

**Exploring the Relationship between Hedonic and Eudaimonic Behaviour and
Momentary Affect in University Students using Experience Sampling**

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Abstract

Background: Mental health issues are a common problem among university students. However, to fully understand mental health, we should view as a two-factor model consisting of two dimensions, one to determine the presence or absence of mental illness and one to determine the levels of mental well-being ranging from languishing to flourishing. Hedonia and eudaimonia are two well-studied concepts, but there is an ongoing debate about how they relate to and influence flourishing. The present study investigated the frequencies with which university students engage in hedonic and eudaimonic behaviours and how those effect their momentary affect. *Methods:* Using the Experience Sampling Method, 18 university students, consisting of four flourishers, with a mean age of 22.4, were investigated. For seven days, three times per day, the participants filled out questionnaires about the last activity they engaged in and their levels of momentary affect. Frequency tables, contingency tables, and χ^2 -tests were used to analyse the frequency with which flourishers and non-flourishers engaged in different types of activities. Linear Mixed Models were used to explore the relationship between the different activity types and momentary affect. *Results:* Flourishing university students engaged more often in simultaneously hedonic and eudaimonic and in solely eudaimonic activities than non-flourishing students. Simultaneously hedonic and eudaimonic activities had the greatest impact on momentary affect, leading to the highest scores on positive momentary affect and the lowest scores on negative momentary affect. *Conclusion:* The current study offers insight into the behaviours that university students engage in and how they influence their well-being. Although the findings have to be viewed critically due to the small sample size, they emphasise the positive impact of simultaneously hedonic and eudaimonic activities and the importance of incorporating those. Future research must consider the possibility that behaviours can be hedonic and eudaimonic at the same time or neither one nor the other.

Introduction

The mental health of university students is a highly relevant topic for public health (Sheldon et al., 2021). In a study reviewing the World Mental Health Surveys of the WHO, Auerbach et al. (2016) found one fifth (20.3%) of university students to qualify for a diagnosis of a psychopathological disorder, including depression, anxiety and substance use disorders. The sample used for this study was comprised of university students from 21 different countries aged 18-22. These findings of high prevalence rates were confirmed by Sheldon et al. (2021), who systematically reviewed and conducted a meta-analysis on data from North America, Europe, Asia, and Australia, on the prevalence and risk factors for mental health issues in university students. Notably, the prevalence of symptoms of depression and anxiety was found to be higher among university students compared to people of the general public who are not studying (Ibrahim et al., 2013). Especially considering the COVID-19 pandemic, existing evidence proposes trends of increasing rates of depressive symptoms and symptoms of anxiety in university students (Li et al., 2021). Conclusively, mental health issues among university students, including symptoms of depression and anxiety, are a common problem.

To fully understand mental health, we also need to look at the concept of mental well-being. The two concepts of mental illness and mental well-being can be seen as related, yet distinct from each other (Keyes, 2007). While there is evidence for reductions in symptoms of mental illness correlating with improvements of mental health, this relationship was found to be modest. On the other hand, research suggests neither the lack of mental illness to imply the presence of mental well-being, nor the other way around. Therefore, according to Keyes (2007), mental health must be understood as a two-factor model consisting of two dimensions, one to determine the presence or absence of mental illness and one to determine the levels of mental well-being ranging from languishing to flourishing.

Flourishing, as conceptualised by Keyes (2002), is a multi-dimensional concept comprised of emotional, social, and psychological well-being. Hedonic well-being equals the concept of emotional well-being (Westerhof & Keyes, 2010) and includes experiencing feelings of happiness and a general satisfaction and interest in life (Keyes, 2007). Eudaimonic well-being, on the other hand, includes both psychological well-being, which is the “subjective evaluation of optimal individual functioning”, and social well-being, “the subjective evaluation of optimal functioning for a community” (Westerhof & Keyes, 2010). According to Keyes, lower scores on measures of hedonic and eudaimonic well-being indicate languishing, while individuals that show higher levels are diagnosed as flourishing.

However, while there is a general consensus on the definition of hedonia, the idea of eudaimonia is still up for debate and requires greater explanation (e.g., Sheldon, 2018; Huta & Waterman, 2014). As the first one to conceptualise eudaimonia, Aristotle saw it as the highest human good and the best within people, not as a mindset or a result of acts, but as these activities themselves (Huta & Waterman, 2014). Eudaimonia thus indicates a virtue-driven life that emphasises purpose, authenticity, growth, and excellence.

According to Sheldon (2018), prior studies investigating the relationship between hedonia, eudaimonia and well-being were mistaken in neglecting the initial definition of eudaimonia by Aristotle and conceptualised it as *a state of being* rather than a pattern of activities and behaviour. As a result, and in line with Aristotles definition, Sheldon (2018) developed his Eudaimonic Activity Model (EAM), which aims to explain the factors that help people flourish. The EAM suggests that our behaviour has an immense impact on our overall mental health, thereby distinguishing between the simple pursuit of pleasure through hedonic behaviours and the indirect impact on well-being through eudaimonic behaviours. The model proposes eudaimonic activities to lead to satisfying experiences, which in turn improve well-being and reinforce more eudaimonic behaviour (Sheldon, 2018). Sheldon et al. (2019)

hypothesise that people flourish through the virtuous cycle of eudaimonic actions and the quest to be the best person possible, whereas the hedonic path is seen as a shortcut to well-being that supposedly results in failure.

On the contrary, a study by Henderson et al. (2013) found that both hedonic and eudaimonic behaviours can be potentially efficient strategies for increasing mental well-being. They stated that eudaimonic activities serve as a tool to reach satisfaction through engaging with long-term objectives, morals, values, or spiritual beliefs, whereas hedonic activities are believed to have a positive impact on people's momentary affect, thereby acting as an immediate emotion regulator. The constructs of positive and negative momentary affect have been shown to correlate with measures of positive and negative well-being, respectively (Seligman et al., 2006), highlighting the importance of the affective component for well-being. Thus, hedonic and eudaimonic behaviours can both be seen as methods for increasing well-being, with hedonic activities having a momentary and eudaimonic activities a long-term impact (Henderson et al., 2013). Notably, prior studies investigating the relationship between hedonic and eudaimonic behaviours and well-being have failed to consider the possibility of people perceiving activities as hedonic and eudaimonic simultaneously (Henderson et al., 2013).

Connecting the topic of hedonia and eudaimonia to university students, past studies (e.g., Kryza-Lacombe et al., 2019; Braaten et al., 2019) have investigated hedonic and eudaimonic motives in the context of academic achievement, or student well-being related to positive and negative experiences while taking hedonic and eudaimonic aspects of living into account (Howell & Buro, 2014). However, less is known about actual hedonic and eudaimonic behaviors students perform daily and how those behaviours influence their overall well-being. In a study which investigated the association between momentary affect and hedonic and eudaimonic behaviours in the general population, Schreiber (2021) proposed

the need for further research on this topic. No prior study has explored the direct relationships between hedonic and eudaimonic behaviours and momentary affect in university students.

In line with the methods used by Schreiber (2021), research of this kind is best done using the Experience Sampling Method (ESM) (Csikszentmihalyi & Larson, 1987). The data collection method ESM involves participants responding to “repeated assessments at moments over the course of time while functioning in their natural settings” (Scollon et al., 2003). Being especially suited for the research of temporal correlations of experiences, behaviours and emotions in different contexts (Myin-Germeys et al., 2018), ESM allows to gather data on the direct effects of different behaviours on the momentary affect of participants.

Therefore, the aim of the present study is to gain an understanding of the influence of hedonic and eudaimonic behaviours on university students’ well-being. To reach this goal, this study examines 1) how frequently flourishing and non-flourishing university students engage in hedonic and eudaimonic behaviours, and 2) the relationship between hedonic and eudaimonic behaviours and momentary affect in flourishing and non-flourishing university students. Based on the prior research by Henderson et al. (2013) and Sheldon’s (2018) EAM, it is hypothesized that 1) flourishing university students engage in more eudaimonic activities than non-flourishing university students, and that 2) hedonic activities are related to higher positive and lower negative momentary affect in university students compared to eudaimonic activities.

Methods

Design

This study was approved by the University of Twente Ethics Committee (no. 230205). The research was designed as a seven-day longitudinal online study using ESM. Participants were required to fill out a baseline questionnaire and give their informed consent in the

beginning of the study, and to fill out a predefined questionnaire three times per day each day through the Ethica application.

Participants

Out of 24 participants that signed up for the study, 18 completed the baseline questionnaire and were therefore eligible for the analysis. The mean age of the sample was 22.4 years ($SD = 1.38$; $Min = 20$; $Max = 26$). The majority of the sample was female (66.67%) and German (61.11%), with the rest being Dutch (27.78%) and participants from a different nationality (11.11%).

Procedure

The participants for this study were recruited using convenience sampling, either being approached in person by the researchers, via posts and messages on social media (WhatsApp, Instagram) or directly via the SONA Systems of the University of Twente. The SONA system is an internally used test-subject pool of the Faculty of Behavioral, Management, and Social Sciences of the University of Twente, that allows students to find and participate in different research projects. As a reward for participation, students earned a certain number of credits through the SONA System. All participants had to be 18 years old or older, own a smartphone, and be sufficient in the English language. Furthermore, the participants for this study had to be students at a university.

First, participants registered either directly through a link provided by the researcher or through the Sona system. They then downloaded the Ethica application onto their personal smartphone and gave informed consent to participate in this study. Afterwards, they were asked to sign up with their individual participation number and enable push notifications within the Ethica application. The Ethica application is a data collection tool that is used by participants on their personal Android or iOS smartphone. The application enables collection of data that is suited for ESM in a way that is more convenient than it would be with

traditional methods like a physical diary. For a predetermined period of time, a predefined collection of questions comes up on the participant's application multiple times per day. The system notifies the user via push notifications when inquiries need to be made. Next to this, questionnaires can be programmed to expire after a certain amount of time to guarantee the momentary nature of data collection, which is crucial for ESM. For this study, version 632 of the Ethica application was used.

On the first day of the study, all participants had to complete a baseline questionnaire consisting of questions about their demographic data, as well as the Mental Health Continuum Short Form (MHC-SF) (Keyes et al., 2008). Over the next seven days, data on the participants' positive and negative momentary affect and their hedonic and eudaimonic behaviours were collected using ESM. Participants were asked to complete a questionnaire consisting of a total of 18 questions in randomized section order three times a day (9-11am, 2-4pm, 9-11pm). They received push notifications at the beginning of every inquiry, followed by a reminder 60 minutes later in case they had not filled in the questionnaire by that time. Each questionnaire was available for not more than 120 minutes to ensure the validity of the momentary assessments. On the last day of the study, all participants received an Email in which they were thanked for their participation and provided contact information of the researchers. The participants that signed up using the SONA System were rewarded with one credit, while other participants did not receive any compensation.

Materials

Mental well-being

The levels of mental well-being of all participants were measured on the first day of the study using the 14-item MHC-SF developed (Keyes et al., 2008). The MHC-SF is comprised of three subscales: emotional well-being (e.g. *“During the past month, how often did you feel happy?”*), social well-being (e.g. *“During the past month, how often did you feel*

that you had something important to contribute to society?") and psychological well-being (e.g. *"During the past month, how often did you feel that you liked most parts of your personality?"*). Possible answers to each question range from 0 (*never*) to 5 (*every day*), where higher mean scores signal higher levels of mental well-being. Participants were classified as flourishers if they received a score of 4 or 5 on at least one item of the emotional wellbeing subscale and 4 or 5 on at least six out of the eleven items on the combined social and psychological wellbeing scale. The remaining participants were categorised as non-flourishers. According to Keyes et al. (2008), the MHC-SF has good psychometric properties. This has been confirmed by the findings of this study with a Cronbach's alpha of .90.

Momentary affect

The momentary affect of the participants was assessed three times per day with the use of a 10-item instrument that was developed by Wichers and colleagues (2011) and is based on the Positive and Negative Affect Schedule (PANAS) (Watson et al., 1988). The questionnaire consists of two subscales, one for positive momentary affect (e.g. enthusiastic), and one for negative momentary affect (e.g. lonely). Participants were asked to indicate on a scale from 0 to 6 the extent to which they felt "cheerful, content, insecure, lonely, energetic, anxious, low, enthusiastic, guilty, and suspicious" at the moment of taking the questionnaire. Larger sum scores on the two subscales, ranging from 0 to 24 for positive and from 0 to 36 for negative momentary affect, correspond to more positive or negative momentary affect, respectively. The psychometric properties of the instrument have been shown to be good (Wichers et al., 2011), which has been confirmed by the findings of this study with a Cronbach's alpha of .91 for positive and .80 for negative momentary affect.

Hedonic and eudaimonic activities

To assess the types of behaviours that the participants engaged in before each inquiry, an ad hoc questionnaire was created. The purpose of this questionnaire was to measure the

actual and objective behaviours of the participants and to order them into four categories: (1) *hedonic activities*, (2) *eudaimonic activities*, (3) *simultaneously hedonic and eudaimonic activities* and (4) *neither hedonic nor eudaimonic activities*. First, participants were asked whether the activities they engaged in since the last notification were “joyful” and, after that, whether they were “meaningful”, with the first item measuring hedonic activities and the second item measuring eudaimonic activities. Afterwards, an open follow up question to assess the participants’ exact activities was asked by asking “What were you doing?”.

Data Analysis

All analyses were performed using the statistical program R Studio (version 2023.03.0+386). As a first step, the dataset was put into long format and cleaned up by removing missing reports. Participants that did not identify as university students were excluded from the analysis. The demographic data of the participants were analysed using descriptive statistics.

First, to analyse the frequency with which flourishing and non-flourishing participants engaged in the four different activity types, frequency tables were computed for each activity type for both flourishing and non-flourishing students. The frequency of each activity type was then compared between groups using contingency tables and χ^2 -tests. Finally, all answers to the open questions about the specific activities that participants engaged in were checked from a qualitative perspective to determine any notable differences between flourishers and non-flourishers.

Lastly, the relationship between the different activity types and momentary affect in flourishing and non-flourishing students was explored using linear mixed models (LMM). Positive and negative momentary affect were used as separate dependent variables, while the activity types and flourishing were set as independent variables.

Results

On average, the 18 participants filled out 11.72 (55.81%) of the 21 possible daily inquiries, which resulted in a total of 211 observations. Out of the 18 participants, four were categorised as flourishers and the other 14 as non-flourishers. Flourishers were, on average, slightly older ($M_{age} = 23.00$, $SD = 2.16$; $Min = 20$, $Max = 24$) than non-flourishers ($M_{age} = 22.20$, $SD = 1.12$; $Min = 20$, $Max = 24$). However, this difference in age between the two groups was not statistically significant, $t(16) = 0.70$, $p = .530$. Out of the four flourishers, three (75%) were female and one (25%) was male, whereas nine (64.29%) of the non-flourishers were female with the remaining five (35.71%) being male. χ^2 -tests comparing the gender differences between flourishers and non-flourishers showed no significant results, $\chi^2(1) = 1.004$, $p = .316$.

Engagement in Activity Types

Over the course of the study, participants engaged most frequently in simultaneously hedonic and eudaimonic activities (45.97%), followed by hedonic (21.8%) and eudaimonic activities (18.01%), and the least often in activities that were seen as neither hedonic nor eudaimonic (14.22%). The frequencies of engagement in the four activity types for the total sample, as well as for flourishing and non-flourishing participants are illustrated in Table 1, together with quoted examples of each activity types for flourishing and non-flourishing students. The χ^2 -tests indicated that the differences in the frequency of engagement in the four activity types between flourishing and non-flourishing students are statistically significant, $\chi^2(3) = 9.45$, $p = .024$.

Relationship between Activity Types and Momentary Affect

The results of the LMMs showed significant relationships between the different activity types and positive and negative momentary affect, except for the relationship between eudaimonic activities and negative momentary affect (Table 2). Simultaneously

hedonic and eudaimonic activities yielded the highest scores for positive affect with an estimate of 14.06, followed by hedonic (11.53) and eudaimonic (9.97) activities, while activities that were neither hedonic nor eudaimonic (7.42) yielded the lowest scores. These results were reversed for negative momentary affect, with simultaneously hedonic and eudaimonic activities (5.38) predicting the lowest negative affect scores, followed by hedonic (6.31) and eudaimonic (7.62) activities, and activities that were neither hedonic nor eudaimonic (8.42) predicting the highest negative momentary affect scores.

Over the course of the study, flourishers had a mean score of $M_{pos} = 13.98$ ($SD = 4.83$) for positive momentary affect and $M_{neg} = 2.76$ ($SD = 3.28$) for negative momentary affect. Non-flourishers had a mean score of $M_{pos} = 11.50$ ($SD = 5.90$) for positive momentary affect and $M_{neg} = 6.47$ ($SD = 5.42$) for negative momentary affect. The interactions between activity type and flourishing on positive and negative momentary affect were not statistically significant ($ps > .152$), suggesting that flourishers who engaged in certain activity types did not differ significantly in their subsequent level of momentary affect compared to non-flourishers who engaged in the same type of activities.

Table 1

Frequency of engagement in the four activity types in the total sample, flourishers, and non-flourishers

Activity type	Flourishers (14)			Non-flourishers (4)			Total sample (18)	
	n	%	Example	n	%	Example	n	%
<i>Simultaneous</i>	28	60.87	Working with a friend	69	41.82	Talking to friends	97	45.97
<i>Hedonic</i>	8	17.39	Watching TV	38	23.03	Dancing	46	21.8
<i>Eudaimonic</i>	9	19.57	Studying	29	17.58	Fitness	38	18.01
<i>Neither</i>	1	2.17	Cleaning my room	29	17.58	Studying	30	14.22

Table 2

Results of Linear Mixed Models for the relationship between activity type and momentary affect

Fixed factor	Positive momentary affect			Negative momentary affect		
	Estimate	SE	<i>p</i>	Estimate	SE	<i>p</i>
Activity type						
<i>Simultaneous</i>	14.06	0.92	<.001	5.38	0.77	<.001
<i>Hedonic</i>	11.53	1.03	<.001	6.31	0.87	.016
<i>Eudaimonic</i>	9.97	1.11	.023	7.62	0.94	.392
<i>Neither</i>	7.42	1.21	<.001	8.42	1.29	<.001

Discussion

The aim of the present ESM study was to gain an understanding of the influence of hedonic and eudaimonic behaviours on the level of well-being of university students. Over the course of seven days, flourishing university students engaged more often in simultaneously hedonic and eudaimonic and in solely eudaimonic activities, and less often in hedonic activities and activities that were neither hedonic nor eudaimonic than non-flourishing students. Activities that were seen as simultaneously hedonic and eudaimonic were shown to have the greatest impact on the momentary affect of both flourishing and non-flourishing participants, leading to the highest scores on positive momentary affect and the lowest scores on negative momentary affect. On the contrary, activities that were seen as neither hedonic nor eudaimonic led to the lowest scores on positive and the highest scores on negative momentary affect. However, there was no significant difference for the effects of activity type on momentary affect between flourishing and non-flourishing participants.

Engagement in Hedonic and Eudaimonic Activities

This study was built on the assumption that hedonic activities offer short-term benefits for our momentary affect (Henderson et al., 2013), whereas eudaimonic activities are seen as the key to long-term well-being and flourishing (Sheldon, 2018). The results showed that over the course of the study, flourishing participants did indeed engage more frequently in eudaimonic activities than non-flourishers. Therefore, the hypothesis that flourishing university students engage in more eudaimonic activities than non-flourishing university students can be accepted and shows support for the EAM (Sheldon, 2018). Accordingly, prior studies found eudaimonia to yield more long-term benefits for mental well-being compared to hedonia (e.g. Huta & Ryan, 2010; Zeng & Chen, 2020). However, these prior studies focused on motives, rather than actual behaviours. This shows the need for future studies focusing on actual hedonic and eudaimonic behaviours and their impact on well-being.

Notably, in line with Schreiber (2021), the present study considered that one activity can be viewed as simultaneously hedonic and eudaimonic or neither hedonic nor eudaimonic. While the differences in the frequency of engagement in hedonic and eudaimonic activities between flourishers and non-flourishers were modest, larger differences were observed for the frequency of engagement in those activities that were simultaneously hedonic and eudaimonic or neither of the two. This indicates that simultaneously hedonic and eudaimonic activities might be more associated with flourishing than eudaimonic activities alone. Future research should repeat this type of study to see if the results remain for a larger sample. A possible explanation for these recorded differences in the frequency of engagement in simultaneously hedonic and eudaimonic activities could be the possibility that flourishing students experience certain behaviours differently and find more joy and meaning in them, and, therefore, tend to rate them as more joyful or meaningful than non-flourishing students. This is supported by the finding that people can perceive the same activities differently

(Henderson et al., 2013; Huta & Ryan, 2010). In this case, the differences could also lie in flourishers' interpretations of certain activities, rather than only in the actual frequency of engagement. Thus, future research should look at how flourishers and non-flourishers experience and interpret different types of behaviours from a qualitative perspective, using more thoroughly defined measurements for hedonic and eudaimonic activities.

Relationship between Hedonic and Eudaimonic Activities and Momentary Affect

The present study hypothesised that hedonic activities are related to higher positive and lower negative momentary affect in university students compared to eudaimonic activities, based on prior research (Henderson et al., 2013; Huta & Ryan, 2010). However, activities that were rated as simultaneously hedonic and eudaimonic by the participants yielded even higher scores on positive momentary affect and lower scores on negative momentary affect than merely hedonic activities. Thus, the present study showed that not hedonic activities, but activities that are simultaneously joyful and meaningful have the largest benefits for the momentary affect of university students, while activities that are seen as neither joyful nor meaningful lead to the poorest momentary affect. These findings are in line with those of Schreiber (2021), who was the first to consider that activities could be simultaneously hedonic and eudaimonic, and found similar results in a larger sample of the general population. Further support for the importance of both hedonic and eudaimonic elements comes from Huta and Ryan (2010), who found higher scores on well-being in people that scored high on both hedonic and eudaimonic motives compared to people that scored low on both measures. Together with the findings of the present study, this stresses the importance that finding and incorporating those activities that are both joyful and meaningful has. These insights could have practical implications for potential behavioural interventions aiming to help students incorporate more simultaneously hedonic and eudaimonic activities into their everyday lives with the goal of improving their mental well-being. Given that prior

studies (e.g. Henderson et al., 2013; Huta & Ryan, 2010; Ortner et al., 2018), have mostly investigated the effects of separately hedonic or eudaimonic motives or activities on well-being, future research should incorporate the possibility of behaviours being simultaneously hedonic and eudaimonic to confirm the positive impact of those activities on momentary affect.

Strengths and Limitations

The present study possesses several strengths. Firstly, the study's ESM design gives insight into the relationships between behaviours and affect by repeatedly collecting data on their interactions (Myin-Germeys et al., 2018). This design reduces retrospective recall bias and allows for the collection of realistic, reliable, and valid data (Myin-Germeys et al., 2018). Secondly, and in line with the design used by Schreiber (2021), this study examined the idea of flourishing as Keyes (2007) defined it. It was the first study to examine that concept in a population of university students with the use of ESM. Next, the present study addressed past concerns by concentrating on the actual behaviours of participants rather than orientations or motivations for behaviour (Sheldon, 2018; Henderson et al., 2013) and provides more concrete, realistic, and useful findings consistent with the EAM (Sheldon, 2018). Finally, the present study allowed participants to independently decide whether they interpreted the activities they engaged in as hedonic, eudaimonic, simultaneously hedonic and eudaimonic, or neither, as opposed to selecting from a fixed list of objectively classified activities. This provided a novel and deepened understanding of hedonic and eudaimonic behaviours in university students, given that perceptions of activities have been said to be extremely subjective in earlier studies (Henderson et al., 2013). They argue that an activity that is seen as purely hedonic by one person could be interpreted as extremely eudaimonic by others.

However, despite these strengths, the study had several limitations that must be taken into account for the interpretation of its findings. Firstly, it may not be possible to draw

conclusions about causal relationships, due to the correlational character of the data analysis (Aggarwal & Ranganathan, 2016). Therefore, it cannot be assured that engaging in more hedonic activities led participants to higher scores on positive momentary affect.

For example, it could have been possible that positive affect in any given moment has motivated participants to engage in more enjoyable activities. Next to this, the small sample size of the study makes it difficult to generalise the characteristics of the sample, as well as the findings to all university students. Especially the number of participants categorised as flourishing poses questions about the validity of the findings. Thus, future research should look to confirm this study's findings with a larger sample of university students, which should automatically include more flourishers and possess a more representative distribution of flourishers and non-flourishers. Lastly, due to the time-consuming nature of data collection with the ESM design, participants did not complete all the inquiries. Thus, even less data was available for the analyses, which further questions the validity of the findings.

Implications for Further Research

The findings of the present study result in several implications for future research. Future studies with a similar design should employ a larger sample of university students, potentially from multiple different universities, as well as try to increase the completion rate of the participants, in order to confirm the findings of this study. To obtain a larger and more representative sample, the study could recruit students from different universities and different fields of study, and promote the study openly on the campuses. The completion rate could be improved by offering stronger rewards for those that complete the study, like the option to win a voucher in a raffle. Secondly, future ESM studies should qualitatively investigate the specific activities that flourishers and non-flourishers engage in, as well as their experience and interpretation of those activities, to see if there are notable differences in how they view different activities. If this would yield the findings that flourishers indeed give

different meaning to the same activities than non-flourishers, it could have practical implications for teaching people to attribute more meaning to their daily activities. Lastly, based on the apparent positive impact of engaging in activities that are simultaneously hedonic and eudaimonic, future research should research how university students can effectively incorporate more of those behaviours in their everyday lives. With regards to the fact that behaviours can be changed and prescribed (Henderson et al., 2013), behavioural interventions could be designed and tested to potentially help students change their behaviour in a way that could improve their mental well-being.

Conclusion

The present study is able to offers insights into the current question of whether hedonic or eudaimonic activities are more effective for the achievement of flourishing. The study applied this problem to a sample of university students, which offers new insight on the relationship between the different activity types and well-being in students. The findings support the prior assumptions that hedonic activities improve emotional states in the short term. However, the present findings suggest activities that are simultaneously hedonic and eudaimonic to have a larger positive impact on momentary affect, while activities that are neither hedonic nor eudaimonic were shown to have a more negative impact. Therefore, future research should consider the possibility that behaviours can be hedonic and eudaimonic at the same time or neither one nor the other. Conclusively, even though the findings have to be viewed critically due to the nature of the sample and the low rate of completion, the present study adds to the field by showing that activities that are simultaneously hedonic and eudaimonic have the greatest impact on the mental well-being of university students.

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