

Goal Conflict of Students and its Impact on Well-being:

The Role of Goal Importance and Goal Attainment

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Abstract

The aim of the present study is to get a better understanding of the relationship between goal conflict and well-being in students, as already existing research is inconclusive. Some studies found an association between goal conflict and well-being, whereas others not. Therefore, we considered the mediating role of goal attainment and the moderating role of goal importance to shed more light on the relationship. We argued that goal conflict affects the well-being of a student, and explored how the attainment of goals could further explain the relationship between goal conflict and well-being. Additionally, we investigated how goal importance could affect the association, such that the relationship between goal attainment and well-being is stronger when the goals are deemed important. We utilized a cross-sectional study design ($N = 226$) and data was collected through the use of an online questionnaire to test our hypothesis. The results showed that high goal conflict is associated with lowered well-being of students. However, we did not find support for our hypothesis that goal attainment mediates the relationship between goal conflict and well-being, and the association between goal attainment and well-being was also not moderated by goal importance. Practical implications of the study are discussed, as well as, future research directions that could further specify the relationship between conflicting goals of students and their well-being.

Keywords: goal conflict, well-being, goal attainment, goal importance, study goals

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The Role of Goal Importance and Goal Attainment

Well-being in the psychological context has been extensively studied over the last decades and refers to optimal psychological experience and functioning. Still, there are a lot of debates about what really makes up the construct of well-being. High subjective well-being (SWB) is generally understood as experiencing high positive affect, low negative affect and high satisfaction with life (Deci & Ryan, 2008), and well functioning across life domains (Luruli et al., 2020). Motivational theorists argue that individuals can actively contribute to making their life as meaningful as possible in order to reach a sense of high SWB. A way in which people might contribute to reaching a sense of high SWB is through attaining meaningful goals. Existing literature claims that the pursuit and attainment of goals is related to healthy mental functioning, successful life outcomes, academic achievements, and higher subjective well-being (Gray et al., 2017).

Nonetheless, when an individual tries to pursue multiple desirable goals simultaneously, where one goal undermines the efforts of achieving another desired goal (e.g., because of time constraints), well-being can be negatively affected (Boudreaux & Ozer, 2013). In our study, we focused on students and investigated the effects of study goal conflict and other life goals in a students' life. When experiencing goal conflict, certain goals get prioritized at the cost of others, which could have an effect on well-being; high subjective well-being might be absent and students might experience stress by failing to satisfy the expectations they have of themselves. This is in line with earlier research, as evidence suggests that high levels of goal conflict are associated with lower psychological well-being (Boudreaux & Ozer, 2013). However, since the

evidence is conflicting (Kehr, 2003; Kelly, et al., 2011), we introduce potential mediating factors, and moderating factors, such as goal attainment and goal importance, respectively. The current study will explore how goal conflict of students affects their well-being, which is assessed using measures of life satisfaction and depression. We argue that the level of goal conflict between study goals and general life goals has an impact on the attainment of goals, and subsequently on the well-being of a student. In addition, we aim to explore how study goal importance affects the strength of the relationship between goal attainment and well-being. In other words, we expect the relationship between study goal attainment and well-being to be stronger if the goal is deemed more important to the student.

Goal conflict and well-being

Due to many responsibilities that students have to face, such as studying, living a social life, and probably also earning some money, two out of three students experience constant stress, and as a result, depressive symptoms may develop (Bakker et al., 2017). Thus, being a successful student can present several challenges in terms of life satisfaction. For instance, when there is a conflict between a study goal, such as preparing for an important exam the next day and a private life goal like going to a party with friends, priorities must be set, as pursuing both goals simultaneously is difficult. However, the problem is that students usually want to do well in their studies on the one hand, but at the same time want to socialize with others, want to help others, or even have a part-time job to finance their life. As a result of too many demands, they may subjectively perceive a high conflict between their goals. They may experience that their resources such as time and energy are limited and that they are not able to manage meeting all

their goals at once (Etkin et al., 2015). This is an example of goal conflict, whereby the striving for one goal might hinder the achievement of another (Gray et al., 2017).

In particular, students are confronted by managing their responsibilities in a highly complex environment that often requires pursuing multiple goals at once (Grund et al., 2014). Furthermore, when not all goals can be attained at the same time, stress might arise. However, stress is probably a phenomenon that many students deal with and almost every student has experienced, but when stress persists for too long, is too frequent or too high, and recovery time is not available, it can have severe consequences on physical and psychological health (Bakker et al., 2017).

Another explanation for the negative relationship between goal conflict and well-being could be that humans neglect their need to interact as social beings. Indeed, Harlow and Cantor (1994) found that when students' academic goals and their social goals were in conflict, they generally resolved it by focusing more attention on the academic goal, rather than the social goal. As a consequence, humans' innate need to belong can not be satisfied and the role of a human as a social being gets threatened. In fact, evidence points out that when an individual experiences a role conflict, it has the potential to create distressing feelings, which could, in the long run result in depressive symptoms (Emmons & King, 1988). So, conflicting goals do not just block someone from being happy, but potentially also could make someone feel depressed.

Accordingly, there is a lot of evidence present emphasizing that high levels of goal conflict are related to higher levels of distressing symptoms (Boudreaux & Ozer, 2013; Emmons & King, 1988; Gray et al., 2017; Riedinger & Freund, 2004; Schultheiss et al., 2008). For example, research by Boudreaux and Ozer (2013), assessed goal pursuit of 180 undergraduate

students on several dimensions including *commitment*, *stress*, and *ambivalence*. They found significant positive associations of goal conflict with depression, anxiety and negative affect.

Nevertheless, existing research on goal conflict is ambiguous; some studies failed to detect an association between goal conflict and well-being (Kehr, 2003; Kelly et al., 2011; Solberg Nes & Segerstrom, 2006; Sheldon & Kasser, 1995). In contrast, one study even found a significant negative correlation between goal conflict and depression (Kelly et al., 2011), indicating that people who experience high goal conflict, show lower depression levels. In this study, they argue that probably not the conflict of goals alone is responsible for the psychological distress. Emmons and King (1988) suggest that merely opposing feelings that relate to the same goal are responsible for the distressing symptoms, which can also be described as within-striving conflict. Kelly and colleagues (2011) argue this was due to goal ambivalence. This definition refers to the concept of ambivalence, and a student might have ambivalent feelings about writing his or her bachelor's thesis, as this is important for a higher level goal to succeed academically, which is in conflict with a goal of maintaining close connections (Moberly & Dickson, 2018). Thus, creating goal ambivalence. A finding by Kelly and colleagues (2011) indicates that when goal ambivalence was high and goal conflict was low, depression symptoms were at the highest. This suggests that individuals can accept conflict if they are still able to realize other important valued goals, or if they expand their resources. Another explanation for not finding an effect between goal conflict and well-being could be self-acceptance, which is highly related to well-being (Stauner, 2014). This implies that accepting that not all goals can be attained at the same time, should buffer against depressive feelings and increase the likelihood of a satisfying feeling about the realization of other important goals. Like this, the negative effects of goal

conflict could be reduced, but only when goal ambivalence is perceived to be low. This points out that goal conflict might not only negatively affect well-being when goals can still be realized. Therefore, since the evidence is conflicting regarding the relationship between goal conflict and well-being, we will further investigate the role of goal attainment in the relationship between goal conflict and well-being and how goal importance could affect the strength of the relationship between goal attainment and well-being.

The role of goal attainment and goal importance

Goal attainment can be described as a process in which an individual progresses towards their goal (Brunstein, 1993; Sheldon & Kasser, 1998; Sheldon & Elliot, 1999; Sheldon et al., 2002). It is important to consider goal attainment, as it can further explain the underlying connection of goal conflict and well-being.

Goal attainment is related to well-being (Emmons, 1986), and even while being in the goal attainment process, individuals may experience short positive satisfying emotions, which can have an effect on later progress-relevant judgements. This was actually shown in a study by Sheldon and colleagues (2002), where the participants had to think about several relevant goals, why they wanted to achieve these goals, and how the pursuit of each of these goals has influenced the potential future of them. It was shown that these small positive experiences affected their attainment-associated judgements and the general experienced emotions. Those individuals who successfully moved toward their goals, had satisfying feelings during this process, which also influenced other goal-related appraisals. For example, if the goal to get to know new people was perceived to be attained, participants also experienced the feeling of relatedness and intimacy. This affected the general well-being judgements later. Longitudinal

studies that address subjective well-being support the notion that goal attainment is a major contributor to SWB (Brunstein, 1993; Sheldon & Elliot, 1999; Sheldon & Kasser, 1998; Sheldon et al., 2002), and Emmons (2003) even suggests that the attainment of goals is a crucial part for the experience of well-being. Indeed, when the question comes up how to live in a meaningful and valuable manner, people tend to report their life goals, ambitions and ideas about their future. By being mindful of one's dreams and wishes, goals can function as providing a sense of directionality and therefore, motivate the individual to actually approach one's personal development by attaining their goals, and thus experiencing positive emotions about themselves (Mayser et al., 2008).

Another possibility how attaining goals increases well-being is by instigating positive changes in one's self-concept, which might be created when the individual adopts a new way of thinking about their skills and capabilities (Sheldon et al., 2002). Moreover, as goals function as a sense of perspective focus in a way that they inform us about what we have to do, they arrange our strivings and subsequently guide our behavior. For instance, when an important exam is coming up, the student knows that studying is crucial to pass the exam, which will in turn be the driving force to work hard in order to be successful. Indeed, achieving a goal should result in a feeling of competence, which reflects being able to get things done in an effective way (Bahrami & Cranney, 2017).

However, if the goals one wants to attain are in high conflict with each other, the likelihood to attain these goals decreases, as goal conflicts are related to increased behavioral inhibition regarding the progress of goals and rumination about goals (Boudreaux & Ozer, 2013; Gray et al., 2017). As a result, the limited goal progress increases the likelihood to experience

negative emotions, and subsequently may lead to lowered well-being (Gray et al., 2017).

Therefore, taking into account goal attainment as a significant mediating factor of goal conflict and well-being could further specify the relationship. As mentioned above, conflicting goals are a potential stressor, especially when one goal highly interferes with the attainment of another (Gray et al., 2017). Hence, it is important to take a closer look at the attainment of goals, since we state that goal conflict will make someone feel happy or depressed depending on whether the goal is actually attained or not. Furthermore, the importance of the study goal could also play a role by affecting the strength of how goal conflict decreases life satisfaction and/ or increases depression levels of students. So, taking into account goal importance could strengthen our understanding of the relationship.

Goal importance can be defined as an individual difference variable that describes how people assign their resources such as time and energy. The more resources are invested to reach this goal, the more important it is (Freund & Tomasik, 2012). Research also demonstrates that the attainment of goals is especially likely to lead to well-being when those goals are deemed particularly important (Tóth-Bos et al., 2018; Sheldon & Elliot, 1999). Tóth-Bos and colleagues (2018) found that especially the attainment of important goals helps to fulfill three basic needs which are autonomy, competence, and connectedness (Ryan & Deci 2000; Sheldon et al., 2004), and therefore, individuals could feel less depressed. For example, a student who is facing an exam period and decides to focus on the upcoming exams, as they are deemed important. Consequently, the student restrains for three weeks from partying with friends, and thus, experiences increases in the feeling of competence when the exam is passed and therefore attained. In fact, when people are able to attain what they intend to do, they experience a feeling

of satisfaction and happiness, and this association gets strengthened when the goals they accomplish are especially valuable and meaningful to that person. However, at the same time, if an individual is not able to accomplish a goal of high importance, they are more likely to experience negative emotions and distressing feelings, as they may have the feeling that their needs cannot be fulfilled (Mayser et al., 2008; Tóth-Bos et al., 2018). Thus, it appears that the interaction of goal attainment and goal importance predicts subjective well-being (Kasser & Ryan, 1996; Tóth-Bos, A., 2019). For the sake of simplicity, this paper will refer to well-being as satisfaction with life, and psychological distress as depression.

Overall, we intend to (1) examine the relationship between goal conflict and well-being and depression symptoms of a student. Furthermore, (2) we will investigate the role of goal attainment in the relationship between goal conflict and students' life satisfaction and depression, and thirdly, (3) the interaction of study goal attainment and study goal importance on life satisfaction and depression will be explored. Based on the preceding, our hypotheses are as follows.

Hypothesis 1a: there is a negative relationship between students' goal conflict and students' satisfaction with life, meaning that the less goal conflict a student experiences, the higher the satisfaction with life.

Hypothesis 1b: there is a positive relationship between goal conflict and students' depressive symptoms, meaning that the more goal conflict a student experiences, the more depressive symptoms the student will develop.

Hypothesis 2a: the negative relationship between goal conflict and students' satisfaction with life is mediated by study goal attainment.

Hypothesis 2b: the positive relationship between goal conflict and students' depressive symptoms is mediated by study goal attainment.

Hypothesis 3: the relationship between study goal attainment and satisfaction with life and depression symptoms of students is moderated by study goal importance, such that this association is stronger to the extent that goals are perceived to be important.

Method

Ethical Statement

Ethical approval for this study was granted by the Ethical Committee Psychology (ECP) affiliated with the University of Groningen, the Netherlands (PSY-2122-S-0070). The study was conducted in accordance with the Declaration of Helsinki.

Participants

The total sample of participants ($N = 249$) was recruited through the research panel website (SONA) of the University of Groningen and through convenience sampling in order to include a wider population of students. SONA respondents comprise mostly first-year Psychology students who participate in research for ECTS. Twentythree participants were excluded from the research for not meeting the required criteria; seventeen for not completing the questionnaire, five for failing the attention check, and one for being under the age of 18. The sample which was then used for analysis, consisted of 226 participants (women ($n = 173$), men ($n = 49$), gender non-conforming ($n = 2$), prefer not to say ($n = 2$)). Participants' age ranged from 18 to 31 ($M_{age} = 20.48$, $SD = 2.49$). All participants were required to be students while they took part in the research. Participants' highest level of education in our sample ranged from high

school (or equivalent; $n = 184$), to bachelor's degree ($n = 36$), to graduate or professional degree ($n = 4$), to vocational school ($n = 1$), and to primary school ($n = 1$). The majority of the students in our sample came from the Netherlands (41.2%) and Germany (27.9%), and the remaining belonged to other countries from Europe (22.7%), Asia (5.3%), North America (2.2%), and Russia (0.5%). Of these students, 38.9% were engaged in paid employment while 61.1% were not employed. Participants who were recruited through the SONA research panel website were granted class credit in the form of ECTS. No inducements were offered to those participants who were recruited through convenience sampling.

Procedure

Respondents were informed about the aim of the research in a transparent manner and no deception was involved. Participation in the research was voluntary and respondents were informed they could terminate their participation any time without any repercussions. Participants were assured their data would remain anonymous and informed consent was obtained before the assessments began. All the assessments were completed online and the participants first had to provide their demographic information: a) gender; b) age; c) highest level of education; d) nationality; e) employment status. They then completed the SWLS (Diener et al., 1985) and the PHQ-9 (Kroenke et al., 2001), which were used to measure and operationally define the dependent variable: subjective psychological well-being. Subsequently, study-goal importance (moderator), study-goal attainment (mediator), and goal conflict (independent variable) were assessed through the use of the aforementioned questionnaires that were designed

for the purpose of this study. Additionally, participants were asked to provide their grade point average (GPA). To ensure participants were completing the assessment in an attentive and alert state, the researchers included two attention check questions that asked them to click on a certain number on the Likert scale. Participants who failed these checks and failed to complete the entire questionnaire were excluded from the statistical analysis.

Measures

Goal Conflict

In order to measure goal conflict, the researchers of this study created a questionnaire. This questionnaire drew inspiration from Kasser and Ryan's (1996) Aspiration Index questionnaire, which was developed to measure people's aspirations (goals). The goal conflict questionnaire consisted of six items that referred to other life goals (not related to education) that one may deem personally important. The item 'being famous' was excluded in our study, as it was deemed the least important goal for the student population and had the lowest reliability of all the items (Utvær et al., 2014). Of these six items, two were categorized as extrinsic goals (being good looking, having a lot of money) and four were categorized as intrinsic goals (living a healthy life, having loving relationships, knowing oneself, and helping others improve their lives). Participants were asked to indicate to what extent they felt these other goals were in conflict with their study goals on a seven-point Likert scale ranging from 1 (*not at all conflicting*) to 7 (*very much conflicting*). The Cronbach alpha for this scale was $\alpha = .79$.

Goal Importance

To measure the importance of study goals that were held by students, the authors created yet another questionnaire inspired by Kasser and Ryan (1996). This questionnaire included five items that relate to students' study goals: a) having good grades; b) excelling in studies; c) obtaining their diploma; d) studying hard; e) finishing their degree. The participants were instructed to indicate the personal importance of these items related to study goals. They reported their answer through the use of a seven-point Likert scale, ranging from 1 (*not at all important*) to 7 (*very important*). The scale's reliability was found to be $\alpha = .76$.

Goal Attainment

Similarly, to measure goal importance, the authors created another questionnaire inspired by Kasser and Ryan (1996). Items in the questionnaire were identical to the ones in the goal importance questionnaire. However, this time around, participants were asked to indicate how much they had felt they achieved these goals on a seven-point Likert scale, ranging from 1 (*not at all attained*) to 7 (*very much attained*). It should be noted that Cronbach α for study goal attainment is relatively low, but still adequate ($\alpha = .64$). This could be due to our measure of how we assessed study goal importance and attainment. We asked our participants to rate the importance of five goals related to studying, which we provided, and additionally to rate how much they already achieved this goal. Cronbach α may be suppressed due to the restricted number of items in the questionnaire, but for short-item questionnaires it is often rather lower than the cut-off point of 0.7 (Cronbach, 1951; Wanous & Hudy, 2001).

Dependent Variables

Satisfaction with Life Scale. To measure the subjective well-being of participants, the authors used the Satisfaction with Life Scale (SWLS) designed by Diener et al., (1985). The five items of the scale ($\alpha = .84$) are intended to measure one's self-reported overall satisfaction with life, (e.g., "the conditions of my life are excellent"), and participants respond on a seven-point Likert scale, ranging from 1 (*totally disagree*) to 7 (*totally agree*).

Patient Health Questionnaire-9 (PHQ-9). The Patient Health Questionnaire-9 (Kroenke et al., 2001) was utilized to measure depressive symptoms in participants. The questionnaire consisted of nine items ($\alpha = .88$), that inquire about depressive symptoms and behavior (anhedonia, sleep, lethargy, negative thoughts, etc.). Participants indicated how often they had been bothered by the symptoms/behaviors (e.g., "little interest and pleasure in doing things") in the past two weeks on a four-point Likert scale, ranging from 0 (*not at all*) to 3 (*nearly every day*).

Results

Preliminary Analysis

Descriptive statistics and intercorrelations of the study variables are provided in Table 1.

A significant negative correlation between goal conflict and life satisfaction ($r = -.16, p < .05$) was found, and a significant positive correlation between goal conflict and depression ($r = .21, p < .01$). In addition, goal conflict was slightly positively correlated with study goal attainment, but non-significant ($r = .04, p = .54$). Life satisfaction had a significant positive correlation with study goal attainment ($r = .23, p < .01$), and depression had a significant negative correlation with study goal attainment ($r = -.30, p < .01$).

Table 1*Descriptive Statistics and Intercorrelations of the Study Variables*

Variables	Mean	SD	1.	2.	3.	4.	5.
1. Goal conflict	3.49	1.32					
2. Goal attainment	4.06	1.10	.041				
3. Goal importance	5.90	.84	.147*	.042			
4. SWLS	4.51	1.16	-.16*	.23**	-.14*		
5. PHQ-9	2.22	.70	.21**	-.30**	.23**	-.55**	

Note. * $p < .05$; ** $p < .01$ (two-tailed significance).

Hypothesis testing

In order to test our model and hypothesis we performed regression analysis for which we used Hayes' (2018) Process macro in SPSS (model 7). Goal conflict was the predictor variable, subjective well-being the outcome variable (one analysis was performed by using life satisfaction as dependent variable, and one where we used depression as dependent variable), and study goal attainment as the mediator. Study goal importance was used as the moderator variable between study goal attainment and subjective well-being.

The results (see Table 2) displayed a significant negative main effect of goal conflict on students' life satisfaction ($b = -.15, p < .01$), supporting hypothesis 1a. In line with hypothesis 1b, we found a significant positive main effect of goal conflict on depression ($b = .11, p < .01$). Interestingly, no significant main effect was found for goal conflict on study goal attainment ($b =$

-.30, $p = .44$). Study goal attainment had a positive main effect on satisfaction with life ($b = .25$, $p < .01$), and a negative main effect on depression ($b = -.20$, $p < .01$). Furthermore, we investigated the indirect effect of goal conflict on life satisfaction and on depression via study goal attainment. Inconsistent with hypothesis 2a, study goal attainment was found to be no significant mediator for the effect of goal conflict on life satisfaction when study importance was high ($index = 0.02$, 95% $CI [-0.03, 0.07]$) and low ($index = -0.01$, 95% $CI [-0.04, 0.03]$). Moreover, study goal attainment did not emerge as a significant mediator for the effect of goal conflict on depression when study importance was high ($index = -0.02$, 95% $CI [-0.05, 0.02]$) and low ($index = 0.00$, 95% $CI [-0.02, 0.03]$), disconfirming hypothesis 2b. We did not find a significant interaction effect between goal attainment and well-being on study goal importance, therefore the data did not support hypothesis 3 (see Table 2). The results indicate that, even if the goal importance is rated high, goal attainment does not predict satisfaction with life or depression.

Table 2

Model Estimation Results for Assessing Moderated Mediation Wherein Study Goal Importance Interact to Influence Psychological Well-being Through Study Goal Attainment

Predictor	Mediator variable model (DV = Study Goal Attainment)				
	β	<i>SE</i>	t(221)	<i>LLCI</i>	<i>ULCI</i>
Constant	4.73	1.35	3.50	2.07	7.39
Goal Conflict	-.30	.39	-.78	-1.06	.46

Study Goal Importance	-.13	.23	-.58	-.59	.32
Goal Conflict x Study Goal Importance	.06	.07	.86	-.07	.18

Dependent variable model
(DV = SWLS)

Predictor	β	<i>SE</i>	<i>t</i> (221)	<i>LLCI</i>	<i>ULCI</i>
Constant	4.02	.34	11.66	3.34	4.70
Goal Conflict	-.15	.06	-2.66	-.26	-.04
Study Goal Attainment	.25	.07	3.70	.12	.39

Conditional indirect effects of the predictor at values of the moderator

	<i>Index</i>	<i>SE</i>	<i>LLCI</i>	<i>ULCI</i>
SWLS if importance low	-.01	.02	-.04	.03
SWLS if importance high	.02	.02	-.03	.07

Dependent variable model
(DV = PHQ9)

Predictor	β	<i>SE</i>	<i>t</i> (221)	<i>LLCI</i>	<i>ULCI</i>
Constant	2.62	.20	13.07	2.22	3.01
Goal Conflict	.11	.03	3.47	.05	.18

Study Goal Attainment	-20	.04	-4.93	-.28	-.12
Conditional indirect effects of the predictor at values of the moderator					
	<i>Index</i>	<i>SE</i>	<i>LLCI</i>	<i>ULCI</i>	
PHQ9 if importance low	.00	.01	-.02	.03	
PHQ9 if importance high	-.02	.02	-.05	.02	

Note. * $p < .05$; ** $< .01$ (two-tailed significance).

Discussion

In the present paper, we investigated the impact of goal conflict on students' subjective well-being by measuring students' life satisfaction and depression levels. Moreover, we intended to test if goal conflict predicts well-being via study goal attainment. In addition, it was explored whether well-being is the function of the interacting effect between study goal attainment and study goal importance. We proposed that conflicting goals do not just hinder someone from being happy, but also make someone feel more depressed. In addition, we posited that by realizing important goals, students will be less depressed and more satisfied with their lives. Through conducting an online questionnaire, we found that students' perceived goal conflict is negatively associated with students' life satisfaction and positively associated with student's perceived depression levels, confirming Hypothesis 1a and 1b.

Based on our findings, by perceiving a high conflict between academic goals and private life goals, students' subjective well-being is affected, in a sense that goal conflict results in an absence of high subjective well-being and in the presence of depressive symptoms. This is in line

with previous literature on goal conflict, where high levels of goal conflict are associated with lower psychological well-being and higher depression levels (Boudreaux & Ozer, 2013; Emmons & King, 1988; Gray et al., 2017; Riedinger & Freund, 2004; Schultheiss et al., 2008). We did not find support for the mediating role of goal attainment between goal conflict and students' life satisfaction (see Hypothesis 2a). Similarly, goal attainment did not mediate the relationship between goal conflict and depression (see Hypothesis 2b). This can have several explanations, one being that the goals we proposed were not necessarily in conflict with the study goal (Boudreaux & Ozer, 2013). Therefore, study goal attainment did not explain the relationship between goal conflict and well-being, when goal importance was rated low, and also not when goal importance was rated high. The findings on goal attainment are contradictory, and our results are inconsistent with previous findings on goal attainment (Emmons, 2003; Gray et al., 2017; Sheldon & Elliot, 1999).

Regarding Hypothesis 3, we did also find no support for the moderating role of goal importance between goal attainment and well-being, implying that goal importance does not significantly strengthen the relationship. This finding was unexpected, and not in line with existing research of goal importance (Sheldon & Elliot, 1999; Tóth et al., 2018; Tòth, 2019). One reason for this divergent finding could be that the students in our sample consisted mostly of first-year students, so they might be confused at the beginning of their studies about how important certain study goals are to them, thus having ambivalent feelings (Kelly et al., 2011). Additionally, they might not yet be aware of how much effort is required to attain such a goal. A possible solution may be to rather include participants who already have a sense of how to

coordinate their efforts to achieve their goals, or how important it is to them to be successful in their studies.

Strengths, Limitations, and Future Directions

The present study adds relevant knowledge for the population of interest, namely university students, and contributes to the literature on goal conflict. In most studies, goal conflict is measured in a very complicated way because there are only quite complex questionnaires available and, therefore, we developed a questionnaire to measure goal conflict based on Kasser & Ryan Aspiration Index (1996). Considering Cronbach's alpha of 0.79, it is reasonable to claim that the goal conflict measure is reliable. Furthermore, we have introduced a quite interesting model taking into account goal attainment as a mediator and goal importance as a moderator. With this study, we filled a gap in the literature on goal conflict.

By conducting an online study, which comes with positives and negatives, the study was cost effective, but still had the potential to yield multiple outcomes and to reach a lot of people all over the world. However, unfortunately, our sample is mostly western, which limits the generalizability. In addition, the cross-sectional study design typically implies low internal validity (Houdek, 2017). Thus, we should be cautious in inferring a causal direction between goal conflict and well-being, because the relationship could also be in the opposite direction. For example, individuals who feel depressed are likely to be more pessimistic about their future and the attainability of their goals, and therefore perceive greater goal conflict (Gray et al., 2017). Future research should address this issue by adopting a longitudinal study design, also because it could be interesting to look at different points in time, since goal conflicts might be persistent and may only affect well-being in the long term (Boudreaux & Ozer, 2013). With a

cross-sectional design, we can only determine differences in life satisfaction and depression levels of students, but it prevents us from determining real changes in individuals' well-being.

Moreover, the way we measured goal attainment could have affected the results, since two items of the study goals asked how much the student had already attained their diploma, and how much the student had already attained to finish the degree. Apparently, these questions forced the student to answer the questions by indicating extreme values ($1 = \textit{not at all attained}$) for the ones that are still enrolled in their bachelors' degree, which could have biased the results and for that reason, Cronbach alpha for the goal attainment measure was found to be relatively low. One solution could be to rather ask how certain a student is about attaining their diploma, or how certain the student is about finishing the degree. Also, the problem could be addressed by only taking into account students, who already finished their bachelor's degree.

In addition, Boudreaux and Ozer (2013) found that the relationship between conflict and goal attainment was different between individuals, highlighting individual differences among students. Thus, it appears that some individuals are simply better at dealing with conflict and thus, have better self-regulatory strategies that may influence the relationship between goal conflict and well-being. The different perception of goal conflict could also be a reason why we did not find an effect between goal conflict and goal attainment. Therefore, the question arises whether perceiving goal conflict is a trait-like characteristic of individuals. Hence, future research should include a measure which can assess the perception of goal conflict and look for other third variables in order to understand the complex relationship between goal conflict, goal attainment, and well-being. Previous research suggests that other variables such as goal

commitment (Brunstein, 1993), self-regulation (Carver & Scheier, 1996), and self-efficacy (Wolf et al., 2018) may also influence this relationship.

As mentioned above, goal attainment and goal importance was assessed using the Aspiration Index questionnaire of Kasser & Ryan (1996), which consists of intrinsic and extrinsic goal domains. Tóth-Bos and colleagues (2019) argue that in order to comprehend the common effect of goal attainment and goal importance on well-being, it is essential to distinguish between intrinsic and extrinsic goals. Admittedly, we did not differentiate between intrinsic and extrinsic goals specifically, which may have influenced our results. The distinction between these goals, particularly the importance of intrinsic goals, may have affected the relationship between goal conflict and well-being, as intrinsic goals are the ones we value most and are therefore critical for well-being. Niemiec et al., (2009) and Tóth-Bos et al., (2018) differentiated between intrinsic and extrinsic goals and found that the match between intrinsic goal importance and goal attainment was positively related to well-being, whereas extrinsic goal importance was neither positively nor negatively related to well-being. In line with existing literature, realizing important intrinsic goals increases subjective well-being (Kasser & Ryan, 1996; Sheldon et al., 2004), in comparison to extrinsic goals.

Conclusion and Practical Implications

The present study supports the assumption that goal conflict is related to lowered subjective well-being and higher depressive symptoms among students. Students who perceived more severe goal conflict between their academic goals and their private life goals reported more depressive symptoms and less life satisfaction. Attaining multiple essential goals simultaneously appears to be a part of everyday life for most people. However, especially students are

confronted with conflicting goals, especially in their first year of studying. Everything around them is new: the people, maybe the city, or even the country. Starting a degree involves a lot of adventure, but at the same time, many things are expected, such as paying rent, being self-sufficient, and succeeding in your studies. Students are forced to learn how to manage their time and organize themselves, so that they still have time for enjoyable things, such as meeting friends or doing sports. Unfortunately, not everyone can handle the expectations of themselves and others, and cope with the enormous stress surrounding the exams. This might put students at an increased risk of suffering from burnout. Therefore, it is especially important for universities and other educational institutions to understand how students can achieve their goals despite increasing demands and limited resources. It can be beneficial for them to formulate realistic goals for several areas of life that will give them a concrete direction in order to still enjoy life, despite handling their responsibilities. Furthermore, universities should offer and expand counselling services or teach the students how to prevent burnout. This research is therefore highly relevant, as it highlights the adverse impact on life satisfaction on one hand, and, on the other hand, the augmented levels of depression. This could increase awareness on how to improve the educational system to put less pressure on students.

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Appendix A**Measures*****Goal Conflict***

	1 (not at all conflicting)	2	3	4	5	6	7 (very much conflicting)
To live healthy.							
To be good looking.							
To have loving relationships.							
To have a lot of money.							
To help others in need.							
To know who I am.							

Appendix B***Goal Attainment***

	How much have you already attained this goal?						
	1 (not at all attained)	2	3	4	5	6	7 (very much attained)
To have good grades.							
To excel in my studies.							
To obtain my degree.							
To study hard.							
To finish my degree.							

Appendix C***Goal Importance***

	How important is this goal to you?						
	1 (not at all important)	2	3	4	5	6	7 (very important)
To have good grades.							
To excel in my studies.							
To obtain my degree.							
To study hard.							
To finish my degree.							