# The Impact of Goal Conflict on Student Well-Being: Detangling the Role of Goal Attainment and Goal Importance

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#### Abstract

This study investigated the impact of study goal conflict (GC) on students' overall well-being (WB), operationalised by measuring their positive affect (PA) and negative affect (NA). The aim was to explore whether GC affected both negative valence as well as positive valence. Additionally, the role of study goal attainment as a mediator between GC and WB, and the role of study goal importance as a moderator between study goal attainment and WB was explored. We expected higher goal conflict to be related to lowered goal attainment, which would subsequently be associated with lower WB. Additionally, we posited that when study goal importance was high, the relationship between goal attainment and WB would be stronger. Participants (N=226) reported their levels of GC, goal attainment, goal importance, PA, and NA. All assessments were conducted online. A moderated mediation regression analysis was conducted to test the hypotheses. Results indicated that GC was indeed positively related to NA, but did not have a significant association with PA. Neither goal attainment nor goal importance emerged as a statistically significant mediator and moderator, respectively. A possible limitation of the study is that PA and NA are momentary affective states and perhaps did not measure more lasting cognitive appraisals of subjective well-being. It was concluded that GC only impacted one half of WB - the negative aspect. Practical implications and future research directions regarding the findings were discussed.

*Keywords:* Goals; goal conflict; well-being; distress; PANAS; goal importance; goal attainment.

# The Impact of Goal Conflict on Student Well-Being: Detangling the Role of Goal Attainment and Goal Importance

For time immemorial, members of the human race have been investigating the key to a happy, healthy, and purposeful life. From early philosophers like Aristotle, to psychoanalysts like Freud, to the currently prevailing pseudo-scientific, clickbait authors, it is evident that we are constantly concerned with finding and/or providing the answer to this ubiquitous question. While we have failed to reach a consensus, it should be noted that Albert Einstein, one of the most distinguished and accomplished minds in history, famously once said, "If you want to live a happy life, tie it to a goal...". This idea, that goals play a significant role in shaping the quality of our lives, is deep-rooted in our society. Its relevance is reflected through the amount of research and interest generated by the scientific community, which investigates the impact of meaningful personal goals on people's lives. Research suggests that the pursuit of goals provide a structured, meaningful, and psychologically fulfilling life, and shape individuals' identities and activities (Diener, 1984; Gray et al., 2017; Toth-Bos et al., 2019). Successful goal pursuit has been associated with variables that point to psychological well-being, such as higher life satisfaction, higher levels of positive affect, and greater reports of subjective well-being (Boudreaux & Ozer, 2013; Diener et al., 1984, 1999; Koestner et al., 2002). Therefore, it could be argued that goal pursuit is a contributing factor to a happy and meaningful life. However, problems arise when an individual holds multiple important goals at once, which happen to be incompatible with each other (Austin & Vancouver, 1996).

#### **Goal Conflict**

Goal conflict (GC) is a term that defines the conflict that arises when one valued goal impedes the attainment of another valued goal (Emmons et al., 1993). This phenomenon may occur when two competing goals are incompatible in nature (Segerstrom & Nes, 2006). For

instance, the goal "save money" and the goal "join friends regularly for dinner/drinks" are inherently conflicting, and the pursuit of one goal hinders the achievement of the other. Goal conflict may also arise when two goals compete for the same resources (Gray et al., 2017). The goal "spend more time studying" and the goal "spend more time with friends" both compete for an individual's time and thus are hard to achieve simultaneously. This study will investigate the impact of academically related goal conflict on the overall subjective well-being of students. Students place a lot of importance on their education, as it is one of their main priorities, so it seems natural that most of the goal conflict they sustain is between their academic goals and their goals from other life domains (Boudreaux & Ozer, 2013).

## Psychological Distress

While the successful pursuit of goals has been linked with psychological well-being, research suggests goal conflict is associated with psychological distress (DeYoung, 2015; Diener, 1985; McNaughton & Gray, 2000). Individuals who experience goal conflict tend to display higher levels of negative affect, anxiety, depression, and somatisation than counterparts who do not experience goal conflict (Berrios et al., 2017; Boudreaux & Ozer, 2013; Renner & Leibetseder, 2000). Increased goal conflict inhibits successful goal progress, reduces goal pursuit, and increases goal rumination in individuals (Boudreaux & Ozer, 2013; Gray et al., 2017; Kleiman & Hassin, 2011). The existence of goal conflict impairs goal attainment and psychological well-being, and brings about psychological distress instead. Those who experience goal conflict tend to devote more time thinking about their goals, and less time acting upon said incompatible goals, and this is known as behavioural inhibition (Emmons & King, 1988). Behavioural inhibition, that accompanies goal conflict, hinders goal progress and impedes the successful attainment of goals which then contributes to psychological distress. If goal conflict persists over an elongated period of time, one's ability

to achieve goals is hampered, which in turn affects their well-being and quality of life, thus, the issue has the potential to be cyclic (Kher, 2003).

The presence of heightened goal conflict seems to have adverse effects on those who experience it. The positive relationship between goal conflict and psychological distress has also been observed in clinical populations. Fiexas et al. (2014) found that patients with depression faced greater goal conflict than the healthy group comparison. It should be noted that the levels of conflict reported by these depressed participants were positively correlated with the severity of their symptoms. Similarly, a study involving dysthymic patients found that the association between goal conflict and symptoms of depression was greater than their healthy counterparts (Montesano et al., 2014). This suggests that the relationship between goal conflict and psychological distress may be greater in clinical populations.

#### Psychological Well-Being

As stated above, most research on the topic concludes that goal conflict is related to psychological distress. However, a point of contention remains regarding the relationship between goal conflict and psychological well-being. Some argue that while increased goal conflict is associated with higher distress, it also results in lowered well-being (Berrios et al., 2017; Michalak et al., 2011; Sheldon et al., 2015). According to Emmons (1996), impaired well-being is a consequence of the failure to resolve goal conflict. This would mean that goal conflict not only increases negative emotions and symptoms in people but also decreases their positive ones. Riediger & Freund (2004) support this claim through their finding that people who experience high goal conflict tend to experience higher levels of negative affect and lower levels of positive affect. Conversely, it seems plausible that a lack of goal conflict enhances well-being and decreases distress. So far, it appears as though goal conflict has a positive relationship with psychological ill-being and a negative relationship with subjective

well-being. However, not all research supports this claim. Boudreaux and Ozer (2013) found that goal conflict was only associated with psychological distress and did not have a significant association with well-being. This implies that while increased goal conflict may exacerbate negative emotions and symptoms in individuals, it does not impair or reduce their positive emotions. Sheldon and Elliot (1999) support this view with their claim that there is an inherent association between goal conflict and psychological distress, while positive psychological outcomes are related to successfully achieving goals.

These contrasting studies cast doubt on whether or not psychological well-being is a function of goal conflict. Kelly et al., (2011) failed to find a significant association between psychological well-being and goal conflict. So while an individual may face greater negative consequences due to goal conflict, it is some consolation that their positive valence may not be impacted/diminished. In a similar vein, Emmons and King (1988) did not find an association between goal conflict and positive affect, but found one between goal conflict and negative affect. Gray et al. (2017) claim that although goal conflict may be associated with lowered psychological well-being, the relationship between goal conflict and psychological distress is of particular significance. Does this mean that the positive relationship between goal conflict and distress is stronger than any negative (or non-existent) relationship between GC and well-being?

Furthermore, other studies have found some puzzling results. Surprisingly, one found that goal conflict was not related to negative affect, but was significantly correlated with positive affect (Freitas et al., 2009). They believed this was due to the high action construal of goals. This meant that when participants evaluated their goals and the conflict in an abstract manner and learned to regard all their activities as congruent with one another, they would experience enhanced well-being. In a simpler sense, they would learn to regard competing

goals as complementary. Klug and Maier's (2015) study posits that goal conflict is more strongly associated with psychological well-being than psychological distress. This suggests there may be individual differences in the perception of and reaction to goal conflict. Despite the conflicting evidence in research, the majority of previous theoretical findings state that goal conflict should be positively associated with psychological distress, and negatively related to well-being (Gray et al., 2017; Michalak et al., 2011). For the current study, we will investigate whether students who face higher goal conflict - between study goals and goals from other life domains - also experience higher negative affect (distress) and lowered positive affect (well-being).

#### Students

Students, in particular, are a demographic who are highly susceptible to stress as they have to manage several domains of their lives at once; namely, personal, social, and academic (Deckro et al., 2002). It has been noted that a substantial amount of the distress they face is due to relationship problems, exams, financial instabilities, and uncertainties regarding their careers (Frazier & Schauben, 1994). It can be argued that this distress is by virtue of goals from several competing life domains. Reports indicate startling rates of depression, anxiety, psychological distress (Amir Hamzah et al., 2019; Broglia et al. 2018; Sax, 1997), and behaviours that are detrimental to health - such as excessive smoking and binge drinking - among students (Deckro et al., 2002). They are 53% more likely than non-students, to develop cardiovascular diseases, face future employment issues, have relationship difficulties, and be prone to substance abuse issues (Amir Hamzah et al., 2019; Eisenberg et al., 2007). They are also likely to have higher suicide ideations, feel more hopeless, and feel more alienated than normal populations (Dixon et al., 1992). It is troublesome but true, to think that most students are at risk for grave psychological, social, and physical risk factors just because they pursue

academics. Thus, it is imperative to investigate whether goal conflict contributes to the distress experienced by students that leads to such disastrous consequences.

#### **Goal Attainment and Goal Importance**

A variable of interest - that has been observed to contribute to well-being - is goal attainment. When goals are congruent, and the attainment of such goals is facilitated, an individual should experience enhanced psychological well-being and increased happiness (Boudreaux & Ozer, 2013; Brunstein, 1993; Carver & Scheier, 1990; Tóth et al., 2018; Wiese & Freund, 2005). Toth and colleagues (2018) argue that attaining meaningful goals raises beliefs of self-efficacy, which in turn increases well-being in individuals and protects against depressive symptoms. Understandably, obtaining a desired outcome increases feelings of happiness and satisfaction in people. Along with increasing well-being, goal attainment also increases goal progress in other life domains, which facilitates a positive cyclic relationship between these variables and further ensures positive outcomes (Toth-Bos, 2019). This implies that goal conflict alone may not impact well-being, but that goal attainment possibly plays an important mediating role between the two variables. As mentioned previously, Sheldon and Elliot (1999) found an inherent relationship between goal attainment and well-being, and it is important to investigate its role in relation to goal conflict. In the current study, we argue that the lower the conflict is between students' study goals and their other life goals, the higher is the attainment of their study goals, which subsequently facilitates higher levels of psychological well-being. We also expect those who experience high levels of goal conflict, to have lower study-goal attainment, and thus have higher psychological distress than their counterparts.

In particular, it is the attainment of personally important goals that increases well-being (Diener, 1984; Emmons, 1986; Tóth et al., 2018). Goal importance has been noted

as an important strategy to overcome goal conflict. Here, an individual who experiences goal conflict cognitively appraises the competing goals and focuses their resources on the more important goal to reduce the conflict (Li et al., 2001). This focusing on goals leads to higher facilitation in goals, which then leads to enhanced goal pursuit and attainment (Riediger & Freund, 2006; Sim & Lui, 2020). One goal may trump over the others and take precedence in time, effort, attention, energy, and value dedicated to it. This allows individuals to reduce the conflict and then successfully attain their goals. Palys and Little (1983) found that individuals who reported higher subjective well-being also reported that the goals they held were particularly important to them. Thus, we propose that goal importance plays a moderating role in the relationship between goal attainment and well-being. In our study, we posit that when study goal importance is high, the relationship between study goal attainment and well-being in students will be stronger. We aim to investigate the combined effects of goal attainment and goal importance on the relationship between goal conflict and well-being (Figure 1).

### **The Present Study**

Given the uncertainty surrounding previous research, the authors of the current study aim to bring some clarity by further investigating the relationship between study goal conflict and the overall psychological well-being of students; this encompasses subjective well-being as well as psychological distress. It is important to note that here on forth, psychological well-being will be referred to as positive affect (PA) and psychological distress will be referred to as negative affect (NA). We will investigate how study goal conflict (IV) affects students' overall psychological well-being (DV) in a cross-sectional study design.

Additionally, we will investigate the mediating role of goal attainment and the moderating role of goal importance on the relationship. Since it is believed that goal conflict obstructs

goal-oriented behaviour and impedes goal attainment, we expect higher levels of goal conflict to be associated with lower subjective well-being and higher psychological distress.

*Hypothesis 1.* We expect a positive relationship between students' goal conflict and negative affect (psychological distress). That is, higher levels of goal conflict will be related to higher negative affect, and vice versa.

*Hypothesis* 2. Due to the inconsistencies in previous findings regarding the relationship between goal conflict and psychological well-being, we have conflicting hypotheses for Hypothesis 2.

**Hypothesis 2a**: We expect a negative relationship between students' goal conflict and positive affect (well-being). That is, those who experience high goal conflict will report lowered positive affect and vice versa.

**Hypothesis 2b**: We expect goal conflict to not have an impact on students' psychological well-being. This is, goal conflict will not have a significant relationship with positive affect.

*Hypothesis 3*. The relationship between goal conflict and well-being is mediated by study goal attainment.

**Hypothesis 3a**: Goal attainment will mediate the negative relationship between goal conflict and positive affect. That is, high levels of goal conflict will be related to lowered goal attainment, which will subsequently be associated with lowered positive affect.

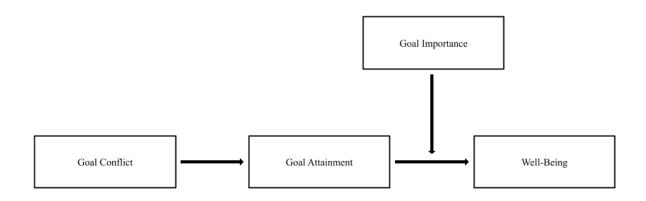
**Hypothesis 3b**: Goal attainment will mediate the positive relationship between goal conflict and negative affect. That is, high levels of goal conflict will be related to lowered goal attainment, which will subsequently be associated with increased negative affect.

*Hypothesis 4*: Study goal importance plays a moderating role in the relationship between study goal attainment and well-being. That is, we expect the association between study goal attainment and well-being to be stronger, the more important the study goal is.

**Hypothesis 4a**: The positive relationship between goal attainment and positive affect will be stronger to the extent the study goal is deemed important.

**Hypothesis 4b**: The negative relationship between goal attainment and negative affect will be stronger to the extent the study goal is deemed important.

Figure 1



#### Method

### **Ethical Statement**

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 line 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 convenience sampling. Twenty-three participants were excluded from the research for not meeting the required criteria; 17 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 analysed 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= 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), vocational school (n= 1), bachelor's degree (n= 36), graduate or professional degree (n= 4), to primary school (n= 1). The majority of the students in our sample hailed 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 the participants who were recruited through convenience sampling.

#### Procedure

Respondents were recruited through targeted advertisements via the research panel website (SONA) of the University of Groningen. SONA respondents comprise mostly first-year Psychology students who participate in research for ECTS. In addition, the researchers employed convenience sampling in order to include a wider population of students. 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 assessments were completed online.

Participants first provided their demographic information: a) gender; b) age; c) highest level of education; d) nationality; e) employment status. They then completed the PANAS (Watson et al., 1988), which was used to measure and operationally define the dependent variable: overall psychological well-being. Subsequently, study-goal importance, study-goal attainment, and goal conflict were assessed through the undermentioned questionnaires that were designed for the purpose of this study. Additionally, participants provided 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. Participants who failed these checks and failed to complete the entire questionnaire were excluded from the statistical analysis.

#### Measures

#### Goal conflict

To measure goal conflict, the researchers of this study created a questionnaire to satisfy that requirement. This questionnaire drew inspiration from Kasser and Ryan's (1996) Aspiration Index questionnaire, which was developed to measure people's aspirations (goals) and categorise them into intrinsic aspirations and extrinsic aspirations through the use of seven domains. Our goal conflict questionnaire consisted of six items that referred to other life goals (not related to education) that one may deem personally important (Appendix A). The item 'being famous' was excluded from 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 categorised as extrinsic goals (being good looking, having a lot of money) and four were categorised 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 reliability of this scale was .79.

#### Goal importance

To measure the moderating effects of study-goal importance, the authors created yet another questionnaire inspired by Kasser and Ryan (1996; Appendix B). 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. Participants indicated 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 Cronbach's Alpha was .76.

#### Goal attainment

Similarly, to measure the mediating effects of goal attainment, 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 (Appendix C). 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)*. The reliability of this scale was .64.

## Dependent variables

Positive affect subscale (PAS) from PANAS. In order to measure positive affect (PA) within participants, the PAS subscale from the Positive and Negative Affect Scale (PANAS; Watson et al., 1988) was utilised. The division of the PAS and the NAS subscales were in line with Watson et al.'s (1988) distinction of the PANAS scale. The subscale consisted of 10 items that were markers of feelings and/or emotions that relate to PA (attentive, interested, excited, proud, etc.). Participants indicated the extent to which they felt those

feelings/emotions in the past two weeks on a five-point Likert scale, ranging from *1 (very slightly or not at all)* to *5 (extremely)*. A higher score indicates high levels of PA within individuals. The Cronbach's Alpha for the PA subscale was .82.

Negative affect subscale (NAS) from PANAS. In a similar vein, the NAS subscale from the PANAS (Watson et al., 1988) was used to measure negative affect (NA) within participants. The subscale consists of 10 items that mark feelings related to NA (distressed, hostile, scared, ashamed, etc.). Participants indicated to what extent they felt those feelings/emotions in the past two weeks on a five-point Likert scale, ranging from *1 (very slightly or not at all)* to *5 (extremely)*. A high score on the subscale indicated high levels of NA within participants. The Cronbach's Alpha was .86.

#### **Results**

#### **Preliminary Analysis:**

The descriptive statistics (mean and standard deviation) and intercorrelations of the study variables are included in Table 1. We found statistically significant correlations between goal conflict and goal importance (r= .15, p= .03), and between goal conflict and NAS (r= .18, p= .007). Goal attainment was significantly correlated with PAS (r= .27, p< .001) and NAS (r= -.14, p= .05). Goal importance and NAS had a significant association (r= .31, p< .001). PAS and NAS were also significantly correlated (r= -.26, p< .001).

**Table 1**Descriptive Statistics, Chronbach's Alphas, and Intercorrelations of Variables

Variables	Mean	SD	1.	2.	3.	4.
1. Goal Conflict	3.49	1.32				
2. Goal Attainment	4.06	1.10	0.04			
3. Goal Importance	5.90	0.84	0.15*	0.04		
4. PAS	3.26	0.64	-0.06	0.27**	0.08	
5. NAS	2.67	0.76	0.18**	-0.14*	0.31**	-0.26**

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

## **Hypotheses Testing:**

To test the proposed moderated mediating effects of study-goal importance and study goal attainment on relationship between goal conflict and well-being, the authors conducted two regression analyses (see Table 2) using Hayes' Process macro (model 7) in SPSS.

Psychological well-being was specified as the outcome variable; the first analysis defined PAS and the DV, and the second defined NAS as the DV. Both analyses defined goal conflict as the independent variable. Study-goal importance was specified as the moderator, and study-goal attainment was specified as the mediator in the relationship between goal conflict and psychological well-being.

*Hypothesis 1- Goal conflict and NAS*. We expected participants with high levels of goal conflict to report greater psychological distress, i.e. high levels of negative affect. To test the relationship between goal conflict and negative affect, the authors inspected the regression analysis. The moderated mediation analysis indicated a positive, significant main effect between goal conflict and NAS (b= .11, p= .005). The results confirmed our expectations regarding the relationship: that is, people who experienced high levels of goal conflict reported high levels of negative affect.

*Hypothesis 2- Goal conflict and PAS.* Due to the inconsistencies in previous findings, the authors had differing expectations for the relationship between goal conflict and psychological well-being.

**Hypothesis 2a**: We expected a significant, negative relationship between students' goal conflict and positive affect. The moderated mediation analysis indicated a statistically non-significant, negative relationship between goal conflict and positive affect (b= -.03, p= .31). The results did not support Hypothesis 2a. While the relationship is slightly negative, the relationship between goal conflict and positive affect is not a significant one.

**Hypothesis 2b**: We expected goal conflict to not have an impact on students' psychological well-being. The moderated mediation analysis indicated a statistically non-significant, negative relationship between goal conflict and positive affect (b= -.03, p= .31). While the relationship between goal conflict and positive affect is slightly negative, it is not a statistically significant relationship. Goal conflict does not appear to have an impact on positive affect. The results confirmed our expectations.

*Hypothesis 3- Goal attainment mediation*. We hypothesised that study-goal attainment plays a mediating role in the relationship between goal conflict and well-being.

**Hypothesis 3a**: We expected goal attainment to mediate the negative relationship between goal conflict and positive affect. The results indicated that goal attainment did not mediate the relationship between goal conflict and PAS at high levels of goal importance [index= .013, 95% CI (-.02, .04)] or low levels of goal importance [index= -.003, 95% CI (-.03, .02)]. The results disconfirmed our hypothesis.

Table 2Model Estimation Results for Assessing Moderated Mediation Wherein Goal Conflict andStudy Goal Importance Interact to Influence Well-Being Through Study Goal Attainment

	Mediator Variable Model (DV= Study Goal Attainment)						
Predictor	β	SE	t(221)	LLCI	ULCI		
Constant	4.73	1.35	3.50**	2.07	7.39		
Goal Conflict	-0.30	0.39	-0.78	-1.06	0.46		
Study Goal Imp.	-0.13	0.23	-0.58	-0.59	0.32		
Goal Conflict x Study Goal Imp.	0.06	0.07	0.86	-0.07	0.18		
	Dependent Variable Model (DV= PAS)						
Predictor	β	SE	t(221)	LLCI	ULCI		
Constant	2.72	0.19	14.12**	2.34	3.10		
Goal Conflict	-0.03	0.03	-1.01	-0.10	0.03		
Goal Attainment	0.16	0.04	4.19**	0.09	0.24		
	Conditional Effect of the Predictor at Values of the Moderator						
-	Index	SE		LLCI	ULCI		
PAS at Low Study Goal Imp.	-0.003	0.01		-0.03	0.02		
PAS at High Study Goal Imp.	0.013	0.02		-0.02	0.04		
	Dependent Variable Model (DV= NAS)						
Predictor	β	SE	t(221)	LLCI	ULCI		
Constant	2.69	0.23	11.70**	2.24	3.14		
Goal Conflict	0.11	0.04	2.84**	0.03	0.18		
Goal Attainment	-0.10	0.05	-2.17*	-0.19	-0.01		
	Conditional Effect of the Predictor at Values of the Moderator						
-	Index	SE		LLCI	ULCI		
NAS at Low Study Goal Imp.	0.002	0.008		-0.01	0.02		
NAS at High Study Goal Imp.	-0.008	0.01		-0.03	0.01		

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

**Hypothesis 3b**: We expected goal attainment to mediate the positive relationship between goal conflict and negative affect. The results indicated that goal attainment did not mediate the relationship between goal conflict and NAS at high levels of goal importance [index= -.008, 95% CI (-.03, .01)] or low levels of goal importance [index= .002, 95% CI (-.01, .02)]. The results disconfirmed our hypothesis.

*Hypothesis 4- Goal importance moderation*: We expected the association between study-goal attainment and well-being to be stronger depending on the moderator: importance of the study goal.

**Hypothesis 4a**: The results revealed a statistically non-significant interaction effect of study-goal importance on the relationship between study goal-attainment and positive affect (b=.06, p=.39). The results were not consistent with our hypothesis.

**Hypothesis 4b**: We did not find a statistically significant interaction effect of study-goal importance on the relationship between study goal-attainment and positive affect (b=.06, p=.39). The results were not consistent with our hypothesis.

#### **Discussion**

Our study aimed to investigate the impact of academically related goal conflict on the well-being of students. Overall well-being was operationalised by measuring the levels of positive affect (well-being) and negative affect (distress) in the participants. The objective was to explore whether goal conflict had consequences on both negative valence and positive valence. In addition, we investigated whether goal attainment mediated the relationship between goal conflict and well-being, and if goal importance was a significant moderating variable. To examine the variables and the interactions between them, we utilised Hayes' Process macro to conduct a moderated mediation regression analysis.

We first examined the relationship between goal conflict and negative affect. We expected a positive relationship between the variables, and the results were consistent with our beliefs. We found that students who experienced high levels of goal conflict also reported high levels of negative affect. This implies that psychological distress is indeed exacerbated by the presence of goal conflict. Those who face greater goal conflict are more likely to feel guilty, upset, hostile, irritable, nervous, etc. (PANAS; Watson et al., 1988). Conversely, this also meant that students who reported low levels of goal conflict, between study goals and goals from other life domains, also experienced lowered negative affect. Not only was this finding in line with our expectations, it also aligned with the majority of previous literature on the topic (Carver & Scheier, 1982; DeYoung, 2015; Diener, 1984; McNaughton & Gray, 2000). While our findings and existing literature link goal conflict and distress, it would be remiss not to mention the possible reversible relationship between the two. As mentioned earlier (Fiexas et al., 2014; Montesano et al., 2014), goal conflict has been found to be stronger in clinical populations. This could mean that goal conflict is possibly a function of poor mental health, and those who already suffer from distress then consequently sustain goal conflict. People who experience higher distress possibly do not see their prospective goals as positive, and thus report greater goal conflict (Boudreaux & Ozer, 2013). Future research is required to establish a causal relationship between the two variables. As mentioned in the introduction (Freitas et al., 2009), while there may be individual differences in the perception of and reaction to goal conflict, our study concludes that goal conflict is mainly positively associated with NA.

For well-being, we had competing expectations regarding its relationship with goal conflict due to inconsistencies in previous findings; one hypothesis was confirmed. Results contradicted the notion that heightened goal conflict would result in lowered well-being

(positive affect; Emmons, 1996; Riediger & Freund, 2004). Instead, it appears as though well-being is not a function of goal conflict, and failure to resolve conflict does not appear to have an impact on students' positive affect. This finding implies that while one could be experiencing heightened (or a lack of) goal conflict, their feelings of excitement, enthusiasm, determination (PANAS; Watson et al., 1988) will not be affected/impaired. Thus, it appears as though well-being is independent of goal conflict. A possible explanation is that we did not do not include goals that would lead to a student feeling positive. Tóth-Bos and colleagues (2019) argue that not all goals make people happy, and so it is possible that the conflict including them also would not impact positive affect. Nevertheless, we conclude that while a lack of goal conflict spares one from increased negative valence, it does not contribute to increases in positive valence.

Goal attainment was expected to mediate the relationship between goal conflict and well-being, and the results disconfirmed the hypothesis. The attainment of personally important study goals did not appear related to goal conflict and well being. Goal attainment did not appear to have an influence on the positive relationship between goal conflict and NAS or the negative relationship between goal conflict and PAS. This finding conflicts with previous literature (Boudreaux & Ozer, 2013; Brunstein, 1993; Carver & Scheier, 1990; Wiese & Freund, 2005). A possible reason for our non-significant results may be because the authors did not differentiate between intrinsic and extrinsic goals. Tóth and colleagues (2018) argue that enhanced well-being occurs only when an individual attains goals that are intrinsic in nature. Conversely, extrinsic goals have been associated with decreased well-being. While the authors created questionnaires inspired by Kasser and Ryan's (1996) that listed goals from both domains, we did not utilise or study the division of goals. So it is possible that, in subsequent research, studying well-being in terms of this distinction would provide us with a

better understanding of the relationship. Additionally, it is entirely possible that not all goals relate to an individuals' well-being/happiness (Emmons, 1986). Perhaps the goals we listed for students did not accurately reflect their interests nor did they conflict with their study goals. Which is possibly why the goal conflict did not relate to goal attainment, which subsequently was not related to well-being/distress. Future research should take into account the distinction between intrinsic and extrinsic goals, along with studying goals that students themselves state would bring them joy/satisfaction and that they felt were conflicting for them.

It was posited that when goals were deemed personally important to a student, the relationship between goal attainment would be stronger. The results were not in line with our expectations and previous findings (Diener, 1984; Emmons, 1986; Tóth et al., 2018). Riediger and Freund (2006) provide an explanation for a lack of significant interaction between the variables. They claimed that simply deeming a goal as important would not ensure increased goal attainment; goal directed behaviours are not given simply because the goal is important. People may fail to act on and towards the desired outcome of the goals despite its importance. This would explain the lack of interaction of goal importance on the relationship between goal attainment and well-being. Another significant explanation is that goal prioritisation/importance is a strategy to overcome goal conflict that has not been observed in young people. The studies mentioned in the introduction (Li et al., 2001; Riediger & Freund, 2006) all mostly took age into account as a variable of interest and found that it was older individuals who used goal importance as a compensatory strategy to overcome resource deficits. It is possible that since young people do not face the same cognitive declines as older people, this is not a strategy that they employ to deal with goal conflict. Our sample mostly consisted of young people so this serves as a possible explanation. Lastly, another possible reason we did not find a significant moderating effect of goal importance is because of the

enjoyability and difficulty of the goals held by people. Palys and Little (1983) argued that goals had to be enjoyable and less difficult in order to enhance well-being. It is possible that study goals are neither enjoyable nor easy, which may be why we did not observe a significant relationship between the variables.

## **Strengths and Limitations**

A strength of the current study is that multiple outcome variables (PA and NA) were used to provide an understanding of overall well-being. This allowed for a comprehensive understanding of participants' psychological states, and is more informational than simply looking at either distress or well-being. Additionally, since goal conflict is a variable that can not be manipulated by researchers for ethical and practical reasons, our assessment of the phenomenon is appropriate. Our results contribute to a growing body of literature that will help us better understand goal conflict. However, there are a few notable shortcomings in our research.

First, our sample consisted mostly of young, educated, middle class students from western countries. The sample is not very diverse and runs the risk of being too homogeneous, which possibly affects the generalisability of our findings to a wider population. Additionally, we utilised the PAS and NAS to operationalise well-being. These simply measure fleeting, momentary affective states of participants and may not measure more lasting reflections of subjective well-being. An alternative would be to use PHQ-9 (Kroenke et al., 2001) and the SWLS (Diener et al., 1985) as they are more solid, cognitive appraisals of well-being (Tóth et al., 2018). Lastly, since the study did not have a longitudinal design, we were unable to observe the patterns and effects of GC on well-being over time.

#### Conclusion

While we may not yet have found the key to a happy, meaningful, and fulfilling life, we can provide some insight to its relation with goal conflict. This study shows that goal conflict does indeed affect a part of well-being - the negative aspect; increased goal conflict is associated with increased negative valence. Goal conflict does not appear to have an effect on positive psychological outcomes. This is a reassuring finding because it implies that while goal conflict may increase feelings of negativity in sufferers, it does not impair their positive feelings; the consequences are not twofold. The student population are exposed to multiple responsibilities from several domains once they undertake an academic path. They are required to manage multiple tasks all by themselves for the very first time, and this may understandably pose significant challenges for them, some in the form of conflicting goals. Goal conflict is an occurrence that will undoubtedly continue to persist in an extensive manner due to its nature; people will always have goals and there will be many times where they sustain a conflict between them. Since we have observed that heightened goal conflict is associated with exacerbated negative valence, educational institutions and scientist-practitioners have an obligation to aid students' current predicament. To start with, clinicians should research and develop techniques to counteract goal conflict and its consequences in order to alleviate the negative outcomes. This includes gaining a better understanding of the phenomenon, as well as generating behavioural techniques that prevent and/or alleviate the negative outcomes once an individual does experience goal conflict. Lastly, educational institutions should reconsider their systems that put such excessive amounts of strain on their students and put forward support systems to deal with the adverse effects experienced.

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# Appendix A

# **Goal Conflict Questionnaire**

	1 (not at all conflic ting)	2	3	4	5	6	7 (very much conflic ting)
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 Importance Questionnaire**

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

# Appendix C

## **Goal Attainment Questionnaire**

	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.								