

“Coveting Thy Neighbour’s Legs”: A Qualitative Study of Exercisers’ Experiences of Intrinsic and Extrinsic Goal Pursuit

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Goals are central to exercise motivation, although not all goals (e.g., health vs. appearance goals) are equally psychologically or behaviorally adaptive. Within goal content theory (Vansteenkiste, Niemiec, & Soenens, 2010), goals are adaptive to the extent to which they satisfy psychological needs for autonomy, competence, and relatedness. However, little is known about what exercisers pursuing different goals are feeling, doing, thinking, and paying attention to that may help to explain the association between goal contents and need satisfaction. Using semistructured interviews and interpretative phenomenological analysis, we explored experiences of exercise among 11 adult exercisers who reported pursuing either predominantly intrinsic or extrinsic goals. Four themes emerged: (a) observation of others and resulting emotions, (b) goal expectations and time perspective, (c) markers of progress and (d) reactions to (lack of) goal achievement. Intrinsic and extrinsic goal pursuers reported divergent experiences within these four domains. The findings illuminate potential mechanisms by which different goals may influence psychological and behavioral outcomes in the exercise context.

Keywords: exercise goals, self-determination theory, interpretative phenomenological analysis

Physical activity is associated with numerous physical and psychological health benefits (O’Donovan et al., 2010) and the initiation and maintenance of exercise behavior is central to national health policies (Department of Health, Physical Activity, Health Improvement, and Protection, 2011). A key construct underpinning people’s exercise participation is their motivation (e.g., what they pursue through their action), which is often studied through an examination of their goals for exercise (Ryan, Williams, Patrick, & Deci, 2009). However, the cognitive, affective, and behavioral correlates of goal pursuit vary depending on the focus (content) of people’s exercise goals (Sebire, Standage, & Vansteenkiste, 2009). Relatively little is known about exercisers’ experiences of pursuing goals with different contents. Yet studying such experiences would expand our knowledge of the psychological processes at work during exercise goal

pursuit and contribute to our understanding of how and why the content of exercisers’ goals may support or undermine sustained exercise engagement.

Intrinsic and Extrinsic Goal Content

Exercise goals can be studied using goal-content theory (GCT), a mini-theory within self-determination theory (SDT; Deci & Ryan, 2000; Vansteenkiste, Niemiec, & Soenens, 2010). Goal-content theory was initially developed in an inductive fashion by Kasser and Ryan (1996) to examine goal-related phenomena that account for variations in wellness. The classifications relating to the characteristics of the differing goals were based on a consistent and stable pattern of goals that emerged via factor analyses. This pattern aligned with the organismic foundations of the self within SDT (i.e., the goals could be distinguished as being more or less conducive to basic psychological need satisfaction) (see also Grouzet et al., 2005). Specifically, within GCT a distinction is made between *intrinsic* and *extrinsic* goal content. Goals such as improving one’s appearance or amassing wealth and fame are termed *extrinsic* because they focus outward, upon ego validation (Vansteenkiste, Niemiec, & Soenens, 2010). Goals for health, self-acceptance, social affiliation, and community contribution are termed *intrinsic* because

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they have an inward orientation rather than being focused on ego validation.

The pursuit of intrinsic goals is hypothesized to positively influence well-being, because they are assumed to satisfy people's basic psychological needs for autonomy (i.e., to experience volition and be the origin of one's behavior), competence (i.e., to experience achievement), and relatedness (i.e., to experience reciprocal caring/meaningful interpersonal connections), whereas extrinsic goals are not need satisfying (Deci & Ryan, 2000; Vansteenkiste, Niemiec & Soenens, 2010). Valuing extrinsic relative to intrinsic life goals has been positively associated with ill-being (Kasser & Ryan, 1996), poorer health (e.g., bulimic symptoms and drug use) (Verstuyf, Vansteenkiste, & Soenens, 2012; Williams, Cox, Hedberg, & Deci, 2000), and poorer social well-being (Kasser & Ryan, 1996; Vansteenkiste, Soenens, & Duriez, 2008). These maladaptive associations are maintained even when people achieve their extrinsic goals (Niemiec, Ryan, Deci, & Williams, 2009; Van Hiel & Vansteenkiste, 2009).

A theoretical distinction is made within SDT between goal contents (i.e., the "what" of goal pursuit; intrinsic or extrinsic) and people's reasons for pursuing certain types of goals (i.e., the "why" of goal pursuit; autonomous or controlled reasons) (Deci & Ryan, 2000). Although the "what" and "why" of goal pursuits are said to be relatively orthogonal, Sebire, Standage, & Vansteenkiste (2011) showed that intrinsic and extrinsic goal contents related to more autonomous and controlled forms of regulation respectively. Such interrelationships may be attributed to the dynamic nature of these constructs, which have been shown to repeatedly, and uniquely, predict differential exercise experiences (Standage & Ryan, 2012). Moreover, within SDT, behavioral regulations and goal contents share a conceptual foundation in that the quality of the exercise experience is related to the degree to which they satisfy, as oppose to frustrate, peoples' basic psychological needs. Although a number of studies have qualitatively assessed different exercise-related behavioral regulations (e.g., Gillison, Osborn, Standage, & Skevington, 2009), there has been a distinct lack of research to provide an in-depth account of individuals' experiences of intrinsic and extrinsic goals within the exercise context. Thus, the focus and overarching aim of the present work was to explore goal-related phenomena as advanced within GCT.

Intrinsic and Extrinsic Exercise Goals

An analysis of the clustering of goals within the exercise domain has found that intrinsic exercise goals for improving health, skill development, and social affiliation load on one factor, whereas extrinsic goals for image and social recognition load on a separate factor (Sebire, Standage, & Vansteenkiste, 2008). Research has shown that placing greater importance on intrinsic versus extrinsic exercise goals is associated with greater physical self-worth, well-being, and less exercise-related anxiety (Sebire et

al., 2009). Conversely, the pursuit of extrinsic exercise goals (e.g., improved appearance) has been positively associated with social physique anxiety (Crawford & Eklund, 1994), ill-being (Maltby & Day, 2001), and eating disorder symptomology (Vinkers, Evers, Adriaanse, & de Ridder, 2012) and negatively associated with self- and body esteem (Maltby & Day, 2001; Vinkers et al., 2012). Further, research shows that intrinsic versus extrinsic goal content is indirectly associated with objectively (Sebire, Standage, & Vansteenkiste, 2011) and subjectively (Ingledew & Markland, 2008) assessed physical activity via effects on autonomous or voluntary motivation (See Teixeira, Carraca, Markland, Silva, & Ryan, 2012, for a review).

In line with GCT, Sebire et al. (2009) showed that the relation between intrinsic, relative to extrinsic exercise goal importance and psychological outcomes (i.e., exercise anxiety, physical self-worth, and psychological well-being) was partially mediated by perceptions of autonomy, competence, and relatedness need satisfaction in a sample of men and women. Although the pathway of need satisfaction provides a first insight into why different exercise goals have different correlates, it remains unclear *why* people exercising to achieve different goals derive different degrees of exercise-related need satisfaction (Vansteenkiste, Soenens, et al., 2008) and whether this might vary by gender. Therefore, further research is needed to understand what both male and female exercisers pursuing goals with different contents are feeling, thinking, doing, and paying attention to during goal pursuit that may lead them to experience more or less need satisfaction.

Previous work has shown that men and women differ in their expectations, self- and body image perceptions, and motivation for exercise (Gill & Kamphoff, 2010). It is therefore likely that men and women may have differing experiences of exercise goal pursuit. Data from previous research suggests that women endorse image-based exercise goals more strongly than men (Sebire et al., 2008); however, the means by which men and women differentially experience intrinsic and extrinsic goal pursuit has not been explored. For example, it is not known whether men and women attend to different cues related to exercise goal progress, or whether they differ in their engagement in goal-based social comparisons. Although the effects of psychological need satisfaction or frustration on well-being should be gender invariant (Deci & Ryan, 2000), it is possible that men and women experience different pathways to need satisfaction through their goal pursuit. A central aim of the current study was therefore to provide insight regarding the pathways through which goal contents influence basic need satisfaction among both men and women exercisers.

Correlates of Intrinsic and Extrinsic Goal Pursuit: Explanatory Processes

A number of interrelated processes to explain the associations among intrinsic and extrinsic life aspirations

and educational goals and need satisfaction, well-being, and educational outcomes have been forwarded (Kasser, 2002; Vansteenkiste, Ryan, et al., 2008; Vansteenkiste, Soenens, & Lens, 2007). Specifically, past research suggests that due to the ego-validating character of extrinsic goals, individuals who highly value such goals may (a) develop fragile self-esteem hinged on extrinsic goal attainment, (b) experience actual–ideal self discrepancies and dissatisfaction on extrinsic goal attainment, (c) devalue interpersonal relationships and undermine the formation of meaningful connections, (d) be distracted from paying attention to the activity at hand by focusing on attaining external indicators of worth, (e) engage in interpersonal comparisons, and (f) impart effort rigidly to attain external indicators of worth.

Preliminary evidence for some of these proposed mechanisms exists. For instance, the experimental priming of extrinsic relative to intrinsic goals—in which participants read a standardized passage of text about learning a martial art differing only in whether intrinsic goals or extrinsic goals were presented before a physical education lesson—has been found to reduce children's task involvement and to increase their ego involvement. It was reasoned that in the extrinsic goal-framing group, participants' attention was distracted from the task at hand in favor of making comparisons of their own performance on the taught activity with that of others (Vansteenkiste, Matos, Lens, & Soenens, 2007). Further, it has been shown that while the extrinsic goal induction process prompted a degree of persistence, the persistence was not congruent with enjoyment and personal valuation of the behavior (Vansteenkiste, Simons, Soenens, & Lens, 2004). Apparently, focusing on extrinsic goals led participants to put effort into the activity, but the effort was constricted and rigid.

Although this previous quantitative research has derived and tested some proposed mechanisms relating to how goal content may influence need satisfaction, the "goal content → need satisfaction" processes involved in adults' exercise goal pursuit is not well understood. Previous work is also limited in a number of ways: First, the proposed means by which goal content is said to influence need satisfaction are largely based on studies of adults' life aspirations (Kasser, 2002) rather than exercise goals. Second, the tests of mechanisms have involved situationally primed goals among children and adolescents, the experience of which is likely to differ from those of self-selected goals among adults (Vansteenkiste, Matos, et al., 2007). Third, previous studies examining goal contents have been conducted from a quantitative and postpositivist viewpoint, testing *a priori* hypothesized mechanisms. Such work has not taken exercisers' perspectives fully into account. A more detailed exploration of personal exercise goal pursuit is needed to advance knowledge of the psychological processes that lead to differential psychological need satisfaction.

The Present Study

In light of the limitations highlighted above, the purpose of this study was to qualitatively examine the experiences of men and women who reported pursuing relatively intrinsic or extrinsic exercise goals. We aimed to generate new insight into how people's goals may support or frustrate their psychological needs.

An interpretative phenomenological analysis (IPA; Smith, Flowers, & Larkin, 2009) qualitative approach was employed. Interpretative phenomenological analysis aligns theoretically with phenomenology (understanding an individual's perception of an event) and symbolic interactionism (that the meaning of an event to an individual is key and obtained by a process of interaction and interpretation by the researcher) (Smith et al., 2009). Interpretative phenomenological analysis has been used previously to study health-related and sport/exercise experiences (Brocki & Warden, 2006; Darker, Larkin, & French, 2007; McDonough, Sabiston, & Ullrich-French, 2011) and calls have been made for IPA to be used to study preventative health behaviors and attitude-behavior relationships (Smith, 2011). Further, the inductive, idiographic, and hermeneutic aspects of IPA align with the aims of the present work. Specifically, IPA's inductive approach allowed the bottom-up examination of participants' lived exercise goal experiences rather than only testing previously hypothesized mechanisms. The idiographic nature of IPA facilitated a detailed and personal exploration of the complexities, novelties, and processes of each participant's exercise goal pursuit (Smith & Osborn, 2003). Finally, IPA espouses a two-step hermeneutic or interpretative process in which participants make sense of their experiences and the researcher in turn attempts to make sense of this (Smith et al., 2009). Empathic (i.e., trying to take the participants' perspective) and questioning (i.e., asking what may be underlying the participant's narrative) interpretations were used respectively to develop an insider's perspective of the participants' exercise experiences and search their experiences for potential psychological meaning (e.g., how their experiences may influence need satisfaction). Employing these features of IPA facilitated an in-depth idiographic exploration of individual participants' exercise goal experiences. Once this was gained, we were able to examine the experiences further to explore any potential differences between exercisers who reported relatively intrinsic or extrinsic goals.

Method

Sampling and Participants

Ethical approval was granted by a university ethics committee. Participants were recruited from two health and fitness centers in southwest England. Study packs containing information, an informed consent document,

and a brief demographic and goal questionnaire were distributed by fitness center staff and the first author to fitness center users. To ensure that we explored the experiences of people who pursued exercise goals that are considered intrinsic or extrinsic from the GCT perspective, sampling was purposive and based on participants' reporting relatively strong intrinsic or extrinsic goal endorsement (i.e., intrinsic goals > extrinsic goals or extrinsic goals > intrinsic goals) at the time of the study and to achieve a balance of men and women. The Goal Content for Exercise Questionnaire (Sebire et al., 2008) was used to assess the importance participants placed on intrinsic (i.e., health management, skill development, and social affiliation) and extrinsic (i.e., image and social recognition) goals using a 7-point Likert scale (1 = *not at all important* to 7 = *extremely important*). It is contended that the balance of intrinsic and extrinsic goal endorsement is important to consider, as negative psychological consequences are more likely to occur when people's extrinsic goals crowd out their intrinsic goals (Vansteenkiste, Ryan, & Deci, 2008). As such, a relative intrinsic goal score reflecting the degree to which intrinsic goals were more important to participants than extrinsic goals at the time of study was calculated by subtracting the extrinsic goal mean from the intrinsic goal mean. Using this approach facilitated the purposive sampling of two groups of exercisers who differed on their balance of intrinsic and extrinsic goals. Participants also provided demographic information and indicated their willingness to be interviewed. One hundred thirty questionnaire packs were distributed, 63 (48%) were returned, and 48 individuals (23 males, 25 females, $M_{age} = 39.64$, $SD = 12.99$, $M_{relative\ intrinsic\ goal\ score} = 0.43$, $SD = 1.36$; range = -3.00 to 4.38) consented to be interviewed. Consenting participants were stratified by gender and ranked by their relative intrinsic goal score. Beginning with participants with the highest relatively intrinsic or extrinsic goal scores, individuals were contacted by phone to arrange a time and location for the interview. We sought to interview an equal number of men and women in both goal groups. This allowed us to maximize our insight into the experience of divergent goal pursuit across both genders. Interviews continued until the interviewer (following discussion with the research team) perceived that a detailed understanding of the meaning that participants ascribed to their intrinsic and extrinsic goal pursuit experiences had been achieved.

Eleven participants were interviewed ($M_{age} = 31.90$, $SD = 10.72$, range = 21 to 53 years). A description of each participant is presented in Table 1. Six (3 male, 3 female) participants reported relatively intrinsic goals, and five (2 male, 3 female) reported relatively extrinsic goals. The participants' relative intrinsic goal scores ranged from -2.71 to 4.38. The sample comprised eight White individuals and one Asian, one Afro-Caribbean, and one Mixed-race individual.

Interview Procedure

Face-to-face semistructured interviews were conducted by the first author. The researcher took field notes following each interview to record immediate reactions to each encounter (e.g., mood, tone, emotional shifts). A reflexive journal was kept to record personal perspectives, thoughts, and interpretations throughout data collection. Field notes and journal entries were used to interpret and make sense of participants' narratives during analysis.

Interviews were guided by an interview schedule designed to allow dialogue to evolve naturally and for nuances to emerge (Smith & Osborn, 2003). Topics included in the initial schedule were developed to comprehensively explore participants' recent past and present experiences of exercise and pursuing their goals. Previous literature was used to identify general topic areas (e.g., social comparisons) (Kasser, 2002; Vansteenkiste, Soenens, et al., 2008). Specific topics included participants' exercise behavior, their perceptions of the exercise environment and interactions with others within it, experiences and feelings during exercise, and their goal progress. Example questions are, "What does exercise mean to you?," "How do you think others see you as an exerciser?," and "How do you know whether you are reaching your goals?" The schedule was piloted and refined (Creswell, 2007) with a female exerciser (aged 25 years). Refinements included changes to the question order and the addition of an introduction asking participants to describe the experience of a typical exercise session to provide a context for other questions. Follow-up probes (e.g., "How did you feel about that?") were used to elicit depth. Participants were reminded of their right to withdraw and their right to confidentiality before the interview. Interviews were recorded and lasted on average 42 min (range = 27 to 61 min).

Coding and Analysis

Interviews were transcribed verbatim by the first author and anonymized. Transcripts were read multiple times to ensure familiarity, and were analyzed in line with the conventions of IPA (Smith et al., 2009). First, the first transcript was populated with descriptive comments and initial notes concerning interpretations of the participant's experiences. Field and journal notes were used at this point to indicate factors that were not be identifiable within the transcript (e.g., changes in mood) but may have informed interpretation. Second, linguistic features were analyzed (e.g., temporal references, pauses and changes in self—other references). Third, conceptual interpretations and notes including more abstract explorations and questions were made. These data were then explored for interconnections, and emergent themes were developed, listed, and themselves explored for interconnections to form initial higher-order clusters. In the next step, superordinate themes were given preliminary names,

Table 1 Descriptive Characteristics of the Interview Participants

<p>Imogen is 25 years old and has returned to exercising after taking a break to focus on academic studies. Imogen exercises between four and six times per week including gym workouts (cardiovascular and core strength conditioning) on weekdays and off-road running, cycling and walking at weekends.</p> <p>Relative intrinsic goal score = 4.38 (HM = 7.00, SD = 6.50, SA = 5.25, IM = 2.75, SR = 1.00).</p>
<p>Isabelle is 30 years old and exercises three to four times per week. She attends the gym where she does exercise classes and cardiovascular exercise using machines. Isabelle enjoys running outdoors when light levels allow.</p> <p>Relative intrinsic goal score = 1.38 (HM = 6.00, SD = 4.00, SA = 3.50, IM = 4.25, SR = 2.00).</p>
<p>Irene is 53 years old and reports exercising regularly for the past 20 years, having not enjoyed school sports. Irene's exercise includes four to five cardiovascular and light weights sessions followed by stretching in a local gym and one Pilates class per week. Irene exercises on her own but likes to socialize before and after her exercise sessions.</p> <p>Relative intrinsic goal score = 2.21 (HM = 5.75, SD = 5.00, SA = 1.50, IM = 2.75, SR = 1.00).</p>
<p>Ian is 33 years old. He previously had an occupation that required a high level of fitness and training but now exercises to maintain his fitness four to five times per week. Ian exercises at a local gym with mainly treadmill running and strength / conditioning. He also runs in the local area, although more in the summer. He mainly runs on his own but occasionally will run with friends.</p> <p>Relative intrinsic goal score = 0.75 (HM = 6.00, SD = 2.00, SA = 1.00, IM = 3.50, SR = 1.00).</p>
<p>Ivan is 39 years old and has exercised for the last 10 years. He exercises on most days (6–7 times per week) and does cardiovascular exercise and weights in a local gym on his own. Ivan has previously attended exercise classes and swimming sessions. Ivan occasionally requests one-to-one sessions with a personal trainer to check his weights techniques.</p> <p>Relative intrinsic goal score = 0.96 (HM = 7.00, SD = 5.00, SA = 1.00, IM = 5.75, SR = 1.00).</p>
<p>Isaac is 48 years old. He currently exercises at a local gym two to three times per week, which includes cardiovascular exercise on a bike and rowing machine, some weights and stretching. Isaac also practices yoga and martial arts at home. He mainly exercises on his own but will occasionally exercise with his wife in the gym.</p> <p>Relative intrinsic goal score = 2.38 (HM = 7.00, SD = 5.25, SA = 3.50, IM = 3.25, SR = 2.50).</p>
<p>Emma is 32 years old and has exercised irregularly for the past seven years. She has been exercising regularly for about six months. Emma attends a local gym on her own approximately three times per week and follows a routine that includes cardiovascular exercise, toning, and machine-based weights. Emma also exercises most days at home by doing 20 min of stretching and abdominal exercises.</p> <p>Relative intrinsic goal score = -2.00 (HM = 5.00, SD = 1.5, SA = 1.0, IM = 7.0, SR = 2.00).</p>
<p>Ellen is 24 years old and exercises "most days," which consists of 35 min of cardiovascular exercise followed by 10 min of abdominal exercises. Ellen exercises alone although she is friends with some of the gym staff.</p> <p>Relative intrinsic goal score = -2.71 (HM = 3.75, SD = 2.00, SA = 6.00, IM = 6.75, SR = 6.50).</p>
<p>Eve is 21 years old and currently attends the gym up to seven times per week. Her sessions include a total of 60 min of cardiovascular exercise on treadmills, step machines, and cross-trainers followed by weights and abdominal exercises. Eve attends the gym on her own and does not exercise with other people. She reports lapses in gym attendance at times.</p> <p>Relative intrinsic goal score = -1.17 (HM = 6.00, SD = 4.25, SA = 2.00, IM = 6.75, SR = 3.75).</p>
<p>Eric is 24 years old and attends a local gym on five/six days of the week. His gym sessions mainly involve weight training and abdominal exercises and minimal cardiovascular exercise. Eric plays football at weekends in a local team.</p> <p>Relative intrinsic goal score = -0.63 (HM = 6.75, SD = 6.50, SA = 4.00, IM = 7.00, SR = 5.75).</p>
<p>Edward is 22 years old and he exercises by going to the gym between two and three times per week and playing football (soccer) at weekends. Gym sessions typically involve 45 min cardiovascular exercise and then upper-body weights. He also reports going road running occasionally. Edward exercises in the gym alone.</p> <p>Relative intrinsic goal score = -1.58 (HM = 6.25, SD = 3.75, SA = 1.75, IM = 6.50, SR = 4.50).</p>

Note. Pseudonyms beginning with the letter *I* indicate that intrinsic goal importance > extrinsic goal importance, whereas pseudonyms beginning with *E* indicate that intrinsic goal importance < extrinsic goal importance. HM = health management, SD = skill development, SA = social affiliation, IM = image, SR = social recognition.

exported to a master list, and formed into a framework for the remaining analysis. These analytic steps were repeated for each remaining transcript, and data were then analyzed for connections between themes across participants. Analysis was cyclical and iterative in two ways: first, emergent codes and themes from the second and each subsequent transcript were used to refine existing themes from the previous transcripts, and second, instances of any new codes or themes were searched for in the other transcripts (Smith, Jarman, & Osborn, 1999). Atlas.ti (version 5.2.18) was used to facilitate the analysis (i.e., organization; aiding consistent coding, retrieval, and linking; comparison of extracts; and incorporation of reflective remarks and notes).

The transcripts and analysis documents were reviewed by the third author (Patton, 1999). Interpretations, discrepancies, and rival explanations were discussed to account for convergence and divergence within the data before arriving at a final set of themes. Differences were resolved through discussion, and themes/interpretations were refined accordingly. Back-checking with transcripts ensured that themes and interpretations were grounded in the data.

Given the interpretative role of the researcher(s) in IPA, it is possible that their personal perspectives influenced the analysis (Brocki & Wearden, 2006; Patton, 1999). The interviewer and primary analyst was a White British male who was regularly physically active. He had experience of fitness instruction / personal training and an interest in SDT and exercise psychology. The second data analyst was a White British female health psychologist who was also regularly physically active, had previous experience of behavior change (including but not exclusively physical activity) interventions with adults from a wide range of social backgrounds, and of conducting SDT-based research. It is likely that the researchers' perspectives, informed by their academic interests, reading, and experiences of behavior change led to greater attention being placed on certain themes and influenced their interpretation of the results. For this reason, the researchers discussed and critiqued their potential interpretative biases. Triangulation during analysis and preparation of the paper ensured that interpretations were fair and grounded in the data. Quotes and interpretative content to best reflect the diversity and positive/negative cases within each theme were selected and agreed by both researchers. To facilitate interpretation, intrinsic and extrinsic exercise goal-focused exercisers were assigned pseudonyms beginning with the letter *I* (e.g., Imogen) and the letter *E* (e.g., Edward) respectively.

Results

Four overarching themes emerged. One theme, observation of others and resulting emotions, referred to social experiences, whereas three themes—goal expectations and time perspective, markers of progress, and reactions to (lack of) goal achievement—pertained to experiences of goal progress.

Theme 1: Observation of Others and Resulting Emotions

Many participants reported the influence of others during exercise either by observing their workouts or by making interpersonal comparisons. For example, Isaac reported upward social comparisons and focused on the workout, skill, or fitness of others.

Just observing what they do and I'll think about their routine, are they doing sets? Are they doing certain machines? And I just pick things up and add it into my overall repertoire of exercise. (Isaac)

Isaac explained that he made appearance-based comparisons when he initiated exercise. However, he had made a conscious decision to cease such comparisons, feeling they were somehow controlling (not allowing him to "do his own thing") and were counterproductive:

When I started going back to the gym back in . . . March 2004, I was doing that [interpersonal comparisons] a bit and I thought: "This is a waste of time, there's no point, just do my own thing but learn from them at the same time." But don't let how well they are doing undermine my confidence or stop me progressing to the next level of fitness.

There was convergence among male and female participants who reported relatively strong intrinsic goals in that they accepted their level of fitness compared with others' and focused on self-referenced improvements:

I don't see it as better or worse, I see it as, um, trying to do the best I can with the potential I have. So yeah, there are always people who are able to lift up heavier weights than you . . . but I don't feel that they are better than me and feel worse about it, because there are always people fitter than you. (Isaac)

I'm quite willing to accept that there's lots and lots of people . . . that I'm not at my optimum fitness and there are lots of people that are much fitter than me. (Imogen)

Imogen changes the focus of her sentence from referring to *other people's* fitness being greater, to *her* fitness being below her optimum level. We interpret this as an indication that she accepts that others are fitter than her without feeling threatened by the comparison she makes. In referring to other exercisers, it appears that participants reporting intrinsic goals observed others' fitness or exercise routines but were better able to use this as a source of inspiration:

Sort of "bloody hell, what level are they on?" And you'll have a look and they're on like level 20 on the treadmill. . . . So it's more sort of "wow" as opposed to "umph" you know? They're like faster than me or slower. . . . It's never like a direct comparison to myself . . . it's more kind of like in awe of [what] those people are doing. (Imogen)

Isabelle's experiences offered a contrasting view from the other participants endorsing relatively intrinsic goals:

There's an incredible number of very fit people that go to the gym so, who are sort of, I consider myself healthy I'm not sure I would consider myself sort of uber fit, um and so I would feel very self-conscious around people who were very fit 'cause I'd think they were thinking "oh my goodness she doesn't work out enough" [laughs]. Well I think I go quite a bit.

Isabelle reported fitness-based upward comparisons but she assumed that fitter others would negatively evaluate her fitness and felt self-conscious around them. Her self-perception is that she is healthy and committed to exercise, suggesting that while her own evaluations are self-focused these don't match how she thinks that others evaluate her, presumably based on her appearance.

Upward interpersonal comparisons were also reported by the extrinsic goal pursuers but were discussed in relation to appearance and recognition rather than workout or fitness.

It's a bit naughty really, but yeah you do look at other people and think things. . . . So like, I do look at people and think "I want to be like you," like. But I don't want to be a muscle man. (Edward)

Edward's feelings that appearance-based comparisons are "naughty" suggests some conflict between how he behaves and how he thinks he ought to behave. Indeed, the presence of this intrapersonal conflict suggests that Edward's appearance-related upward comparisons evoke some feelings of guilt as he compares his physique to those of others. Showing a similarity between the experiences of male and female participants, Ellen also used comparisons to evaluate social recognition and this led to feelings of envy and decreased competence:

If there's a girl on the cross-trainer that's you know quite attractive and maybe more attractive than me, I do get sort of a little bit, I dunno really . . . I don't like it so much because I know like if someone, if there was a guy walking across the top [a raised walkway] he'd probably notice her rather than me. (Ellen)

Sometimes I'll wonder "oh I bet when she walks her legs never touch, I'd like to have that" you know? "I've never attained that . . . will I ever?" that kind of thing. . . . Am I jealous? Well yeah of course [sighs] you know, coveting thy neighbour's legs. (Emma)

Here Emma asks herself the question "Am I Jealous?" which is perhaps easier than saying "I am Jealous." Emma's comment that "of course" she is jealous in response to upward comparisons suggests that she has internalized cultural ideals of appearance and believes that this is "of course" the way all women want to look. Similar to Edward's perception that his comparisons were

"naughty," Ellen experienced positive emotions following downward comparisons but these appeared to be short-lived and then related to feelings of guilt.

I do feel good like if I think that, you know, I've got a better figure than someone um . . . really good [quiet laugh] but yeah, but then I think that that is a bit terrible. (Ellen)

The broken nature of Ellen's speech and the way she moves from describing her feelings as "good" to "really good" suggests that her admission is not socially acceptable. She appears uncomfortable discussing this subject and is being cautious in how she admits these feelings to the interviewer.

Theme 2: Goal Expectations and Time Perspective

Male and female participants reporting intrinsic goals consistently expected to achieve their goals and believed that their behavior would lead to long-term positive outcomes.

You know that if you are doing it [exercising] then everything is going to be fine anyway. (Ivan)

They also articulated a long-term perspective, believing that there are natural fluctuations in goal progress and no short-cuts to goal achievement:

I'm much more aware of any aches and pains and why I've got an ache or a pain, and I know there is probably something I can do to get rid of it but it's quite a long haul, um, it's not a quick fix. (Irene)

Irene's repeated references to herself suggest that she has taken responsibility for her exercise, feels empowered, and has the ability to address her "aches and pains." A similar long-term perspective that could accommodate natural fluctuations in weight or fitness was part of Ian's view of exercise:

If I come back [from a break from exercise] and I put weight on or I take a bit of time [off from exercise] or my fitness levels drop, um then . . . you can come back to it and you just have to work a little bit harder to get back to where you were. (Ian)

Exercisers pursuing relatively extrinsic goals often articulated less confidence in achieving them. Further, they reported short-term goals and fewer references to ongoing processes:

A certain dress or skirt or pair of jeans or trousers or something that I'd like to get back into and once I can then it'll sort of, it's much nicer. . . . It's not something that's this "never will I attain what I want," I probably never actually will. (Emma)

I know what I want my body to look like, not that I think I'm going to achieve it, but as much as I can I

will try, 'cause those are the body parts you expose the most. (Eve)

Both Emma and Eve's narratives reveal a conflict between their desire to believe that it is possible to achieve their goals and the expected reality that they never will. It is perhaps the case that they find the hope of attaining their goals, rather than their realistic expectations, more motivating in the short term.

Theme 3: Markers of Progress

Participants focused on relatively intrinsic goals reported evaluating their goal achievement using inwardly oriented criteria associated with their preferences for, and effort expended during, exercise. For example, many experiences were characterized by monitoring goal progress in relation to a feeling of exertion during exercise.

My body just tells me that I am [progressing] . . . I know if I push myself . . . every time I sort of build on . . . every time I try to improve a little bit . . . I try and sort of do a harder setting or just get my heart rate up a bit higher and I know that will . . . you know . . . contribute to my overall, I think it is all sort of gradually sort of getting there in terms of getting fitter and getting stronger. (Imogen)

It appears that Imogen has divided her exercise into smaller parts (e.g., "improving a little bit" and "get my heart rate up a bit higher"), and it could be small successes in these goals that led to her perception of gradual progress. In contrast, both male and female extrinsic goal-focused exercisers converged in using self-presentational means of assessing their goal progress, such as monitoring the appearance of body parts visible to others. Eric demonstrates this clearly:

Mirrors, just looking at yourself um . . . face, belly, those main two areas where sort of fat tends to show more visibly to other people. So obviously that's the maybe the reason obviously I exercise is the appearance thing . . . kind of when you're on the beach [laughs]. (Eric)

Similar to our earlier observation of Emma's suggestion that envy was a natural outcome of social comparison, the term *obviously* in Eric's comment demonstrates how he too considers exercising to attain appearance ideals as a common and normal aim. Extrinsic goal-focused participants consistently referred to seeking more immediate rewards for minimal effort expenditure, which guided their choice of exercise:

I like weights . . . I think weights are good . . . They are good for sort of toning and making sort of . . . not an immediate . . . but a fairly immediate difference in terms of how your body is shaped . . . Yeah they're very easy, they're fine, I can sit back and relax . . . I don't like cardio simply because I'm a bit lazy and cardio is quite an exerting thing to do. (Emma)

Emma's admission of being "a bit lazy" is reflected in her seeking improvement in her physical appearance without exerting much effort. She is focused on attaining a rapid change in her appearance as opposed to investing in exercise for health benefits that were observed among exercisers pursuing intrinsic goals.

Some participants reported using comments of others to evaluate their goal progress. As they considered their own judgment insufficient to signify goal achievement:

I feel like yeah I know that my hard work is paying off and if other people can see it then maybe I am achieving it, you know? Sometimes I make myself not try to believe it . . . when I look in the mirror and think "oh I've lost weight" but then I try to think "no wait a minute" like "don't think too much about it." But then I'll wait for when someone else comments or comes and tells me and I feel like um if they can notice it. (Eve)

Eve's narrative suggests that she views exercise as an investment and feels this is "paying off" due to her own hard work. Her focus on other people's evaluation of her body shape as a sign of achievement points toward a self-presentational goal. Eve deceives herself and suppresses self-praise if she makes progress, perhaps because personally believing that she is achieving her goal may undermine her motivation to persist before others perceive that she has lost weight. This suggests insecurity and anxiety underlying her exercise efforts, which may lead to an unstable self-perception. Comparing Eve's and Imogen's focus during exercise, Imogen reported aiming for a high heart rate or physical sensations as indicators of goal progress, whereas Eve closely monitored the calories she expended, which she found discouraging:

I mostly watch like, aim to do like 250 calories on the stepper, 250 calories on the cross-trainer that's 500 and then 200 calories on the treadmill, that's about 700 calories on the cardio bit . . . There are days when I will look at the calorie thing and think "oh man," and then like I look at the calories and I think "oh shit." And then most often than not I'll just step off and say "oh I really can't be arsed." (Eve)

This could be interpreted as being consistent with Eve's perception of exercise reflecting an investment and return. When the return in calories expended is not deemed to be sufficient, she stops her investment, indicating that her effort expenditure is contingent on the outcome.

Theme 4: Reactions to (Lack of) Goal Achievement

All participants reported making progress toward their goals; however, their resultant emotions and actions differed. Intrinsic goal-focused participants reported a number of positive emotions from self-referenced improvements and a desire to increase the difficulty of their goal:

It's a general feeling of elation really and um just a real sense of confidence and satisfaction you know? But I mean obviously you stop and move on to the next um exercise routine . . . I tend to move it up a notch yeah. (Isaac)

Again, the idea of a reaction to goal achievement is reported as being obvious. This suggests that Isaac is committed to the process of pursuing his goal and has behavioral plans to do this. Similarly, Ivan associated his health goal with a sense of persistence, which he thought was more long term than the pursuit of a weight loss goal:

I feel it's just, it's done and that's it 'cause I don't see it as a goal that you then, like someone would with weight loss they'd go "right I've got down to my target weight, now what?" I don't ever get to that because I know that with my health its ongoing, do you know what I mean? (Ivan)

Goal achievement was also associated with positive emotions for Emma, who endorsed relatively extrinsic goals:

Makes me feel more confident in my appearance . . . I want, you know, I want to look good in what I'm wearing and I want it to fit. (Emma)

However, positive emotions linked to appearance goals were also unpredictable and turned to a pressure to maintain achievements among women and men:

As long as I look good I'm happy I suppose . . . I suppose if I'm happy, like you can't really stop can you? You've got to keep working otherwise it just turns to flab and that. Um, I'm not really sure when I'll be happy. (Edward)

The sense of uncertainty of his own perception of happiness is clear in Edward's narrative and he appears unconvinced that achieving his appearance goal will make him happy. He also uses pressuring language and refers to himself in an instructional way (e.g., "you can't"), which is similar to Ellen's experiences of goal achievement:

I feel good but then I feel, I panic 'cause I feel "oh god, right I'm there I've got to keep it there, I can't let it slip" kind of thing. You know? 'Cause once you've, you can't get to a target weight you can't put all that effort in get to a target weight and then just say "oh I got there now" and let it all go, you've got to maintain it. (Ellen)

Ellen moves from referring to herself in an active sense "I can't let it slip" to an instructional sense "you've got to maintain it." The use of external voices by Edward and Ellen reinforce the experience of exercising for extrinsic goals as an investment-reward behavior and suggest that they require an external source of motivation to persist.

Discussion

In the present work, we qualitatively explored the differences in experiences of exercisers who reported pursuing relatively strong intrinsic and extrinsic exercise goals. In doing so we have identified processes related to interpersonal social experiences and goal achievement that could explain associations between goal content and psychological need satisfaction in the exercise context (Sebire et al., 2009).

Social Factors

It has been previously suggested that extrinsic goal pursuit would be associated with social comparison (Vansteenkiste, Soenens, et al., 2007, 2008). Our findings support this as interpersonal comparisons were prominent in the narratives of those reporting relatively strong extrinsic goals. However, participants focused on intrinsic goals also reported social comparisons (both upward and downward). Extending previous literature in GCT, the results of the current study revealed that participants' reasons for interpersonal comparisons, the focus of their comparison, and resultant emotions appeared to be aligned with their goal content. Therefore, in addition to considering the presence or absence of interpersonal comparisons, the content and nature of comparisons made by exercisers, guided by their goals, could account for differential need satisfaction.

Appearance-focused comparisons were common among the participants who more highly valued extrinsic goals. In making these comparisons, participants reduced themselves and comparison targets to a sum of separate body parts (e.g., slender legs) rather than viewing themselves and others as a whole person. Comparisons were generally upward, referring to others deemed more attractive, were experienced as uncomfortable, socially unacceptable, and highlighted discrepancies between participants' actual and ideal selves. It is likely that these behaviors would undermine autonomy, competence, and relatedness needs by prompting an other- rather than self-focus, (self)-objectification, and a striving for unattainable ideals (Fredrickson & Roberts, 1997). The endorsement of extrinsic life aspirations (e.g., wealth) is purported to lead to objectification of others and a devaluing of interpersonal relationships (Kasser, 2002). Further, self-objectification is positively associated with holding general appearance validation goals (Breines, Crocker, & Garcia, 2008). Our interview findings provide evidence that these processes operate during exercise goal pursuit. Social comparisons reported by participants who reported intrinsic goals were based on fitness and learning from others' exercises and were generally experienced as inspirational. The focus of these comparisons created opportunities to experience competence and autonomy through challenging self-set pursuits.

Upward comparisons to a noncompetitor are likely to be inspirational or irrelevant, whereas upward compari-

sons to a target perceived as a competitor are expected to yield aversive outcomes (Festinger, 1954; Wood, 1989). Exercisers pursuing relatively strong intrinsic goals felt content with their fitness following upward comparison and their narratives suggested that their comparisons were neither competitive nor detrimental to their perceptions of competence. Perceiving others as competitors (e.g., for social recognition and appearance) was linked to feelings of stress and intrapersonal conflict among participants who reported extrinsic goals. This may thwart their needs for autonomy and relatedness. Our findings suggest that social comparison processes present a fruitful avenue for understanding the association between exercise goal contents and psychological need satisfaction. Specifically, in addition to considering the presence or absence of social comparisons among intrinsic and extrinsic goal-focused exercisers, it may be illuminating to study further the associations between people's goal content and their reasons for comparison, comparison criteria, perception of comparison targets as competitors and emotional responses following comparisons.

Previous literature suggests that women endorse appearance goals more strongly than men (Sebire et al., 2008), but has not explored whether goal-based experiences differ by gender. In this study, although women and men reported attending to different comparison cues (e.g., thinness vs. athleticism respectively), their experiences of these comparisons were similar: those focused upon intrinsic goals similarly reported drawing inspiration from upward fitness-based comparisons, and those focused on mainly extrinsic goals voiced concerns about the social acceptability of making comparisons and feelings of shame. The body image literature contends that appearance-based cultural norms are narrower or more tightly defined for women than for men, which increases the likelihood of body dissatisfaction among women (Strahan, Wilson, Cressman, & Buote, 2006). One interpretation of the similar appearance-based comparisons and resultant emotions among men and women in the current study is that their shared focus on extrinsic goals may prompt an equally narrow perception of their gendered appearance ideal (albeit differing in its focus: athleticism vs. thinness), and subsequently similar experiences when comparing themselves to this ideal.

Goal Progress

When discussing extrinsic goals, participants reported attending to defined markers of goal progress (e.g., expending a predetermined number of calories), and choosing exercise activities that offered the greatest benefit in return for the low investment. These findings lend new evidence to support the proposal that set endpoints of engagement may lead to the development of a rigid approach to behavior (Vansteenkiste, Simons, Lens, Soenens, & Matos, 2005). A novel finding from the present work that extends the concept of the rigid approach was that the attainment of extrinsic goals led to pressure

to maintain goal achievement, a process that seemed to compound participants' rigid extrinsic goal pursuit. This process was articulated clearly by both male and female participants despite the focus of their goals differing (e.g., men focused on maintaining muscle and women focused on maintaining weight loss). A similar phenomenon has previously been identified among high-frequency exercisers (Cox & Orford, 2004), and our findings suggest that the content of people's goals may play a role in the development of this pressure to maintain achievements even among those who are not excessive exercisers. Self-imposed pressure to maintain gains is likely to undermine perceptions of autonomy and competence. These findings also highlight the interplay between goal content and behavioral regulation (Sebire et al., 2011). In this case, extrinsic goal achievement seems to prompt controlled motivation to maintain one's achievements to avoid feelings of guilt, related to wasted effort.

Our findings also revealed that exercisers who focused on different goals experienced different expectations of goal attainment, assessments of goal progress, and emotional responses to goal attainment or failure. Previous research suggests that people rate their chance of achieving intrinsic life aspirations more highly than extrinsic aspirations (Kasser & Ryan, 1996). The present data provide evidence to suggest that despite their apparent clarity and specificity, extrinsic exercise goals are often accompanied by self-doubt and low perceptions of competence.

Consistent with previous qualitative research (Bamber, Cockerill, Rodgers, & Carroll, 2000) exercise was characterized by a more flexible and long-term perspective by both men and women who reported higher relative intrinsic goals. This approach accommodated unsuccessful workouts or breaks in routine as part of a "long-haul" process, and participants spoke of persistence during periods of slow progress. In addition, our findings highlight that those pursuing intrinsic goals set new challenges following goal achievement, which is different from the self-pressured goal maintenance experienced in the pursuit of extrinsic goals. This may be a process by which intrinsic goals facilitate persistence and more autonomous exercise engagement characterized by a sense of being comfortable with one's choices and goals. This approach seems to be more conducive to the ongoing support for the participants' competence and autonomy and provides another example of where goal content may influence behavioral regulation. In this instance, indicated by language such as "I can" and "you can come back to it," intrinsic goals appeared to encourage autonomous/choiceful persistence rather than pressurized protection of one's achievements.

We found that the pursuit of intrinsic goals among men and women was accompanied by self-referenced goal monitoring whereas extrinsic goal progress was monitored by the use of feedback from others. Vansteenkiste, Matos, et al. (2007) observed that extrinsic goal framing undermines, whereas intrinsic goal framing

promotes task involvement, and our findings show that self-selected intrinsic goals could have similar benefits among adult exercisers. The detail with which participants described hanging their perceptions of extrinsic goal progress on comments from others provides a novel and original contribution to our understanding of this process within the exercise context. These processes are likely to undermine autonomy, competence, and relatedness and may result in development of a fragile sense of self-worth (Patrick, Neighbors, & Knee, 2004).

Study Evaluation, Strengths, and Limitations

In line with recent studies that have used IPA in the exercise and sport domain (McDonough et al., 2011), we evaluated this study using published guidelines (Smith, 2011). The present study had a clear focus on examining exercisers' experiences of pursuing two theoretically defined types of goal. The in-depth interviews conducted facilitated the collection of strong data representing thorough accounts of the meaning and role of exercise and exercise goals in the participants' lives. This is supported by narratives about sensitive topics in which the participants undertook thoughtful self-reflections. All themes were supported by quotes from four to six participants. In addition, quotes from participants who reported relatively strong intrinsic and relatively strong extrinsic goals were used to support all themes, which allowed us to acknowledge convergence and divergence. Each theme was afforded ample space and was dealt with in detail rather than superficially. Doing so allowed us to address the nuances within each theme and present interpretations. Central to our study aims was the consideration of congruence and divergence within and between participants. This facilitated identification of possible ways in which valuing intrinsic and extrinsic goals may differently lead to psychological need satisfaction. This said, the researchers involved in data analysis were careful to discuss and challenge their potential interpretative biases and aspired to communicate the study with care, specifically allowing readers to access the personal nature of the participants' goal pursuit.

Despite these strengths, a number of limitations are worthy of attention. There were a number of consenting participants who demonstrated a higher relative extrinsic goal score than those interviewed, but who did not consent to be interviewed, or dropped out before the interview, causing a potential sampling bias. We also experienced difficulty in recruiting men for interview. It could be that exercise-based self-presentational issues such as the endorsement of appearance goals were a barrier to men participating in interviews. In addition, although our sample included individuals from different ethnic backgrounds, we did not specifically examine the influence of cultural background on a participant's exercise experiences and such factors did not emerge from the participants' narratives. Within SDT it is suggested that intrinsic and extrinsic goals may be interpreted in

somewhat (but see Grouzet et al., 2005) different ways by people from different cultures (Deci & Ryan, 2000). As such, cross-cultural studies of exercise goal pursuit are warranted.

Although we dichotomized participants into two goal-based groups to provide a starting point from which to analyze their experiences, it is likely that the reality of goal pursuit is less definite. Specifically, people are likely to pursue different goals with different intensity over time. Our sampling based on a relative intrinsic/extrinsic goal score resulted in the combination of individuals who reported high or low endorsement of both goal types which prevented the exploration of the potentially quite different experiences of these individuals. An alternative sampling strategy would be to sample four groups: *high intrinsic-high extrinsic*, *high intrinsic-low extrinsic*, *low intrinsic-high extrinsic*, and *low intrinsic-low extrinsic*. This would allow one to examine whether people who place importance on intrinsic and extrinsic goals experience unique processes, different from people who more strongly endorse either intrinsic or extrinsic goals such as the participants in the current study, or a balance of those reported by the individuals focused on intrinsic or extrinsic goals. Exploration of the experience of these groups may be particularly enlightening with regards to the interplay between their goals. In addition, we acknowledge that there are many other factors that may contribute to an exerciser's experiences, not least the motivational regulation underlying their goal, and our interview guide was not designed specifically to explore participants' exercise history (e.g., previous motivations or goals) in detail, which limits our ability to view the reported experiences in light of more contextual information. Finally, although we used analyst triangulation and extensive discussion to check our interpretations of participants' experiences, we did not verify our interpretations using member checks.

Future Directions

Our findings have highlighted possible mechanisms that may mediate the association between people's exercise goals and their need satisfaction. However, exercise goal pursuit is complex and goal importance is likely to change over time. Therefore, future research could examine whether the mechanisms highlighted in the present work mediate the effects of exercise goal content on need satisfaction prospectively. Further work may also build on the identification of exercise as a "quick fix" and consider other maladaptive behavioral practices (e.g., disordered eating, exercise dependence) among exercisers pursuing predominantly extrinsic goals. In addition, some of the quotes from the participants in the current study demonstrated the interaction between the content and behavioral regulation aspects of their exercise motivation. The interplay between these constructs has been the subject of previous quantitative research (Sebire et al., 2011), which has tested theoretical propositions. Qualitative methods could be employed to good effect to

gain a participant-focused perspective on these theoretical questions. Finally, our findings suggest that it would be informative to consider how other theories such as objectification theory (Fredrickson & Roberts, 1997), social comparison theory (Festinger, 1954), and the thin-ideal internalization and body dissatisfaction literatures (Thompson & Stice, 2001) might combine with SDT to advance the goal content perspective.

Conclusions

The present study provides novel insight into the experiences of exercisers' goal pursuits and has illuminated potential mechanisms that could explain why intrinsic (as opposed to extrinsic) goal contents are more satisfying of psychological needs for autonomy, competence, and relatedness. We have also identified important extensions and refinements to previously proposed mechanisms within the exercise context that provide clear avenues for future qualitative and quantitative research. Our findings highlight in exercisers' own words how different exercise goals might influence exercise experiences. Such experiences may have implications for adherence in exercise programs.

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Manuscript submitted: March 21, 2012

Revision accepted: February 17, 2013