personal training process.
	I feel I have been doing what really interests me.	IQ4.2 How mutually connected did you feel with your personal trainer?	Describe the level of care that you and your personal trainer shared. If care was not demonstrated, please explain.
	My daily activities feel like a chain of obligations.		
RQ3: How do millennials describe competence as a contributor to realizing their personal training goals?	Self-determination theory: Competence		
	Questions on competence from the quantitative survey:		
	I feel confident that I can do things well		
	I have serious doubts about whether I can do things well.		
	I feel capable at what I do.		
	I feel disappointed with many of my performances		
	I feel competent to achieve my goals.		
	I feel insecure about my abilities.		

Research Questions: List each of the Research Questions separately since you will be developing two or more interview questions for each research question.	Theoretical Foundation Model or Theory or Concept: Describe it, identifying the subdimensions or components of the model or theory	Interview Questions: Develop primary interview questions for each RQ, using the Theoretical Model or Theory to guide their development	Probing Questions: Identify general or specific probing questions, you can use to gain additional information or to keep the conversation going.
	I feel I can successfully complete difficult tasks.		
	I feel like a failure because of the mistakes I make.		
RQ4: How do millennials describe relatedness as a contributor to realizing their personal training goals?	Self-determination theory: Relatedness	IQ4.1 Can you describe whether you had some degree of relatedness or to what degree your relatedness was (large, moderate, small, none)?	Describe an example of the relatedness you had in the personal training process.
	Questions on relatedness from the quantitative survey:	IQ4.2 How mutually connected did you feel with your personal trainer?	Describe the level of care that you and your personal trainer shared. If care was not demonstrated, please explain.
	I feel that the people I care about also care about me.		
	I feel excluded from the group I want to belong to.		
	I feel connected with people who care for me, and for whom I care.		
	I feel that people who are important to me are cold and distant towards me.		
	I feel close and connected with other people who are important to me.		
	I have the impression that people I spend time with dislike me.		
	I experience a warm feeling with the people I spend time with.		
	I feel the relationships I have are just superficial		
		IQ4.3 How important was time spent with your personal trainer to be a close, warm experience?	Give a couple of examples of how your personal trainer exuded closeness and warmth during your personal training sessions. If your trainer did not exude those qualities, please explain.
General: Other points to be explored through the IQs: demographics; general perceptions; other points they want to make		IQG.1 How does your generation (the millennials) compare to other generations in terms of self determination?	
Demographic Information: Provide them a short form to collect the demographic information. Or develop a question to collect this information.		IQD.1 Please confirm the demographic data you previously provided (read over the respective demographic form with the participant)	
Closing Question: Use this to close the interview.			IQC.1 Are there any other comments you want to make?
			IQC.2 Are there any questions you have?