

## Emotional empathy predicting subjective well-being: undergraduate and graduate comparison

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### ABSTRACT

The current study aims to determine if emotional empathy predicts subjective well-being among undergraduate and graduate students. The current quantitative investigation is based on the survey research design. Participants were students from Al Ain University's Abu Dhabi and Al Ain campuses (n=307). Data were gathered using the multidimensional emotional empathy scale (MDEES) and the subjective well-being scale (WeBs). The study found that increasing emotional empathy resulted in enhanced subjective well-being among undergraduate and graduate students. The findings also revealed that an increase in the emotional attention component of emotional empathy is associated with a decrease in subjective well-being. The suffering component of emotional empathy makes the greatest contribution to predicting subjective well-being among undergraduate and graduate students. The component of feeling for others ranks second in terms of capacity to predict subjective well-being among undergraduate students. Positive sharing is the second most effective predictor of subjective well-being among graduate students. We discovered that there is a need to increase college students' subjective well-being, which has a major impact on their overall well-being.

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## 1. INTRODUCTION

Emotional empathy is the ability to understand another person's inner experience or to experience the other person's feelings and emotions [1]. It has an important role in building social interactions and improving well-being among university students who are subjected to certain requirements and expected to execute particular tasks, indicating that they are experiencing developmental and psychological obstacles [2]–[4]. Among university students, the effect of emotional empathy on subjective well-being is evident [5], [6]. Subjective well-being reflects the individual's conscious cognitive evaluation of their life and comparison of life circumstances to their standards, taking into account the role of emotional factors and the individual's life satisfaction associated with positive individual, psychological, and social outcomes [7]–[9]. The university education level comprises both intellectual and social requirements. These requirements may cause anxiety and strain, affecting the psychological well-being of university students. Emotional empathy can help students feel less anxious and stressed. Emotional empathy can aid in gaining social support, comprehending emotions accurately, and implementing adaptive coping mechanisms [10], [11].

A number of studies have found a statistically significant positive correlation between emotional empathy and subjective well-being, such as Chen-Bouck *et al.* [12], who discovered that high levels of emotional empathy were statistically significantly positive associated with life satisfaction and the quality of relationships with others among a sample of students. Similarly, Hidalgo-Fuentes *et al.* [13] found that emotional empathy correlates with perceived social support and subjective well-being. This study aimed to elucidate the influence of emotional empathy on predicting subjective well-being in undergraduate and graduate students. This study seeks to address a research gap by examining the impact of emotional empathy on subjective well-being among undergraduate and graduate cohorts.

Although some researchers have found that emotional empathy positively influences subjective well-being, they did not explore its effects on the subjective well-being of undergraduate and graduate students. This study aimed to elucidate the predictive influence of emotional empathy on subjective well-being in undergraduate and graduate students, and to examine the differential impact of emotional empathy on subjective well-being between these two cohorts. Through the examination of emotional empathy's predictive capacity for subjective well-being in undergraduate and graduate students, we aim to highlight the importance of intervention programs designed to enhance subjective well-being among university students. These programs focus on emotional empathy and social support, which are connected to the development of subjective well-being. The study reflects the growing emphasis on mental health and emotional intelligence in educational environments. Understanding how emotional empathy influences subjective well-being may help institutions create settings that promote mental health and social well-being while also giving insights on personal and academic growth. We conducted this study to investigate the function of emotional empathy as a predictor of subjective well-being among undergraduate and graduate students. We investigated the variance in the predictability of emotional empathy about subjective well-being between undergraduate and graduate students. Our expectations indicated that emotional empathy would significantly predict the level of subjective well-being reported by students in both groups. This study sought to address the question: How can the elements of emotional empathy forecast subjective well-being, and how do these predictions vary between undergraduate and graduate students? The study aims to identify which elements of emotional empathy—such as suffering, positive sharing, responsive crying, empathic concern, emotional contagion, and emotional attention—most significantly influence subjective well-being, and whether the patterns of these effects vary between the two groups.

## 2. LITERATURE REVIEW

Emotional empathy is an interpersonal tool that leads to the appropriate emotional response, which is for the individual to put himself/herself in the situation of the other individual, understand his/her emotions, see the reasons that led him/her to behave in a certain way, and then issue a moral judgment while generating similar emotional experiences for the other individual. Emotional empathy is the foundation of the mental norm and our natural sense of fairness because the individual values the other individual's views and points of view. Emotional empathy is natural, although it may be increased or decreased by a variety of activities, including cooperation with others [1], [8], [14]. Emotional empathy reflects that the individual experiences the emotions of others without suppressing his/her own sentiments. It is distressed by the other individual's pain and sympathetic to him/her. When an incident occurs, the individual's response is generally unconscious [15]. Emotional empathy allows individual to read the feelings of others and communicate effectively with them. He/she can interpret nonverbal language since the other seldom communicates his/her emotions vocally, attribute causes to the other individual's emotional state, comprehend his/her goals, and the experiences that led to his/her emotions [16].

An individual with emotional empathy can form healthy relationships with others while improving the subjective well-being [13], [17]. Understanding another individual's internal point of view is necessary for developing trusting relationships, understanding the other person's motives, feelings, and emotions, as well as the reasons for the emergence of his/her emotional state, facilitates adaptation to change, regulates anger responses, and enables acceptable interactions with others while withholding judgement, understanding nonverbal indicators of emotions, and comprehending what was discussed. Through emotional empathy, the individual attempts to understand the other's emotions, and internal state without passing judgment while listening carefully, therefore creating human relationships [16].

We define emotional empathy in the current study as a multifaceted ability that includes a number of interrelated components that work together to enhance an individual's empathetic skills. These components include suffering, which refers to the ability to detect and share in the misery of others, and positive sharing, which entails the ability to feel and share good emotions. Responsive crying refers to the tendency to weep in reaction to other people's feelings, showing a strong emotional connection. Emotional attention relates to being aware of and focused on the emotional states of others, whereas feel for others denotes the ability to

sincerely care about and feel compassion for others. Finally, emotional contagion refers to our tendency to be influenced by and mimic the emotions of others around us [18].

Subjective well-being, or personal happiness, is a complex construct that includes an individual's assessment of emotional experiences and life satisfaction, together with a minimal presence of negative emotions [19]. Subjective well-being denotes an individual's cognitive assessment of their life, along with the emotional responses to that assessment. The cognitive aspect of subjective well-being pertains to an individual's assessment of their past and/or present life, measured by the life satisfaction scale. The emotional component of subjective well-being is characterized by the equilibrium between an individual's experiences of happy and negative emotions [20]–[22]. In general, subjective well-being refers to an individual's personal evaluation of the quality of his/her existence. This cognitive evaluation elicits emotional responses and reflects the individual's overall perception of his/her life. This expresses overall contentment with life as a whole or the individual's appraisal of particular aspects of life such as job and social life, such that the individual feels happy with his/her work or social life [21], [23]. Subjective well-being is often consistent over time and is significantly related to an individual's personality traits [24].

Diener *et al.* [25] proposed a model of subjective well-being that delineated individuals' perceptions of their life quality. The model encompasses both emotional responses and cognitive evaluations. Diener's paradigm delineates three separate yet interrelated domains of human subjective well-being: persistent positive affect, rare negative affect, and cognitive evaluations such as life satisfaction. Life satisfaction constitutes the cognitive aspect of subjective well-being, indicating an individual's conscious cognitive judgment of his/her life using personal criteria. Most people are generally satisfied with their life, which represents a human coping strategy to maintain appropriate living conditions and prevent depression [26]. Individuals who are satisfied with their lives experience better psychological and social consequences. A person who is satisfied with his/her life has a higher quality of life, better physical and psychological health, positive life habits, academic success, a high level of self-confidence, psychological health, and self-efficacy, and supportive relationships [8]. Emotional elements also influence subjective well-being, and the lack of complaints and physical issues may be among the features that elicit good emotional responses [26].

Subjective well-being is characterized as a complex construct comprising five components: financial well-being, physical well-being, social well-being, eudaimonic well-being, and hedonic well-being. Financial well-being refers to an individual's perception of their financial stability and security, which determines their overall satisfaction with life. Physical well-being comprises both good physical health and the absence of diseases, both of which have a significant influence on one's quality of life. Social well-being is defined as the quality and depth of social interactions and relationships, with a focus on social support and connection. Eudaimonic well-being is founded on a sense of purpose and meaning in life, which represents the fulfillment that comes with self-realization and personal growth. Finally, hedonic well-being refers to the pursuit of pleasure and the avoidance of pain indicate a balance of positive and negative emotional states.

A number of studies have concluded that there is a positive relationship between emotional empathy in its cognitive and emotional components and multiple components of subjective well-being [1], [12], [14], [27]–[30]. Emotional empathy among undergraduate and graduate students promotes the development of prosocial behaviors, interpersonal relationships, and social support. The goal for emotional empathy is altruism, which seeks to meet the needs of others and improve their well-being. Students with a high level of emotional empathy are anticipated to be happier and more satisfied with their life [6]. Prosocial behavior promotes emotional empathy. It has been recognized as a moderator of emotional empathy and subjective well-being. Prosocial behavior, such as volunteering and assisting others, enhances subjective well-being. Han and Yoo [31] conducted a study to determine the mediating role of altruistic behavior in the link between cognitive empathy, emotional empathy, and subjective well-being. The study sample comprised of 282 male and female teenage students aged 16 to 18 years. The findings revealed a statistically significant correlation between emotional empathy and altruistic conduct, Altruistic behavior and cognitive empathy. After examining the path of correlation between the study's variables, it was discovered that there is a statistically significant correlation between emotional empathy, cognitive empathy and altruistic behavior, suggesting a correlation between selfless behavior and subjective well-being. The study's results indicated that cognitive and emotional empathy affect subjective well-being through altruistic behavior.

Emotional empathy fosters supportive social interactions and the development of high-quality relationships, resulting in enhanced subjective well-being and life satisfaction. Emotional empathy also aids in the emotion regulation, psychological resilience, and coping in stressful and adverse situations. A study by Chopik *et al.* [29] discovered that those with high levels of emotional empathy are more interested in making quality relationships with others. They know that their social contacts are beneficial and significant, which makes them happy and full of positive feelings. A study conducted by Feiler and Kleinbaum [32] revealed that emotional empathy has an important role in maintaining good relationships linked to subjective well-being, and that emotional empathy helps the individual to identify the positive and negative emotions of others, and helps the individual feel happy when others share their happiness. The individual's pain is

accompanied by that of others. Emotional empathy enables the individual to experience the other's feelings and emotions while being aware that such feelings and emotions belong to the other individual. Research by Grünh *et al.* [30] discovered that those with elevated emotional empathy report more life satisfaction, experience a predominance of good over negative feelings, and display less depression symptoms compared to those with diminished emotional identification. Manczak *et al.* [33] identified the detrimental impact of emotional empathy on subjective well-being, revealing a correlation between emotional empathy and certain physical symptoms, including inflammation. This can be elucidated by the notion that a human with a heightened degree of emotional empathy is concerned for others, and providing such care may place supplementary burdens on the individual.

We chose to examine the predictive ability of emotional empathy in determining the level of subjective well-being among a sample of university students in the United Arab Emirates and to study the effect of emotional empathy on subjective well-being that varies according to the academic level at the bachelor's level and the higher diploma stage, where it can be noted that emotional empathy increases the subjective well-being. Previous studies have varied in its approach to the link between empathy and subjective well-being. Some researchers investigated the function of empathy, both cognitively and emotionally, in subjective well-being [8], [34], [35]. Other researchers have investigated the impact of emotional intelligence on subjective well-being, with a focus on empathy [36], [37]. Some researchers have investigated the mediating role of emotional intelligence in the relationship between mindfulness and well-being [17], [38], [39]. The impact of empathy, encompassing its cognitive and emotional components, on well-being was examined, with empathy regarded as a subset of emotional intelligence. We concentrate on emotional empathy and its influence on subjective well-being, positing that emotional empathy enhances subjective well-being in undergraduate and graduate students.

### 3. METHOD

A quantitative approach was employed, incorporating a comparative examination of the two groups. The present study utilized a survey research design. Students at Al Ain University, both graduate and undergraduate, from the college of education, humanities, and social sciences, self-reported their emotional empathy and subjective well-being. We employed multi-group path analysis, utilizing RStudio and the Lavaan package, to examine the predictive capacity of emotional empathy subscales (suffering, positive sharing, responsive crying, emotional attention, feeling for others, and emotional contagion) on subjective well-being among undergraduate and graduate students. The route analysis employed in this work resembles multiple regression, and the Lavaan package was chosen to utilize the multi-group path analysis feature offered by this package. To establish the dependent variable (subjective well-being) and the independent variables (emotional empathy subscales), the weighted means were computed by summing the scores of each subscale and dividing by the number of items within that subscale. Consequently, all variables incorporated in the analysis are observed variables.

#### 3.1. Participants

We employed the basic random sampling method to select the study sample. The registration and admission departments at Al Ain University, encompassing both the Al Ain and Abu Dhabi campuses, supplied data regarding student enrolment in the bachelor's degree and postgraduate professional diploma programs within the Faculty of Education, Humanities, and Social Sciences for the autumn semester of the academic year 2022/2023, which comprised 1,206 bachelor's degree students and 3,010 postgraduate professional diploma students. An invitation was dispatched to all graduate and postgraduate professional diploma students. A total of 307 students engaged in the research. University email addresses of students were utilized to distribute and convey the multidimensional emotional empathy scale (MDEES) and the subjective well-being scale (WeBs), which were additionally uploaded to Moodle. Table 1 displays the demographic information of the participants.

In Table 1, the researchers revealed that the majority of the respondents were female (92.2%) and most of the students (47.2%) were in the 23-28 age group. The sample was mostly female. The significant gender disparity may limit the findings' application to male students and the whole student population. The vast majority of respondents were between the ages of 23 and 28. The current study was conducted at Al Ain University, which has campuses in both Al Ain and Abu Dhabi. As a result, the findings may not apply to students at other colleges or geographic areas. The study included a small sample of students enrolled in bachelor's degree and postgraduate professional certificate programs at the Faculty of Education, Humanities, and Social Sciences. This cohort may not be representative of students in other faculties or specializations.

Table 1. Demographic characteristics of the sample members (N=307)

Variable	Sub-variables	Numbers	Percentage
Gender	Male	24	7.8
	Female	283	92.2
Age (years)	17-22	38	12.4
	23-28	145	47.2
	29-34	100	32.6
	35 and above	24	7.8
Education level	Undergraduate	145	47.2
	Graduate	162	52.8
Total		307	100

### 3.2. Measuring instruments

#### 3.2.1. The multidimensional emotional empathy scale

We employed the MDEES as outlined by Alloway *et al.* [18] to evaluate the emotional empathy of undergraduate and graduate students. The scale items have been rendered into Arabic. The self-report measure scale comprises six subscales: suffering, positive sharing, responsive crying, emotional attention, feeling for others, and emotional contagion. Each item on the scale delineates a specific behavior. Students employ a 4-point Likert scale to assess the frequency of behavior applicability, ranging from 0 “strongly disagree” to 4 “strongly agree”. An elevated score among undergraduate and graduate students indicates heightened emotional empathy. This study involved a pilot of the MDEES using a convenience sample of 38 undergraduate and graduate students from multiple universities to evaluate the scale's reliability and validity. The majority of the subscales exhibit a correlation of .23 or greater between the item and the subscale; the reliability coefficients for the six subscales are: .76 (suffering), .78 (positive sharing), .82 (responsive crying), .79 (emotional attention), .68 (feeling for others), and .66 (emotional contagion). The overall dependability of the MDEES was .87.

#### 3.2.2. The subjective well-being scale

The WeBs created by Lui and Fernando [40] was employed in the present investigation. The instrument comprises 29 items that evaluate subjective well-being. The scale comprises five subscales: financial, physical, social, eudaimonic, and hedonic well-being. Participants were instructed to evaluate the items using a 6-point scale, with 1 indicating strong disagreement and 6 indicating strong agreement. All items on the scale are positive. The minimum scores a respondent can achieve is 29, while the maximum is 174; a higher score indicates a greater level of subjective well-being. The validity of the scale in this study indicates that most subscales have a correlation of .21 or greater between the item and the subscale. The scale demonstrated a reliability (Cronbach's  $\alpha$ ) of .90 in the present investigation. Although these scales are esteemed, their efficacy and pertinence may differ across cultural or educational contexts, consequently affecting the outcomes. Subsequent study targeting these limitations may enhance the generalizability and reliability of the results.

## 4. RESULTS

This study seeks to examine the predictive capacity of emotional empathy subscales (suffering, positive sharing, responsive crying, emotional attention, feeling for others, and emotional contagion) on subjective well-being in undergraduate and graduate students. To attain this objective, multi-group path analysis was employed, utilizing RStudio and the Lavaan package. The findings are displayed in Table 2 and Figures 1 and 2.

Table 2. The path (regression) coefficients and their significance of the two groups separately

Predicted Var.	Predictor	Group	Est	se	z	P value
Well being	Suffering	Undergraduate	.407	.017	23.450	.000
Well being	Sharing	Undergraduate	.140	.018	7.954	.000
Well being	Crying	Undergraduate	.102	.008	13.549	.000
Well being	Attention	Undergraduate	-.102	.012	-8.249	.000
Well being	Others	Undergraduate	.157	.013	11.921	.000
Well being	Contagion	Undergraduate	.085	.013	6.775	.000
Well being	Suffering	Graduate	.373	.017	22.132	.000
Well being	Sharing	Graduate	.174	.013	13.393	.000
Well being	Crying	Graduate	.103	.006	15.926	.000
Well being	Attention	Graduate	-.068	.010	-7.017	.000
Well being	Others	Graduate	.136	.011	12.582	.000
Well being	Contagion	Graduate	.094	.008	11.474	.000

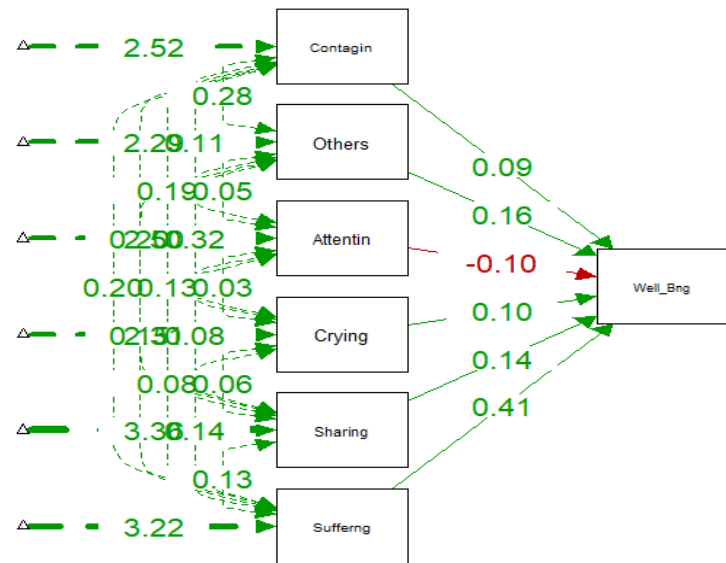


Figure 1. Model output in graphical form for undergraduate students

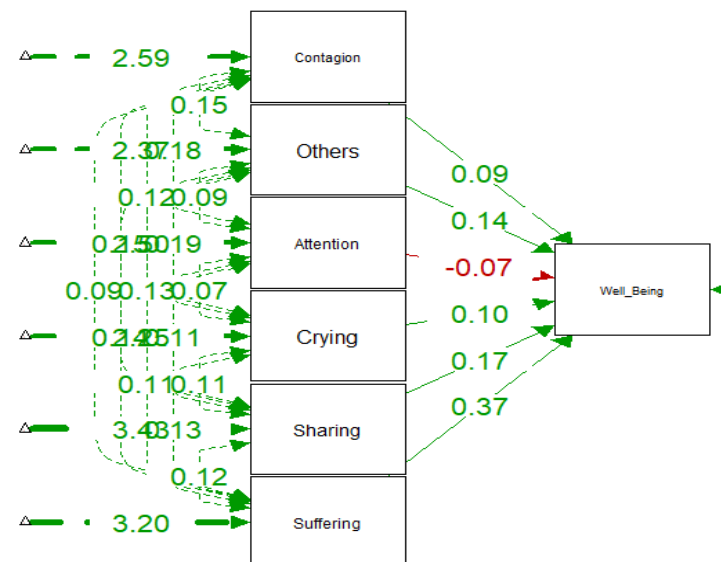


Figure 2. Model output in graphical form for graduate students

Table 2 shows the path (regression) coefficients (Est) and their significance (pvalue) for both groups (undergraduate and graduate students). All the coefficients presented in Table 2 are statistically significant ( $p < .05$ ). This indicates that emotional empathy subscales can predict subjective well-being among undergraduate and graduate students. It is worth noticing that the emotional attention subscale has negative path (regression) coefficients in both groups. This indicates that an increase in emotional attention correlates with a decline in subjective well-being among undergraduate and graduate students. Conversely, an enhancement in the other subscales (suffering, positive sharing, responsive crying, feeling for others, and emotional contagion) is anticipated to correlate with an improvement in subjective well-being among undergraduate and graduate students. Moreover, Table 2 shows that the suffering subscale of emotional empathy has the highest path (regression) coefficients for both groups (undergraduate and graduate students). This means that the suffering subscale of emotional empathy has the highest contribution in predicting subjective well-being among undergraduate and graduate students compared with other emotional empathy subscales. The second order in the ability to predict emotional empathy by emotional empathy subscales is different in both groups. For the undergraduate students, feeling for others subscale has the second highest path (regression) coefficient which means that the feeling for others subscale has the second order on the

ability to predict subjective well-being among undergraduate students. For the graduate students, positive sharing subscale has the second highest path (regression) coefficient which means that positive sharing subscale has the second order on the ability to predict Subjective well-being among graduate students. Figures 1 and 2 show the path diagram or model output in graphical form for both groups separately (undergraduate and graduate students).

In Figures 1 and 2, it is visualized the parameter estimates by the color of the path. Positive parameters are in green and red indicates negative estimates. Also, the width of the path (Line) indicates the strength of the estimate. The results presented in Table 2 and Figures 1 and 2 show that the two models based on the group membership (undergraduate and graduate students) are similar to each other. Therefore, the path analysis was conducted for the full dataset. The results are presented in Table 3 and Figure 3.

Table 3 shows the path (regression) coefficients (Est) and their significance (pvalue) and all of them are statistically significant ( $p < .05$ ). This indicates that emotional empathy subscales can predict subjective well-being. It is worth noticing that the emotional attention subscale has negative path (regression) coefficients. This means that when emotional attention increases, the subjective well-being decreases. On the other hand, it is expected that an increase in all other subscales (suffering, positive sharing, responsive crying, feeling for others, and emotional contagion) to have an increase in subjective well-being. Furthermore, Table 3 indicates that the suffering subscale of emotional empathy possesses the highest route (regression) coefficients. This means that the suffering subscale of emotional empathy has the highest contribution in predicting subjective well-being compared with other emotional empathy subscales. The positive sharing subscale has the second highest path (regression) coefficient which means that the positive sharing subscale has the second order on the ability to predict subjective well-being. Figure 3 shows the path diagram or model output in graphical form for the full dataset (undergraduate and graduate students).

In Figure 3, it visualizes the parameter estimates by the color of the path. Positive parameters are in green and red indicates negative estimates. Also, the width of the path (Line) indicates the strength of the estimate. The current study discovered that increasing emotional empathy components such as suffering, positive sharing, responsive crying, feeling for others, and emotional contagion resulted in an improvement in subjective well-being among both undergraduate and graduate students. Notably, the suffering component of emotional empathy had the highest influence on predicting subjective well-being in both groups. Furthermore, feeling for others rated second in predicting subjective well-being among undergraduates, while positive sharing was the second predictor for graduate students. Interestingly, a rise in the emotional attention component was linked to a reduction in subjective well-being.

Table 3. The path (regression) coefficients and their significance for the full dataset

Predicted	op	Predictor	Est	se	z	P value
Well being	~	Suffering	.389	.012	32.354	.000
Well being	~	Sharing	.157	.011	14.697	.000
Well being	~	Crying	.104	.005	20.958	.000
Well being	~	Attention	-.084	.008	-10.721	.000
Well being	~	Others	.144	.008	17.262	.000
Well being	~	Contagion	.093	.007	13.416	.000

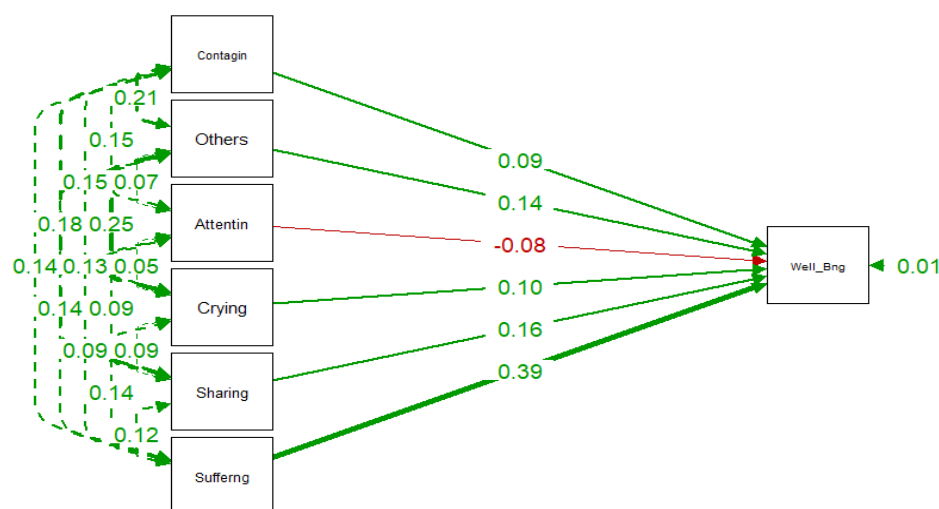


Figure 3. Model output in graphical form for the full dataset

## 5. DISCUSSION

The results of this study elucidate the intricate relationship between many aspects of emotional empathy and subjective well-being in undergraduate and graduate students. This study contributes to existing research on the influence of empathy on well-being by illustrating the predictability of suffering, positive sharing, responsive crying, emotional attention, feeling for others, and emotional contagion, on subjective well-being. This study builds upon prior research examining the connections among cognitive empathy, emotional intelligence, and well-being by identifying emotional empathy as a significant predictor [1], [8], [12], [14], [27]–[30], [32], [34], [35].

One of the most important discoveries is the dual nature of emotional empathy. While emotional empathy can improve subjective well-being by strengthening emotional ties with others, it can also have negative consequences. The negative correlation between high levels of emotional attention and decreased subjective well-being implies that empathy, when perceived as emotional overload, might undermine life satisfaction and impair one's ability to evaluate life objectively. This aligns with previous findings [32], [33] that empathy may exacerbate an individual's challenges. Attending to others' emotional states may adversely affect an individual's well-being. When an individual perceives unpleasant emotions, it may adversely affect subjective well-being, leading to feelings of sadness in response to the negative emotions of others. Emotional empathy had a negative impact on well-being; this findings linking emotional empathy to physical symptoms such as inflammation [33]. This may be explained by the fact that someone with a high level of emotional empathy cares for others, and offering such care might lead to difficulties for the individual.

The subscale of suffering, defined as a conscious tolerance of pain or discomfort, was shown to be the highest predictor of subjective well-being in both undergraduate and graduate students. The study emphasizes the importance of experiencing and responding to other people's pain in improving subjective well-being. According to previous studies [41], [42], suffering not only increases relationship depth but may also lead to a deeper sense of purpose and personal progress.

Similarly, the feeling for others subscale was a predictor of subjective well-being. This suggests that undergraduate and graduate students who demonstrate greater emotional empathy for the emotional states of others are happier. This study may have significance for student mental health intervention since it implies that strengthening empathy-related skills, such as emotional understanding and nonjudgmental replies, might increase well-being [43]. Interestingly, for graduate students, positive sharing was a good predictor of subjective well-being. This shows that sharing good emotional experiences is important for graduate students' social ties and psychological well-being. Happy social contacts, defined as the sharing of joy and happy feelings, can considerably improve well-being, emphasizing the need of creating situations that encourage such relationships [44], [45].

The study findings have profound implications. The concentrated interventions aimed at enhancing emotional empathy components, such as positive sharing and adaptive emotional attention, may be crucial to improving subjective well-being in university students. At the same time, care is advised when enhancing emotional empathy, since excessive emotional engagement can lead to decreased well-being. Future study can use longitudinal studies to better understand the long-term consequences of emotional empathy on well-being. Furthermore, intervention-based research that aims to create programs for strengthening emotional empathy while reducing the emotional overload might have practical benefits for boosting student mental health and resilience.

## 6. CONCLUSION

The present study found that elements of empathy significantly forecast subjective well-being in undergraduate and graduate students. An increase in suffering, positive sharing, responsive crying, feeling for others, and emotional contagion correlates with a heightened level of subjective well-being among undergraduate and graduate students. The emotional attention component had a negative correlation with subjective well-being in both undergraduate and graduate students, indicating that increased emotional attention correlates with diminished subjective well-being. The present study indicates that the relationship between emotional attention and overall well-being may be complex. Among the emotional empathy components, suffering exhibited the highest path coefficients for both undergraduate and graduate students, showing that it plays an important role in predicting subjective wellbeing. This indicates how critical the ability to empathize with the misery of others is for one's own well-being. Furthermore, feeling for others component ranks second in predicting subjective well-being among undergraduate students, while positive sharing does so among graduate students. These discrepancies suggest that some components of emotional empathy may have a bigger influence on subjective well-being. Overall, our findings demonstrate emotional empathy's complex nature and significant advantages to subjective well-being, emphasizing the need of developing emotional empathy skill in order to increase students' well-being.



The outcomes of this study have dominant involvement for future research. Since the results indicate that an increase in the emotional attention component is associated with a decrease in subjective well-being, future research might examine why paying more emotional attention has a negative impact on wellbeing. This might involve conducting qualitative research or using experimental methods to see if emotional attention causes emotional load, or stress which can have a detrimental impact on wellbeing. Considering that positive sharing is the second-best predictor of well-being for graduate students but not for undergraduates, future study might investigate the reasons for this disparity. Researchers might look into how graduate students' life experiences, maturity, or cognitive changes make them more open to positive emotional interchange. Future research might investigate into the long-term effects of various emotional empathy components (suffering, positive sharing, emotional contagion) on well-being. This would provide a more complete understanding of how these components evolve over time and their continuous impact on subjective well-being at various life stages.

The results of this study also have important connotations for practice. It is vital to improve emotional attention and provide students with strategies for regulating it. Mindfulness training and cognitive-behavioral therapy can help students improve their emotional focus while preserving their well-being. Because the suffering component has the greatest predictive potential for subjective well-being in both undergraduate and graduate students, it is recommended that intervention programs that foster emotional empathy for conscious tolerance of others' pain or distress be included in student wellness programs. Improving empathy among college students should be a priority, since it is the second most important predictor of subjective well-being among undergraduates. Such initiatives may include peer mentoring programs, empathy-building exercises, and group activities that encourage perspective-taking and emotional support. Graduate students should emphasize positive sharing components of emotional empathy. Promoting students' appreciation for the constructive exchange of emotions and sentiments among others, as well as the conveyance of emotions and actions linked to those feelings, while sharing positive experiences and reflections. Creating a campus culture that values and fosters empathy and emotional support is crucial.

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C : **C**onceptualization

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R : **R**esources

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O : Writing - **O**riginal Draft

E : Writing - Review & **E**ditng

Vi : **V**isualization

Su : **S**upervision

P : **P**roject administration

Fu : **F**unding acquisition

## CONFLICT OF INTEREST STATEMENT

The authors declare no competing interest.

## INFORMED CONSENT

All participants provided informed consent to complete the required questionnaires. Their participation was voluntary, and they were informed about the purpose of the study, the confidentiality of their responses, and their right to withdraw at any time.

## ETHICAL APPROVAL

The authors obtained ethical approval from the Al Ain University (AAU) research ethical committee (Reference No: COP/AREC/AD/08).

## DATA AVAILABILITY

The datasets used and analyzed during the current study are available from the corresponding author [SAAH], upon reasonable request.




## REFERENCES

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