

**Sacrificial goals: The antecedents and consequences of sacrificing basic psychological needs
in the pursuit of career goals**

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Table of contents

Abstract	4
Résumé	5
Acknowledgements	6
Preface and contributions of authors	7
Thesis format.....	7
Declaration of financial support.....	7
Contribution of authors.....	7
General introduction	8
References.....	10
Manuscript: Sacrificial goals	11
Introduction.....	11
<i>Sacrifices in career goal pursuit</i>	12
<i>Psychological need sacrifice</i>	14
<i>Antecedents of psychological need sacrifice</i>	15
<i>Present study</i>	17
Methods	18
<i>Participants and procedure</i>	18
<i>Measures</i>	19
Results	23
Discussion	27
<i>Contributions to basic psychological needs theory</i>	28
<i>Career-goal related sacrifices</i>	29

<i>Practical implications</i>	30
<i>Future directions and limitations</i>	31
<i>Conclusion</i>	34
References	35
Tables	43
Table 1. Final rotated factor loadings for sacrifice items.....	43
Table 2. Means, standard deviations and correlations of all variables.....	44
Supplementary discussion and conclusion	45
Autonomy and self-compassion amidst controls.....	45
Work-life balance.....	46
Conclusion.....	47
References.....	47

Abstract

Pursuing long-term career goals often leads people to make sacrifices that can have enduring affective and self-regulatory costs. We investigated whether sacrificing basic psychological needs to reach a career goal was detrimental beyond the sacrifice of physical needs (e.g., sleep) or core activities (e.g., time with friends) using a year-long, 6-wave, prospective study of 310 young adults actively pursuing a career goal. Career goal motivation, aspirations and career demandingness were assessed at the start of a school year, while three forms of sacrifice were assessed at midyear. Psychological distress and self-regulation were assessed at both the beginning and end of the school year. Results showed that psychological need sacrifice was associated with increased psychological distress and decreased career- and personal goal progress over the year. Moreover, results suggested that psychological need sacrifice stemmed from career demandingness, introjected motivation and extrinsic aspirations. Implications of these findings for basic psychological needs theory (BPNT) and long-term goal pursuit are discussed.

Keywords: Basic psychological needs, self-determination theory, sacrifices, goal progress, distress

Résumé

La poursuite d'objectifs de carrière à long terme conduit souvent les gens à faire des sacrifices qui peuvent avoir des coûts affectifs et d'autorégulation persistants. Nous avons examiné si le fait de sacrifier les besoins psychologiques de base pour atteindre un objectif de carrière était nuisible au-delà du sacrifice des besoins physiques (par ex. le sommeil) ou le sacrifice d'activités de base (par ex. temps avec ses amis). 310 jeunes adultes poursuivant un objectif de carrière ont participé à cette étude. En début d'année, ces participants ont complété six questionnaires à la longueur d'une année scolaire et ont été évalués sur leur motivation pour cet objectif de carrière, leurs aspirations de vie et sur le niveau d'exigence de la carrière choisie. Les trois formes de sacrifice ont été évaluées en milieu d'année, tandis que la détresse psychologique et l'autorégulation ont été évaluées au début et à la fin de l'année scolaire. Les résultats démontrent que le sacrifice de besoins psychologiques était associé à une détresse psychologique accrue et à une diminution de progrès sur les objectifs de carrière et personnels au cours de l'année. De plus, les résultats suggèrent que le sacrifice des besoins psychologiques découle du niveau d'exigence de carrière, de la motivation introjectée et des aspirations extrinsèques. Les implications de ces résultats pour la théorie des besoins psychologiques de base et pour la poursuite des objectifs à long terme seront discutées.

Mots clés: Besoins psychologiques de base, théorie de l'autodétermination, sacrifices, progression vers un objectif, détresse

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Preface and contribution of authors

Thesis Format

This thesis is comprised of one manuscript reporting the research project undertaken and a general introduction and conclusion. This manuscript is written in the style of the journal *Motivation and Emotion*, to which it has been submitted.

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Contribution of authors

The candidate was responsible for designing the overall research project, assisting with data collection, analyzing the data, interpreting the data, writing the manuscript and editing. This manuscript was also co-authored by Richard Koestner, Jérémie Verner-Filion, Anne Holding, and Frank Kachanoff. Richard Koestner provided academic supervision, assisted with editing the manuscript, and pioneered the Goals Study approach to assessing personality, goal s and motivation in undergraduate students. Richard Koestner also provided hours of support in the form of brainstorming, lab meetings, mentorship and manuscript planning. Jérémie Verner-Filion helped plan the manuscript outline, aided with analyses and assisted with the editing. Anne Holding coordinated the Goals Study, helped to collect data for the research project and assisted with the editing. Frank Kachanoff provided many valuable ideas and assisted with the editing.

General introduction

When faced with demanding career ambitions, it is not uncommon for some students to thrive under these challenges, while others become dejected. Goal pursuit allows students to organize and create meaning in their lives (Koestner & Hope, 2014). Career goals in particular are important facets of managing one's professional development (Greenhaus, Callanan, & Kaplan, 1995). However, this drive to pursue career ambitions can easily become derailed. Students may choose to sacrifice aspects of their life core to their well-being. Caproni (1997) argues that the concept of tradeoffs, or sacrifices, in goal pursuit is of particular interest because, in addition to being understudied, sacrifices and tradeoffs are a common theme in many pop psychology and self-help books.

The present manuscript-based thesis takes a Self-Determination Theory (Ryan & Deci, 2017) approach to understanding the sacrifices students make for their career goals, antecedents of those sacrifices, and psychological adjustment outcomes. Self-Determination Theory is a theory of human motivation that highlights individuals' innate tendency towards growth and development. As a mini-theory of Self-Determination Theory, Basic Psychological Needs Theory establishes three needs central to well-being: Autonomy is identified as the need to fully endorse and feel volitional in one's actions; competence is the need to experience growth and mastery; relatedness is the need to feel reciprocal connection and caring with other people. Core to Basic Psychological Needs Theory is the very strong association of these needs with well-being, development (Deci & Vansteenkiste, 2004) and positive outcomes across cultures (Chirkov, Ryan, & Willness, 2005), in the workplace (Deci & Ryan, 2014; Gagné & Deci, 2005), in athletics (Blanchard, Amiot, Perreault, & Vallerand, 2009), in the classroom (Niemic & Ryan, 2009) and across multiple other life domains (Milyavskaya & Koestner, 2011).

As of yet, career goal related sacrifices have not been studied in depth through the lens of Self-Determination Theory. The study discussed in this thesis aims to test the overarching hypothesis that individuals will sometimes choose to sacrifice their own psychological needs in an attempt to pursue a career goal. This thesis will attempt to answer two central questions. First, does psychological need sacrifice lead to psychological distress and poor self-regulation? Second, what predisposes an individual to sacrifice their basic psychological needs?

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Manuscript: Sacrificial goals: The antecedents and consequences of sacrificing basic psychological needs in the pursuit of career goals

Introduction

Young adults who undertake a demanding program of studies (such as medicine or law) often make significant personal sacrifices to reach their goals. For example, students commonly make the decision to sacrifice sleep, time with friends, or self-care for study time. Whereas some students are capable of achieving a work-study balance that avoids major sacrifices, other students may sacrifice the very basic psychological needs that are required for optimal growth and well-being (Ryan & Deci, 2017). For instance, students may limit their sense of personal volition and choice as they feel forced to study in order to complete tasks they feel are necessary for meeting the demands of their program – a sacrifice of autonomy. Students may also avoid opportunities for growth that do not directly contribute to their career – a sacrifice of competence. Finally, students may lock themselves away with their books, isolating themselves from human connection – a sacrifice of relatedness. While self-initiated, these decisions may thwart the satisfaction of psychological needs and initiate wider disruptions in affective and self-regulatory functioning. Our research explores the two following questions: 1) Are young adults' self-chosen sacrifices of basic psychological needs detrimental to psychological and self-regulatory trajectories over time beyond other common forms of sacrifice?; and 2) What factors predispose young adults to make the decision to sacrifice their psychological needs in the interest of pursuing career goals?

An important way in which young adults give direction and meaning to their lives is through career goal pursuits (Erikson, 1959). Successful pursuit of goals is usually associated with an increase in well-being, while failure to achieve goals is linked with psychological

distress (Diener, Suh, Lucas, & Smith, 1999). However, Self-Determination Theory researchers have argued that “not all goals are created equal” and that the pursuit (or even, the attainment) of certain goals can actually backfire and interfere with growth and development (Ryan, Sheldon, Kasser, & Deci, 1996). There is now considerable evidence that pursuing broad goals that are linked to extrinsic aspirations (e.g., wealth, fame, image) often results in higher levels of psychological distress because such pursuits distract from satisfying basic psychological needs (Kasser & Ryan, 1993; 1996), and that this is true even when people *successfully attain* the extrinsic goals (Niemic, Ryan & Deci, 2009). Similarly, there is considerable evidence that pursuing personal goals for controlled reasons (e.g., because of guilt or contingent self-esteem) rather than autonomous reasons is associated with adverse affective and self-regulatory outcomes (Sheldon & Elliot, 1999).

An example of how the successful pursuit of a career goal can actually undermine one’s affective and self-regulatory outcomes was outlined in a series of studies by Sheldon and Krieger (2004, 2007) on the life trajectories of law students. In prospective studies these researchers found that, over three years, law students became more extrinsic in their aspirations, felt more controlled in their motivation for studying law, and experienced declines in psychological need satisfaction. These motivational changes were associated with affective and well-being changes. The detrimental changes in motivation and affect occurred despite evidence that the students were especially likely to have a positive motivational and mental health profile before starting law school. The declines were noted even for students who excelled academically. Importantly, the declines were especially steep for students who attended a law school that was highly demanding and competitive. Moreover, Sheldon and Krieger (2007, 2014) provided evidence that there can be motivational repercussions from need thwarting during law school that are later

evident in the form of poor performance on licensing exams and marked career dissatisfaction. Yet, while extensive work has elucidated the detrimental role that extrinsic aspirations, controlling motivations, and controlling environments can have for the affective and self-regulatory functioning of young adults, no work has considered whether individuals may be deliberately *sacrificing* their psychological needs for autonomy, competence, and relatedness in pursuit of their long-term goals.

Sacrifices in career goal pursuit

Previous studies in the area of work-life balance have examined the question of why many career goals go hand in hand with harmful sacrifices. Many researchers have used the term “trade-offs” to capture the sacrifices that adults make because of their careers. For example, Mennino and Brayfield (2002) found that individuals in demanding careers chose to sacrifice time at home in order to fulfill work requirements, reflecting a clash between family and employment responsibilities.

Sacrifice for one’s career can take many forms. Milkie and Peltola (1999) focused on family life sacrifices such as missing family events, neglecting housework, and failing to spend sufficient time caring for a sick child. Other studies suggest that adults sacrifice sleep, leisure, and relaxation in order to pursue demands at work (Barnett & Rivers, 1996; Simon, 1995). In response to school demands, University students often reduce or eliminate the time they spend exercising (Nakamura, 1998). We propose that in addition to sacrificing core activities and physical needs, individuals often sacrifice their psychological needs in the pursuit of their goals. Furthermore, we hypothesize that psychological need sacrifice will be particularly damaging (compared to other forms of sacrifice) for young adults affective and self-regulatory outcomes over time.

Psychological Need Sacrifice

The relationship between basic psychological needs and goal-linked sacrifices can be better understood within the context of Basic Psychological Needs Theory (BPNT), a mini-theory developed within Self-Determination Theory (SDT; Ryan & Deci, 2017). BPNT posits three basic psychological needs, autonomy, competence and relatedness, which, when satisfied, lead to greater motivation, mental health and well-being. Autonomy represents the need to volitionally endorse one's actions and act in harmony with one's self. Relatedness refers to the need to be connected to and care for others. Competence is the need to control the outcome of one's life and experience mastery. Extensive research has shown that environments which prevent satisfying one's basic psychological needs (i.e., need thwarting) are associated with diminished psychological functioning (Ryan & Deci, 2017). Need thwarting has been related to a host of maladaptive outcomes such as burnout, negative affect, physical symptoms, and eating disorders in domains such as sports (Bartholomew, Ntoumanis, Ryan, & Thøgersen-Ntoumani, 2011), exercise (Gunnell, Crocker, Wilson, Mack, & Zumbo, 2013), work (Bartholomew, Ntoumanis, Cuevas, & Lonsdale, 2014) and school (Hein, Koka, & Hagger, 2015).

Past research has almost exclusively assessed need thwarting as a result of environmental or interpersonal demands (e.g., Bartholomew, Ntoumanis, Ryan, Bosch, & Thøgersen-Ntoumani, 2011; Balaguer et al., 2012; Van den Berghe et al., 2013). Importantly however, research has yet to examine need thwarting as a self-imposed decision, albeit one that may not be fully integrated into the self. The current study places emphasis on this particular case of need thwarting as resulting from a willingness to sacrifice basic psychological needs as one pursues a goal. We conceptualize this special case of goal-related need thwarting as *psychological need sacrifice*, which we define as the self-initiated, but not integrated, decision to abandon psychological need

fulfillment to pursue a certain goal. Thus, we distinguish need thwarting – which in self-determination research is usually understood as resulting from environmental or interpersonal demands – from psychological need sacrifice, which we believe is largely self-initiated and consciously pursued. Providing some theoretical support for this phenomenon of self-initiated need thwarting (i.e., psychological need sacrifice), Ryan and Deci (2000) illustrate that individuals may sometimes pursue introjected goals which are both not fully internalized, and often inconsistent with their psychological needs. While introjected motivations pertain to *why* someone is pursuing the goal, psychological need sacrifice pertains to *what they'll give up* to pursue the goal. Psychological need sacrifice thus focuses more on the *process* of goal pursuit, rather than its underlying motives and origins.

We hypothesize that young adults may sometimes sacrifice their psychological needs in pursuit of highly valued career goals. We expect to be able to distinguish psychological need sacrifice from the sacrifice of physical needs (e.g., sleep hygiene and healthy eating) and core activities. Furthermore, despite being self-initiated, we expect that psychological need sacrifice will be associated with negative consequences over time, as reflected in affective and self-regulatory dysfunction. Thus, we hypothesize that psychological need sacrifice may be a particularly harmful form of goal-related sacrifice and also lead to psychological distress and poor goal self-regulation over time. Importantly, we plan to confirm the negative effects of sacrificing one's psychological needs after controlling for the sacrifice of physical needs and core personal activities.

Antecedents of Psychological Need Sacrifice

In addition to comparing the affective and self-regulatory consequences of different forms of goal-related sacrifice, we also aim to study the antecedents of these sacrifices. The

literature points to three potentially important antecedents: extrinsic life aspirations, introjected motivation for pursuing a career goal, and the demandingness of that career goal. People's tendencies to prioritize extrinsic aspirations (e.g., fame, beauty, money) versus intrinsic aspirations (e.g., community contribution, self-growth, relationship building) may lead to greater psychological need sacrifices and worse psychological outcomes. Previous work has shown associations between valuing extrinsic aspirations (relative to intrinsic aspirations) and lower well-being (Hope, Milyavskaya, Holding, & Koestner, 2014; 2016). Similar findings were obtained by Vansteenkiste and colleagues (2007) showing associations between extrinsic value orientation and need thwarting. It may be the case that extrinsic values influence people's career-related decisions, resulting in psychological distress. Along similar lines, we examine whether it is the individuals most preoccupied with the extrinsic aspirations that they hope to achieve through their career goal, who may be most prone to neglecting their basic psychological needs.

A variety of research suggests that controlled motivation is associated with less goal progress, less vitality and poor mental health outcomes (e.g., Gunnell, Crocker, Mack, Wilson, & Zumbo, 2014; Holding, Hope, Harvey, Marion-Jetten, & Koestner, 2017; Jowett, Hill, Hall, & Curran, 2013). As a component of controlled motivation, introjected motivation represents a particularly interesting potential antecedent of psychological need sacrifice. Whereas external regulations are controlled by some external cue, introjected motivation is internally driven and can lead to self-negating behaviours, even in the absence of external cues (Ryan, 1982). Introjected motivation has been associated with a host of negative outcomes such as internalizing problems, lack of vitality and psychological distress (e.g., Nix, Ryan, Manly, & Deci, 1999; Ryan & Deci, 2017; Walls & Little, 2005). Core to introjected motivation are the feelings of guilt and shame that people experience when they feel that they are not adequately achieving

their introjected goal (e.g., Ryan & Deci, 2000; Sheldon, 2006). In the context of pursuing a long-term career goal, individuals with introjected motives may feel guilty or ashamed to take time away from their goal in order to satisfy their core psychological needs. In our study, we predict that introjected motivation, as an internal drive that's often inconsistent with psychological needs, may show associations with goal-related psychological need sacrifices.

Finally, the level of work demandingness is a goal-related variable that might predict psychological need sacrifice. In a study on the effects of job demands on mental health outcomes, Van den Broeck, Vansteenkiste, De Witte, and Lens (2008) found that excessive job demands and the absence of resources are related to burnout, and that this relationship is mediated by low satisfaction of basic psychological needs. This association makes sense within the context of our study, as we expect individuals to make sacrifices only when their career goal requires an especially demanding investment of time. We predict that high career-goal related demands will show an association with psychological need sacrifices.

The Present Study

We aimed to test the overarching hypothesis that individuals can sometimes make the non-integrated decision to sacrifice their own psychological needs in service of pursuing a career goal. First, we hypothesized that we would be able to distinguish psychological need sacrifice from other common forms of sacrifice made in the pursuit of important goals -- physical need sacrifice (e.g., sleep, exercise, healthy eating) and core activity sacrifice (e.g., hobbies, time with friends, community involvement). Second, regarding outcomes, we investigated whether sacrificing basic psychological needs to reach a career goal was more detrimental than sacrificing physical needs or core activities. We hypothesized that sacrifice of basic psychological needs would be associated with psychological distress, affective instability and

self-regulatory dysfunction. Third, regarding antecedents, we hypothesized that extrinsic aspirations, introjected career goal motivation, and the objective demands of a chosen career goal would predispose individuals to make greater psychological need sacrifices. To test our hypotheses, we conducted a 6-wave prospective longitudinal study of undergraduate and graduate students across the academic year, from September to May.

Methods

Participants and Procedure

A sample of 351 participants were selected from a larger sample of 508 participants because they indicated that “they were actively pursuing their career goal at the moment.” Participants were recruited from a large public Canadian university through advertisement posters placed across campus for a year-long study of personal goals. The questionnaires were administered through the online survey software Qualtrics. The first survey (T1) was administered at the beginning of the academic year, and assessed participants’ personal goals, career goals, career goal motivation and the life aspiration inventory. Affective measures at T1 included negative affect and depressive symptoms.

Follow-up surveys assessed goal progress and goal-related sacrifice. A total of six surveys were administered throughout the academic year, with negative affect being assessed at every time point. However, data regarding career goals were only assessed at the beginning (T1), middle (T3) and end (T6) of the school year. Goal-related sacrifice was assessed at T3. After receiving the link for the survey, participants had one week to complete the survey at a time of their choosing. The completion rate for each of the surveys was [T3 = 88% and T6 = 87%]. 278 participants had complete data across all three time points (79%). Participants were predominantly female (83%), and were 21.6 years old on average. The study was conducted in

compliance with the University Research and Ethics Board, and participants received financial compensation (\$50 CAD).

Measures

Career Goal Description. At T1, participants were asked: “*What is your career goal? In other words, what career are you planning on pursuing or are on the path towards pursuing?*” Examples of responses included: “becoming a civil engineer on a project,” “veterinarian,” and “teaching English as a second language, preferably in Asia.”

Personal Goals Descriptions. At T1, participants were asked to indicate three personal goals that they were currently pursuing. Examples of responses included: “*lose 15 pounds by the end of the year*” and “*achieve a 3.5 GPA this semester*”.

Current Pursuit of Career Goal. At T1, Participants were asked to indicate their current major field of studies and then to answer the following two yes-no questions: (1) Is the university degree you are currently pursuing at McGill directly related to your career goal; and (2) Are you actively pursuing your career goal at the moment? Only the 310 participants who indicated both that they were currently actively pursuing their career goal and that their career goal was related to their college major were included in the following analyses.

Coded Career Goal Demandingness Two raters independently coded participants’ career goals at T1 using a 1 to 5 scale from “not very demanding” to “very demanding.” Raters were asked to evaluate participants’ career goals based on the following questions before making a rating: 1. Does the participant’s career goal require post-graduate training (e.g., medicine, law, clinical psychology)? 2. Is the participant in a particularly competitive program of study? 3. Does the participant’s career goal require admission into a particularly competitive program of study? 4. Is the amount of work required to succeed at their chosen career goal particularly strenuous?

The two raters showed good agreement ($r = .78$). Examples of the ratings given to various careers are as follows: Physician (5.0), Pianist, Chamber Musician (5.0), Clinical psychologist (5.0), Veterinarian (4.5), Lawyer, (4.0), Pharmacist (4.0), Engineer (3.5), Wild-Life Biologist (3.0), Editor at Publishing House (3.0), Elementary School teacher (2.0), Political campaign work (1.5), Animal Helper (1.0).

Extrinsic Aspiration (AI). At T1, we used 6 items from a shortened version of the AI (Kasser & Ryan, 1996) to measure extrinsic aspirations. Participants were asked to rate the importance of 6 life aspirations, ranging from 1 “*not at all important*” to 7 “*very important*”. For example, participants rated items such as “to have enough money to buy everything you want” and “to be admired by lots of different people” indicative of extrinsic aspirations. This scale showed adequate reliability at T1 ($\alpha = .78$).

Career Goal Motivation. At T1, participants were asked to reflect on why they were pursuing the career they had chosen. They were asked to indicate their level of agreement with several possible reasons using a seven-point scale. Single items were used to assess intrinsic, integrated, identified and extrinsic regulation for career goal. A similar method was employed by Koestner, Powers, Milyavskaya, Carbonneau and Hope (2015). Introjected career motivation was assessed using two items, by asking whether students were pursuing this career “because you would feel ashamed, guilty, or anxious if you didn’t—you feel compelled to pursue it” and by asking “to what extent do you feel your self-worth will be affected by how well you do in pursuing this career”.

Career Goal-Related Sacrifice. At T3, participants were asked to rate their career goal-related sacrifices by responding to the question “*In order to pursue your career goal, how much have you had to make the following sacrifices?*” followed by a series of 14 items. Ratings for

these sacrifice items were made on a 7-point scale ranging from 1 (*not at all*) to 7 (*very much*). These 14 items corresponded to three different types of sacrifice: sacrifice of physical needs (6 items) involved giving up on certain maintenance activities (such as *healthy eating*, enough *sleep*, and enough *exercise*) in order to pursue one's career goal; sacrifice of core personal activities (5 items) involved giving up on various social and leisure activities (such as *hobbies*, *dating*, and *community involvement*) in order to pursue a career goal; sacrifice of basic psychological needs (3 items) involved pursuing a career goal despite negative impacts on psychological needs (such as *feeling less connected*, *feeling less competent*, and *feeling more pressured and less free*). All items used to assess career goal-related sacrifice were adapted from pre-existing questionnaires. The *physical need sacrifice* and the *core activity sacrifice* items were adapted from a list of time-use items found in the American Time Use Survey (ATUS; e.g., Basner et al., 2007). The American Time Use Survey is a United States wide survey sponsored by the Bureau of Labor Statistics and conducted by the United States Census Bureau which provides data on the amount of time that Americans spend on various activities, such as work, leisure, socializing and personal care. The ATUS data and scales have been employed in a wide variety of publications (e.g., Drago, 2009; Eldridge & Pabilonia, 2010; Kofman & Bianchi, 2012) and are both reliable and valid (Bureau of Labor Statistics & U.S. Census Bureau, 2016). We chose to base our scale on the ATUS in order to include a list of sacrifice items that are both comprehensive and consistent with the previous research on work-life trade-offs (e.g., Campbell et al., 2015; Caproni, 1997; Mennino & Brayfield, 2002; Milkie & Peltola, 1999). In addition, the three items used to assess *basic psychological needs sacrifice* were adapted from the Balanced Measure of Psychological Needs (BMPN; Sheldon & Hilpert, 2012).

Basic Psychological Need Satisfaction. The 18-item Balanced Measure of Psychological Needs scale (BMPN; Sheldon & Hilpert, 2012) was used to assess psychological need satisfaction and thwarting. Participants were asked to rate their agreement with a series of statements on a 7-point scale ranging from “*not at all true*” to “*very true*”. 9 statements were used to assess satisfaction of the three basic psychological needs (relatedness, competence and autonomy), with 3 statements for each need. Likewise, 9 statements assessed thwarting of the three basic psychological needs, again with 3 statements for each need. For example, participants rated items such as “I felt a sense of contact with people who care for me, and whom I care for” and “I experienced some kind of failure or was unable to do well at something”. The BMPN was measured at T1 ($\alpha = .79$) and T6 ($\alpha = .86$).

Psychological Distress. At T1 and T6, we used the 10-item Centre for Epidemiologic Studies Depression Scale Revised (CESD-R 10; Andresen, Malmgren, Carter, & Patrick, 1994) to assess symptoms of depression. The CESD-R 10 is a validated self-report measure of depression symptoms which focuses on the affectivity component of depressed mood. The scale includes ten items such as “I could not get going” and “I was bothered by things that usually don’t bother me” using a four-point Likert scale ranging from “rarely or none of the time (<1 day)” to “most or all the time (5-7 days)”. This scale showed adequate reliability at T1 ($\alpha = .80$) and T6 ($\alpha = .83$).

Negative Affect was assessed using a 7-item version of the negative affect subscale of the Positive and Negative Affect Schedule (PANAS; Watson, Clark & Tellegen, 1988) at both at T1 ($\alpha = .82$) and T6 ($\alpha = .80$). Participants were asked to rate the extent to which they had felt certain feelings and emotions (e.g., “irritable”) over the past week using a 7-point scale ranging from 1 “*not at all*” to 7 “*extremely*”.

Depressive symptoms and negative affect were highly positively related ($r = .68$). We therefore formed a combined psychological distress measure by standardizing each scale and calculating a mean for both T1 ($\alpha = .83$) and T6 ($\alpha = .80$).

Career Goal Progress. Career goal progress was assessed at T6 with two items: “I have made a lot of progress toward this goal” and “I feel like I am on track with my career goal plan.” A similar method has been used in previous studies (e.g., Koestner, Lekes, Powers, & Chicoine, 2002; Koestner, Powers, Carbonneau, Milyavskaya, & Chua, 2012). All ratings were made on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The reliability of this scale was acceptable ($\alpha = .88$).

Personal Goal Progress. Participants responded for each of their three chosen personal goals. Personal goal progress was assessed at each follow-up using three items for each goal (e.g., Koestner, Powers, Carbonneau, Milyavskaya, & Chua, 2012). For example, “*I have made a lot of progress toward this goal*”. All ratings were made on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). All personal goals were reviewed to identify ones that were clearly linked to the career goal. Goal progress for career-linked personal goals were excluded from the calculation of progress on personal goals. We did not want the personal goal progress measure to be redundant with the career goal measure. Thus, our final measure of personal goal progress is distinct from career goal progress. We focus on goal progress reported at the end of the school year (T6; $\alpha = .80$).

Results

Preliminary Analyses

The 14 sacrifice items were subjected to a principal components analysis with Oblimin rotation. Two items hypothesized to be part of the core activities sacrifice subscale showed high

cross-loadings and were thus dropped from further analyses: sacrifice of personal goals showed high cross-loadings on the core activities sacrifice and the psychological needs sacrifice subscales, whereas household activities cross-loaded highly onto the activities sacrifice and the physical sacrifice subscales. Three factors with Eigenvalues above 1.0 emerged and accounted for 64% of the variance. The first consisted of five items and represented sacrifice of physical needs, with an Eigenvalue of 5.34 and internal reliability of .83; the second consisted of four items and represented sacrifice of psychological needs with an Eigenvalue of 1.3 and internal reliability of .77; the third consisted of three items and represented sacrifice of core activities with an Eigenvalue of 1.05 and internal reliability of .81. Table 1 shows the names and factor loadings from the rotated matrix for all items. Physical and core activity sacrifice were correlated at an $r = .65$ level, $p < .001$; physical and psychological sacrifice, $r = .48$, $p < .001$; core activity and psychological sacrifice, $r = .46$, $p < .001$. Correlations and descriptive statistics all of the main variables in the study are presented in Table 2. It can be seen that participants career goals were generally rated as highly demanding, and that participants reported moderate levels of introjection. The three forms of sacrifice received similar and moderate levels of endorsement. Participants rated their career goal progress at the end of the year higher than their personal goal progress. Psychological need sacrifice was significantly associated with all outcome and antecedent variables.

Need Satisfaction Over the Year. Level of need satisfaction at the end of the year was regressed on the following variables: baseline need satisfaction (step 1); physical and core activity sacrifice (step 2); and psychological need sacrifice (step 3). At step 3, the regression yielded a significant multiple R of .427, $F(4, 279) = 15.57$. Baseline need satisfaction was significantly associated with end of year satisfaction ($R^2 = .152$, $\beta = .390$, 95% CI [.329, .580], t

$=7.12, p < .001$) at step 1. No significant effects were obtained for physical or core activity sacrifices ($\Delta R^2 = .016, p = .067$) at step 2. Psychological need sacrifice was significantly negatively related to changes in need satisfaction over the year ($\Delta R^2 = .014, \beta = -.141, 95\% \text{ CI } [-.176, -.009], t = -2.18, p = .030$) at step 3, and the effects of physical needs and core activity sacrifices remained non-significant. Participants who sacrificed their psychological needs for their career goals showed a significant decline in their need satisfaction over the course of the 9-month school year.

Central Analyses

Psychological Distress. The combined measure of negative affect and depressive symptoms at the end of the year was regressed on the following variables: baseline psychological distress (step 1); physical need sacrifice and core activity sacrifice (step 2); and psychological need sacrifice (step 3). At step 3, the regression of psychological distress yielded a significant multiple R of .59, $F(4, 279) = 25.70$. Baseline distress was significantly associated with end of year negative affect ($R^2 = .242, \beta = .492, 95\% \text{ CI } [.399, .608], t = 9.48, p < .001$) at step 1. No significant effects were obtained for physical or core activity sacrifices ($\Delta R^2 = .014, p = .076$) at step 2. Psychological need sacrifice was significantly positively related to changes in distress over the year ($\Delta R^2 = .013, \beta = .138, 95\% \text{ CI } [.012, .172], t = 2.27, p = .024$) at step 3, and the effects of physical needs and core activity sacrifices remained non-significant. Participants who sacrificed their psychological needs for their career goals showed a significant increase in their distress over the course of the school year.

Goal-Related Self-Regulation. Levels of progress for career goals and personal goals at the end of the year were regressed on the following variables: physical and core activity sacrifice (step 1); and psychological need sacrifice (step 2). The regression of career goal progress yielded

a multiple R of .185, $F(3, 275) = 3.26$, $p = .022$. Sacrifice of physical needs was unrelated to career goal progress, but the sacrifice of core activities was marginally positively related to career goal progress ($\beta = .139$, 95% CI $[-.017, .290]$, $t = 1.75$, $p = .081$) at step 1 ($R^2 = .016$, $p = .109$). Thus, participants who sacrificed their core personal activities made somewhat more progress on their career goals over the year. In contrast, psychological need sacrifice was significantly and negatively related to career goal progress ($\Delta R^2 = .024$, $\beta = -.159$, 95% CI $[-.301, -.023]$, $t = -2.29$, $p = .023$) at step 2. Participants who sacrificed their psychological needs for their career ended up making less progress in their career goal over the course of the school year. Moreover, core personal activities sacrifice was now significantly and positively related to career goal progress ($\beta = .183$, 95% CI $[.023, .337]$, $t = 2.26$, $p = .025$) when controlling for the effects of psychological need sacrifice at step 2. Together, these results show that sacrificing core activities may be beneficial, while sacrificing basic psychological needs hinders the progress made on a career goal through the academic year.

The regression of personal goals progress yielded a multiple R of .133, $F(3, 287) = 1.71$, $p = .165$. Sacrifice of physical needs and core personal activities were unrelated to personal goal progress ($R^2 = .003$, $p = .689$) at step 1. Psychological need sacrifice was significantly negatively related to personal goal progress ($\Delta R^2 = .018$, $\beta = -.144$, 95% CI $[-.264, -.008]$, $t = -2.09$, $p = .037$) at step 2, and the effects of physical needs and core activity sacrifices remained non-significant. Participants who sacrificed their psychological needs for their career ended up making less progress in their personal goals (e.g., goals that were not associated with their career goal) over the course of the school year.

Antecedents of Psychological Need Sacrifice. Psychological need sacrifice was regressed on the following variables: career demandingness (step 1); extrinsic life aspirations (step 2); and

introjected career motivation (step 3). The regression of psychological need sacrifice yielded a significant multiple R of .260, $F(3, 306) = 7.39, p < .001$. Career demandingness was significantly positively related to psychological need sacrifice ($R^2 = .028, \beta = .169, 95\% \text{ CI } [.085, .407], t = 3.00, p = .003$) at step 1. Extrinsic aspirations were also significantly positively related to greater psychological need sacrifice ($\Delta R^2 = .021, \beta = .145, 95\% \text{ CI } [.043, .305], t = 2.61, p = .01$) at step 2. Finally, introjected career motivation was significantly positively related to greater psychological need sacrifice ($\Delta R^2 = .018, \beta = .138, 95\% \text{ CI } [.028, .267], t = 2.44, p = .015$)¹ at step 3, and the effects of demandingness and extrinsic aspirations remained significant. Thus, the risk of sacrificing one's psychological needs in the service of reaching one's career goals was associated with choosing a highly demanding career goal, feeling guilty and pressured about pursuing this goal and having a general orientation toward extrinsic life goals, such as popularity and wealth.

Discussion

We conceptualized psychological need sacrifice as a distinct case of need thwarting that involves a self-initiated, but not integrated, decision to abandon need fulfillment in order to pursue a highly valued goal. We examined whether sacrificing basic psychological needs to reach a career goal would be uniquely associated with greater psychological distress and self-regulatory dysfunction over time, beyond other forms of sacrifice (e.g., physical needs, such as sleep and exercise, or core personal activities, such as leisure activities). As predicted, the sacrifice of psychological needs in the pursuit of career goals was associated with psychological distress and self-regulatory problems for both personal and career goals over time, above and beyond the impact of sacrificing physical needs and core personal activities.

¹ Results regarding the effects of introjected career motivation were similar to the ones reported above when including intrinsic, identified, and external career goal motivations in the regression model.

Contributions to Basic Psychological Needs Theory

Our results have several theoretical and practical implications for SDT and basic psychological needs. First, the current study contributes to the SDT research on basic psychological needs by integrating literature on career goal pursuit, sacrifices (or tradeoffs) and processes involved in need thwarting. One central tenet of SDT posits that the psychological needs for autonomy, relatedness, and competence are universal (e.g., Chen et al., 2015; Church et al., 2013; Milyavskaya & Koestner, 2011; Ryan & Deci, 2017) and essential to thriving and flourishing (e.g., Bartholomew, Ntoumanis, Ryan, & Thøgersen-Ntoumani, 2011; Chirkov, Ryan, & Willness, 2005; Ryan & Deci, 2017). Our findings provide further evidence for the centrality of these needs by demonstrating that, even in cases where the decision to sacrifice one's psychological needs is self-initiated, it leads to diminished psychological and self-regulatory functioning.

We also assessed the motivational and goal-related antecedents of sacrificial goals. We find that the sacrifice of psychological needs stemmed from controlled motivational processes. Specifically, selecting highly demanding career goals, placing an emphasis on extrinsic life aspirations such as wealth and status, and feeling introjected motivation for pursuing one's career goals were all positively associated with psychological need sacrifice. Thus, a variety of controlling factors may conspire to push young people to sacrifice their needs for autonomy, competence, and relatedness in the service of reaching valued career goals. Our results suggest that selecting a highly demanding career goal, valuing wealth, fame and status, or pursuing a career goal to minimize feelings of guilt and shame, will all predispose an individual to sacrifice their basic psychological needs. While the demandingness of a given career path is not within an individual's control, individuals can choose to re-examine their life aspirations and reflect upon

their reasons for goal pursuit. As such, our recommendation is not for people to refrain from embarking on a demanding career path. Instead, we propose that these “at-risk” individuals may benefit all the more from prioritizing intrinsic over extrinsic life aspirations and internalizing their reasons for career goal pursuit.

Career-Goal Related Sacrifices

The present research also introduces a new form of sacrifice – psychological needs sacrifice – into the work-life balance literature, thereby connecting work-life balance research with basic psychological needs theory. Our results suggest that the sacrifice of psychological needs is distinct from physical need sacrifice and core activity sacrifice using principal component analysis. This is important because all forms of sacrifice are not created equal, and the self-imposed sacrifice of psychological needs seems to be especially damaging over time when compared with other forms of sacrifice.

Indeed, it is notable that physical and core activity related sacrifices were unrelated to diminished functioning over the course of the study. As well, participants who sacrificed their core activities made more progress on their career goal over the school year when controlling for psychological need sacrifice. This suggests that core activity sacrifice may, in some cases, be beneficial to progress toward a career goal. Temporarily sacrificing some personal activities, such as certain hobbies, may allow students to temporarily allocate more time and effort toward their desired career goal. Critically however, sacrificing feelings of autonomy, competence, and relatedness undermined the pursuit of a career goal and personal goals, as well as psychological well-being over the span of a school year. Thus, our results suggest that, whereas an individual can recuperate from temporarily sacrificing physical well-being or commitment toward activities, psychological need sacrifice may carry more enduring negative repercussions. Our findings thus

underscore the importance of considering self-initiated psychological need sacrifice, and its effects on young adults' adjustment and growth.

These findings contrast with prior theoretical views on the importance of physical needs. Indeed, Maslow (1943) initially postulated that when needs go unmet, the individual feels a drive towards those unmet needs. For example, when sleep deprived, people feel a drive to sleep. However, Deci and Ryan (2000) explain that psychological needs act differently from physiological needs. When psychological needs are thwarted, people may instead be inclined to pursue compensatory motives, or need substitutions, that could further impede their direct attempts to satisfy their psychological needs. For example, Kasser, Ryan, Zax and Sameroff (1995) found that teenagers' level of extrinsic aspirations for wealth was predicted by their reports of their mothers' controlling and rigid parenting style, thus suggesting that need thwarting can lead people to pursue need substitutes in the form of extrinsic aspirations. The sacrifice of basic psychological needs may be more detrimental than the sacrifice of physical needs because of the propensity to pursue need substitutes in response to unmet or sacrificed psychological, but not physical, needs. Whereas the sacrifice of physical maintenance needs produces a drive that is readily corrected by the individual, the sacrifice of psychological needs may lead to a longer lasting derailment from healthy need satisfaction.

Practical Implications

At an applied level, our findings elucidate the pitfalls that young adults may face as they make sacrifices in their pursuit of challenging career paths. On the one hand, our results suggest that making physical sacrifices in terms of sleep, eating and hygiene do not seem to impair young adults' affective and self-regulatory trajectories over the school year. Making activity sacrifices in the form of less time dedicated to hobbies and social activities may even represent

an effective strategy for making more progress at one's career goal. For both physical and core activity sacrifice, further research is needed to determine at what point both the quantity and chronicity of these forms of sacrifice become harmful.

In stark contrast, sacrificing psychological needs appears to be detrimental to well-being and goal progress. The medical resident who must spend late nights in the hospital, but who creates opportunities for decision-making, interpersonal connection and learning, can nonetheless function effectively over time in terms of both affect and self-regulation. However, the medical resident who focuses on work at the expense of personal autonomy, a sense of connection, and experiences of mastery will likely come up against a brick wall. Essentially, some sacrifices may be necessary in pursuing a career goal, but only insofar as they do not affect one's basic psychological needs.

Future Directions and Limitations

The concept of psychological need sacrifice relates to literature discussing the central role of tradeoffs and sacrifices in work-life balance (Caproni, 1997; Mennino & Brayfield, 2002; Milkie & Peltola, 1999). As such, one might expect that psychological need sacrifice would be detrimental in establishing a healthy work-life balance. Thus, future research could explore the associations between psychological need sacrifice and work-life balance. Furthermore, our study highlighted several antecedents associated with increased psychological need sacrifice (extrinsic aspirations, introjected motivation, demandingness). Future research could also investigate how other factors, such as self-compassion (Neff, 2003) might protect against psychological need sacrifice. Defined as a mindful approach to treating oneself with kindness and understanding that has previously been studied in relation to SDT (Hope, Koestner, & Milyavskaya, 2014), self-compassion is a likely protective factor against psychological need sacrifice.

From a developmental perspective, one can also understand the process of psychological need sacrificing from the Motivational Theory of Life-Span Development (Heckhausen, Wrosch & Schultz, 2010). Heckhausen and colleagues (2010, p. 51) note that “individuals may develop patterns of primary control striving that reflect very high or even excessive persistence when facing insurmountable obstacles, whereas others are more amenable to disengage”. To this end, Heckhausen and colleagues (2010) give the example of over control in one domain (e.g., gymnastics) as potentially compromising an individual’s goal striving capacity in the future (e.g., because of skeletal injury). Likewise, psychological need sacrifice for a career goal may be an example of “excessive persistence” in goal pursuit and may lead to adverse mental health outcomes (e.g., burnout, depression) that compromise an individual’s goal striving capacity in the future. Given Heckhausen and colleagues’ (2010) model of optimal goal striving, it may be most adaptive for individuals’ sacrificing their basic psychological needs to relinquish or re-adjust their career goal, given that psychological needs sacrifice increases psychological distress and undermines goal progress. However, switching from goal engagement to goal disengagement for goals that elicit psychological need sacrifice may be more difficult, precisely because these goals tend to be more introjected and disengagement may pose a greater threat to self-esteem. As such, future research is needed to examine how individuals regulate goals for which they have sacrificed basic psychological needs, and whether goal disengagement reverses adverse affective outcomes such as psychological distress.

There were also certain limitations to our study. First, we used self-report measures to assess all variables within our study, with the exception of ratings of career goal demandingness. Future research could supplement these self-report measures with physiological measures of ill-being (such as cortisol as an indicator of stress; e.g., Russell, Koren, Rieder, & Van Uum, 2012),

implicit measures (such as the implicit association test; e.g., Greenwald & Banaji, 1995), or even informant reports from friends and family members (e.g., Hope, Koestner, Holding, & Harvey, 2016).

Second, because our study used a non-experimental longitudinal design, we cannot infer causality from our results. Although we concluded, for theoretical reasons, that career goal demandingness and motivation likely predict psychological need sacrifice, which in turn predicts diminished psychological and self-regulatory functioning, it is possible that the associations found within our study might be explained by a different model. In order to establish causality, future studies could manipulate variables at T1 that might affect changes in later time points. In particular, SDT interventions designed to help participants with weight loss or diet control have manipulated participants' levels of autonomous motivation or perceived autonomy support in helping participants establish a healthier diet (Shaikh, Vinokur, Yaroach, Williams, & Resnicow, 2011; Silva et al., 2011). A similar manipulation (e.g., distributing informational materials about autonomous goal motivation or promoting an autonomy supportive educational environment) could be used to assess the outcomes of our study variables. A third limitation was the use of a university student sample which limits the generalizability of our findings. In order to ensure both generalizability and replicability, we would need to repeat our measurements of psychological need sacrifice within different populations, such as athletes, nurses, businesspeople, or other working professionals.

Overall, the current study contributes to the SDT and basic psychological needs literature by investigating the costs of psychological needs sacrifice in career goal pursuit. Our findings support the centrality of basic psychological needs and how their sacrifice, even when self-initiated, has detrimental effects to psychological and self-regulatory functioning beyond the

effects of core activity and physical need sacrifices. This study thus suggests that we can choose to sacrifice sleep, socializing and sports for some time, but self-sabotaging our need satisfaction takes a toll.

Conclusion

The road to pursuing a long-term career goal is not without its trials and tribulations. People are constantly forewarned that they must be willing to make sacrifices to achieve the goals that they hold most dear, and are often encouraged to do so. Indeed, social media is fraught with memes and quotes asserting that, “If you don’t sacrifice for what you want, what you want becomes the sacrifice”². We find that such potential words of wisdom must be interpreted with caution. Indeed, the relation between sacrificing physical needs and desirable activities with making greater goal progress was tenuous. More critically, sacrificing basic psychological needs for autonomy, relatedness, and competence was robustly associated with reduced goal progress and increased psychological distress. Thus, when people embark on the long and arduous road towards pursuing their long-term goals, it is critical that they do not sacrifice the basic psychological needs that will fuel them on this journey.

² Retrieved from https://www.pinterest.com/pin/A_g0IgEQQNoGvIrsKVWBH3o/

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Tables

Table 1. *Final Rotated Factor Loadings for Sacrifice Items.*

In order to pursue your career goal, how much have you had to make the following sacrifices?				
Items	Sacrifice of...			
	Physical Needs	Psychological Needs	Core Activities	
1. <i>Sleep</i>	.561	.073	-.138	
2. <i>Exercise</i>	.718	-.053	-.099	
3. <i>Healthy eating</i>	.915	.069	.163	
4. <i>Hygiene/ appearance</i>	.789	.006	.029	
5. <i>Self-care activities</i>	.638	.036	-.233	
6. <i>Hobbies, leisure or fun activities</i>	.018	.181	-.747	
7. <i>Friends and family</i>	.018	.092	-.805	
8. <i>Dating, romantic or intimate relationships</i>	.018	-.079	-.830	
9. <i>Community involvement</i>	.315	-.027	-.484	
10. <i>Feeling less connected</i>	-.082	.778	-.225	
11. <i>Feeling less competent</i>	.076	.833	.109	
12. <i>Feeling more pressured and less free</i>	.050	.807	.012	

Table 2. Means, Standard Deviations and Correlations of All Variables.

Variables		M	SD	Correlations								
				1	2	3	4	5	6	7	8	9
T1 Antecedents	1. Career Goal Demandingness	3.69	0.96	—								
	2. Extrinsic Aspirations	4.12	1.14	-0.02	—							
	3. Introjected Career Goal Motivation	4.31	1.29	0.04	0.21**	—						
T3 Sacrifices	4. Psychological Needs Sacrifice	4.12	1.37	0.17**	0.14*	0.17**	—					
	5. Physical Needs Sacrifice	3.92	1.41	0.11	0.11*	0.13*	0.48**	—				
	6. Core Activity Sacrifice	4.24	1.43	0.12*	0.10	0.14*	0.46**	0.65**	—			
T6 Outcomes	7. Δ Needs Satisfaction	0.00	0.83	-0.05	-0.09	-0.01	-0.17**	-0.13*	-0.11	—		
	8. Δ Psychological Distress	0.00	0.80	0.06	0.01	0.01	0.17**	0.12*	0.12*	-0.65**	—	
	9. Career Goal Progress	5.30	1.40	0.10	-0.09	-0.03	-0.06	0.07	0.13*	0.25**	-0.22**	—
	10. Personal Goals Progress	4.59	0.89	0.02	-0.11*	0.02	-0.17**	-0.08	-0.03	0.19**	-0.12*	0.32*

Notes. * $p < .05$; ** $p < .01$. Δ represents the unstandardized residual variables of outcomes at T6 from T1.

Supplementary discussion and conclusion

For the sake of concision, certain discussions were only briefly introduced or omitted altogether from the final manuscript. I have chosen to append these additional discussions to this thesis.

Autonomy and self-compassion amidst controls

In addition to previously discussed implications for individuals choosing a demanding career goal, the present study also has important implications for individuals in controlling contexts. Evidence from our study suggests that individuals may initiate their own need sacrifice in response to an introjected goal, regardless of the context. However, it stands to reason that the opposite could also be true, that certain individuals could safeguard their needs regardless of context. Indeed, Deci and Flaste (1995) explain that individuals are sometimes capable of remaining largely autonomously motivated despite controlling environments. Different factors explain this assertion. For instance, individual differences, such as having a strong autonomy orientation or a strong prioritization of intrinsic values, contribute to an individual's ability to remain autonomous amidst controls. In addition, behavioural regulation strategies, such as taking steps towards non-judgemental understanding, or talking to an autonomy-supportive friend, contribute to personal autonomy. Finally, Deci and Flaste (1995) also discuss emotional regulation strategies that enable people to be autonomous amidst controls, such as considering one's emotions with non-judgemental awareness, or considering one's failures with kindness. These emotion regulation strategies for ensuring personal autonomy, that is, mindful awareness and self-kindness, resonate true with self-compassion theory (Neff, 2003). As argued by Neff, self-kindness, a sense of common humanity, and mindful awareness strongly contribute to well-being and mental health. In addition, research by Hope, Koestner and Milyavskaya (2014)

showed that self-compassion and autonomous motivation interact to predict low negative affect. Taken together, this research suggests that certain individual difference and emotion regulation strategies could contribute to an individual's ability to safeguard their psychological needs from need thwarting (or need sacrifice). In order to assess whether factors such as self-compassion and autonomy orientation protect against need sacrifice, further research could assess these strategies as potential antecedents of low psychological need sacrifice.

Work-life balance

The present study also has implications for work-life balance. Conceptualized as perceived compatibility between work and non-work activities that promotes growth in accordance with one's life priorities (Kalliath & Brough, 2008), work-life balance has previously been studied in relation to core self-determination theory concepts (e.g. Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008; Grawitch, Barber, & Justice, 2010). In particular, research has attempted to explain how Basic Psychological Needs Theory ties into the association between work-life balance and well-being. Gröpel and Kuhl (2009) demonstrated in two separate studies (one with undergraduate students and the other with company employees) that the association between work-life balance and well-being is mediated by need satisfaction. Indeed, Milyavskaya et al. (2009) demonstrated that a balanced satisfaction of the three psychological needs across several important life contexts, including with friends, family, at school and in part-time jobs, independently predicted higher well-being. Additionally, a study conducted in Norway (Andreassen, Hetland, & Pallesan, 2010) supported this association between work-life balance and need satisfaction by providing evidence for an association between workaholism (blurred boundaries between work and private life, inability to relax, frequency of thinking about work, etc.) and decreased psychological need satisfaction.

By introducing a new form of sacrifice, psychological need sacrifice, into the research on work-life balance, the present study further connects self-determination research with work-life balance literature. The present study suggests a mechanism through which an introjected and obsessively pursued career goal can disrupt a proper work-life balance, thwart an individual's psychological needs and lead to affective and self-regulatory failures. Future research could aim to test this model by assessing work-life balance measures that may mediate the relationship between psychological need sacrifice and negative outcomes.

Conclusion

Developing career aspirations and setting forward on a path towards their pursuit are integral parts of emerging adulthood. Although this drive is decidedly adaptive for a young adult, the challenges inherent to pursuing one's dreams may lead some to lose touch with their innate psychological needs. Forgetting, and especially sacrificing, the very needs essential to sustaining oneself on this path, can inadvertently compromise one's success and lead to psychological distress. While arduous career challenges hold the potential to enable growth, learning and development, they also warrant a degree of caution. Individuals in these career pursuits could greatly benefit from reflecting on their motivation, internalizing their reasons for career pursuit, and orienting themselves towards intrinsic life aspirations.

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