



Emotional well-being and social reinforcement as predictors of motivation and academic expectations

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ABSTRACT

Nowadays there is a tendency to highlight the significant contribution of students' socio-emotional perceptions about academic motivation and expectations in Higher Education. This study aims to analyze the relationships among emotional well-being, desire for social reinforcement, intrinsic motivation, the perceived value of the task, and academic expectations. To do this, 455 university students from the Spanish educational system filled out an online questionnaire. The application of a Structural Equation Model (SEM) underscores the fact that emotional well-being and the desire for social reinforcement have a positive effect on intrinsic motivation for learning. In turn, this motivation has been a significant predictor of the perceived value of homework and academic expectations. In addition, various mediating effects are observed to influence high academic expectations. These results highlight the need for emotional care and social reinforcement in initial university training programs.

1. Introduction

University students face periods of change in which they must assume considerable responsibilities and challenges, as well as adapt to new circumstances (Smith et al., 2017). In addition, there is a wide range of personal, social and cognitive factors that influence the comprehensive development of university students. These characteristics may help them face the new challenges that the university stage of their education presents them or, on the contrary, they may hinder the achievement of their objectives as a result of not having the necessary resources. One of the aspects that has gained great relevance in the educational field is well-being, in physical and also psychological and emotional terms. In fact, authors such as Antaramian et al. (2010) have noted that well-being has a significant positive influence on academic performance, social skills, and physical health, and consequently it also has important implications in the school context.

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2. Theoretical framework

2.1. Emotional well-being and its personal and academic implications

The concept of well-being implies feeling good physically, mentally and socially, as well as feeling satisfied with one's life. More specifically, emotional well-being is related to "maintaining a good state of mind, defined as an optimal balance between positive and negative emotions" (Chaves & Kern, 2017, p. 32). Likewise, Courtwright et al. (2019) also associate emotional well-being with an overall positive state of the emotions, including factors such as self-esteem and resilience. Along the same lines, several studies (Ogundokun & Adeyemo, 2010; Malhotra & Kaur, 2018) state that emotional intelligence skills are closely related to the achievement of goals and personal well-being. Furthermore, empirical research has supported the idea that the proper management of emotions also has an intense impact on academic motivation. In this way, more meaningful learning is fostered (Nabi, 2020). All the issues mentioned about well-being can be attributed to Daniel Goleman's Theory of Emotional Intelligence (1996), according to this author, emotional intelligence comprises a set of skills of a socio-emotional nature that significantly influence the performance of life. More specifically, there is another theory called "Person-object-theory of interest (POI)" proposed by Krapp (2005) in which he defines that the emotional aspects are related to the fulfillment of the three needs proposed in the Self-Determination Theory (Deci & Ryan, 1985) and that justify its relationship with the intrinsic motivation of the person (Ryan & Deci, 2000). We will address later.

2.2. Social reinforcement, motivation and academic performance

Another factor to which the literature has made reference is the desire for social reinforcement, defined as the positive way one person pays attention to another through acknowledgments or praise (Losada, 2018). The social reinforcement by families, teachers and peers is considered a relevant apex to face the challenges of the university stage (Zulkifli et al., 2019). As reflected in the General Benefits Model of Social Support (Rueger, 2016) and Social Capital theory (Brouwer et al., 2016). As an example, Noel and Graft (2014) have mentioned that the praise emitted by close people act as positive reinforcers capable of increasing the intrinsic motivation of students. Likewise, Fernández et al. (2015) emphasize social support as a factor that contributes positively to coping with new situations, such as the immersion of university students.

On the other hand, Zulkifli et al., (2019) and Fatima et al., (2018) found in their studies that social reinforcement can be considered a predictive factor associated with academic motivation and, therefore, with academic performance. This association is described in the sense that a higher degree of social reinforcement generates greater self-confidence, greater competition, as well as greater psychological security in the university student who perceives it. This association also favors both physical and psychological well-being (Emadpoor et al., 2015; Li et al., 2018). In relation to emotional well-being and desire for social reinforcement, with the results of their research Di Fabio and Kenny (2012) endorsed the significant correspondence between adequate levels of emotional well-being and social reinforcement in the educational field. In the same way, Fernández-Lasarte et al. (2019) concluded in their study that both social reinforcement and emotional intelligence are factors that contribute to the development and academic performance of students in Higher Education.

2.3. Motivation and academic aspects

Another key aspect that influences the expectations and academic performance of university students is motivation. According to Fatima et al. (2018), motivation plays a fundamental role in the educational context. In fact, studies such as Hamilton and Phillips (2016) have shown that it has a positive relationship with academic performance and, in turn, with well-being. Noel and Craft (2014) reaffirm this fact and underline the relevance of intrinsic motivation in academic issues related to competence and the satisfaction that students obtain through academic experiences.

Intrinsic motivation is described as a psychological process that involves the individual in their own interests and in the use of their abilities to spontaneously overcome challenges through their autonomy and competence (Reeve, 2010). However, and under the empirical evidence denoted by the Self-Determination Theory, it is specified that self-motivation depends on the need to be competent, the need to be autonomous and the need to relate. In this sense, it seems evident that the fulfillment of these needs will lead to an increase in academic expectations. In addition, the Cognitive Assessment Theory (Deci & Ryan, 1985), a sub-theory of the Self-Determination Theory, which aims to identify those factors that affect intrinsic motivation, determined that both social and environmental factors influence intrinsic motivation (Deci & Ryan 2000). In this sense, emotional well-being and social reinforcement would explain the increase or decrease in intrinsic motivation. Intrinsically motivated students take advantage of learning opportunities, both inside and outside school. They express a great interest in learning and, in addition, they take pleasure in the process as they are committed to their learning. If students are intrinsically motivated by learning, they will perform the academic tasks they are set better, they will feel curiosity for and interest in their tasks, they will be willing to face academic challenges and, finally, they will seek knowledge and learning for their enjoyment (Ogundokun & Adeyemo 2010). Consequently, these students will endow their academic tasks with value and utility (Jiménez-Reyes et al., 2019). In this regard, Rodríguez et al. (2018) found that, when students attribute value to the academic task carried out, their academic results and expectations are higher than those who do not consider them important.

In relation to the concept of academic expectations, and according to what was stated by Tinto (1997) more than two decades ago, they are understood as those interests that drive the perception of continuing in the advancement towards the achievement of a certain objective framed within the academic field. As mentioned by Cobarrubias-Apablaza et al. (2019), a wide variety of factors of various

kinds (cognitive, emotional, attitudinal, etc.) take part in the process of achieving the proposed academic expectations. Depending on these factors, it will be more or less difficult to focus on achieving the academic expectations they are set. In a study by Rodríguez et al. (2018) the authors highlighted the relationship between the manifestation of high expectations for academic success and emotional well-being.

Continuing with the Self-Determination Theory, this theory allows explaining the relationship between intrinsic motivation and academic expectations. According to Deci and Ryan (2008), intrinsic motivation is made up of three subfactors: intrinsic motivation to know, intrinsic motivation to achieve, and intrinsic motivation to experience stimulation. In this sense, the intrinsic motivation to know, which one shows when there is pleasure in learning, can favor a task that seems useful to us (Clark & Schroth, 2010). In addition, the intrinsic motivation for achievement can be associated with the feeling of feeling competent in the development of a task, a feeling that will exert a positive influence on academic expectations.

Academic expectations are considered relevant from the student’s adaptation to the new university stage until achieving academic success at the end of it (Casanova et al., 2019; Araujo et al., 2019). The study of the components that contribute to increasing motivation and academic expectations has grown considerably in the last decade. The influence of the student’s intrinsic motivation towards learning in achieving the desired academic expectations has been highlighted. However, on rare occasions, emotional well-being and the desire for social reinforcement have been taken as a starting point as factors that have the ability to influence the motivational state of students in Higher Education, as well as the achievement of their academic expectations. In addition to all this, there is also the fact that in most of the studies reviewed, academic performance is considered a key factor in the learning process, together with self-regulation of learning and general self-efficacy. However, academic expectations have proven to be highly relevant in the educational process, especially in the university context.

From a broad perspective, the main purpose of this research is to analyze the relationships between different factors that lead to the establishment of positive academic expectations among university students. This objective is derived from the following research questions:

- What relationships exist between emotional well-being, desire for social reinforcement, intrinsic motivation, utility of tasks, and academic expectations?
- Within the proposed structural model, are there positive and significant direct effects that influence intrinsic motivation, utility of tasks, and academic expectations?
- Is there any mediating variable in the proposed model on positive academic expectations for university students?

Thus, possible affected relationships between the state of well-being and the desire for social reinforcement obtained from the environment, and the intrinsic motivation for student learning are evaluated. The possible influence of intrinsic motivation on the academic expectations expressed by students is also studied. Finally, it investigates the existence of a mediating effect of the perceived

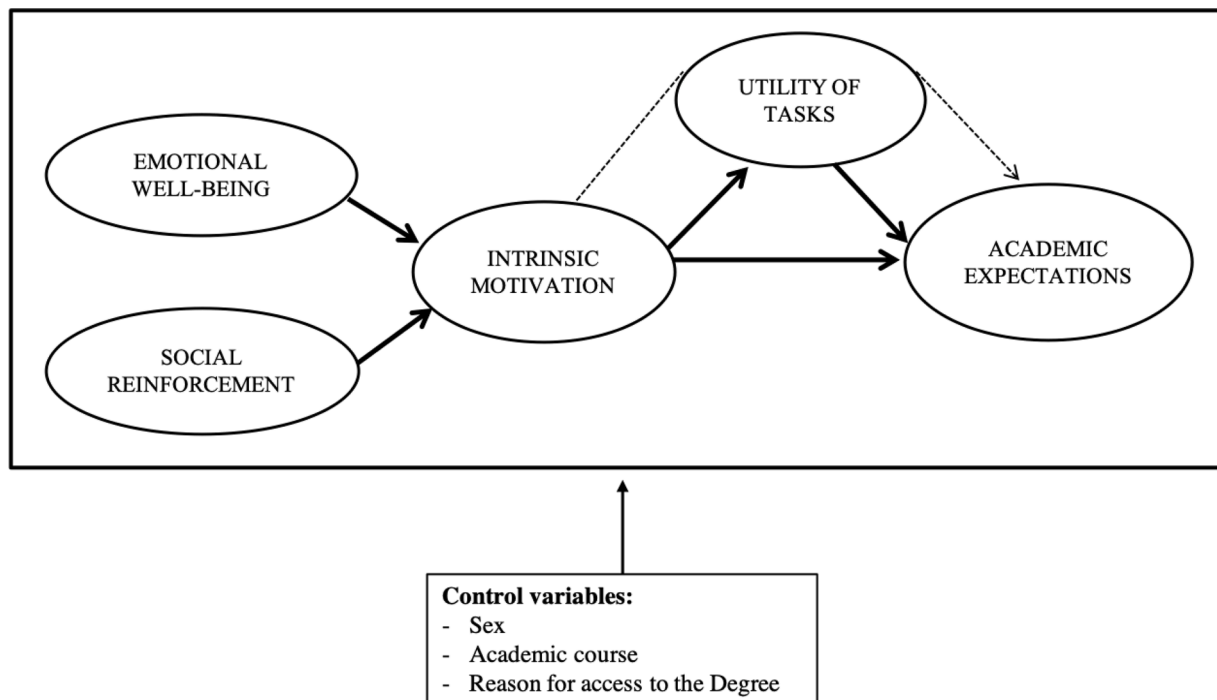


Fig. 1. Theoretical model framework.

utility of the tasks they carry out in the university environment on the relationship between intrinsic motivation for learning and their academic expectations. All these effects have been controlled for by the characteristic variables of the surveyed sample (sex and academic course) and their environment (reason for access to the Degree). Fig. 1 shows the diagram of the proposed theoretical model.

3. Method

3.1. Participants

The study involved an intentional sample of 455 Higher Education students who are studying for university degrees in Teaching in Early Childhood and Primary Education. The sampling procedure started by establishing contact with the Dean's service in the participating faculties. In a second stage, these services disseminated the web link among all the students of their faculties. A total of 455 valid questionnaires were received considering that the students decided to answer completely voluntarily (Table 1). 25.3% of the participants were males, a fact that is not surprising considering that a large percentage of people who work as teachers are women (Lassibille & Navarro, 2020). The age of most of the sample ranged between 18 and 24 years old (91.9%). Regarding the academic year, a predominance of the first three levels is observed (of the first course of the university, 32.7% of the second course and 31.6% of the third course). On the other hand, almost half of the participants (47.2%) reported secondary education levels with respect to the person who supports the family environment, followed by 35.5% with university studies and 17.2% who have primary studies or did not complete any type of studies. Finally, similar percentages are detected regarding the expectations of this sample of university students to find a job related to their degree in the future (48.9% are positioned with a positive attitude towards obtaining a job).

3.2. Definition of variables and instrument

First, the measurement indicators of each of the constructs were identified and conceptually defined. In this way, the operationalization of each of these dimensions was obtained from the previous literature review. Specifically, some of the subscales of the empirical studies by Gargallo et al. (2009), and Durán-Aponte and Arias-Gómez (2015), were adapted. In the first case, the reliability of the questionnaire showed a Cronbach's α coefficient of .897 (Gargallo et al., 2009), while in the second case it was .87 (Durán-Aponte & Arias-Gómez, 2015). In addition, expert judgments were carried out in these studies to guarantee the construct and content validity of the indicators. All these constructs were measured from perceptual data reported by the group of students participating in the research.

Intrinsic motivation for learning (INM) is the first variable to be analyzed. It includes five indicators, namely, facing new challenges, satisfaction in solving difficult tasks, interest in solving complex problems, the profitable use of existing knowledge and, finally, the feeling of well-being when overcoming obstacles or failures. This set of indicators was taken from the 'intrinsic motivation' subscale of the study by Gargallo et al. (2009).

Secondly, four indicators were established to measure academic expectations (ACEX), which included the following contents: the feeling of security when assimilating the most difficult contents of the subjects, the perceived ability to learn the basic concepts that are taught in the subjects, the perception of being able to achieve those stated purposes and, lastly, the conviction that they have the necessary competences to master the skills taught in the subjects of the curriculum. This set of indicators was taken from the 'self-

Table 1
Sociodemographic characteristics in the sample ($N = 455$).

| Variables | <i>n</i> | % of the sample |
|--|------------|-----------------|
| Academic course | | |
| 1° | 125 | 27.5 |
| 2° | 149 | 32.7 |
| 3° | 144 | 31.6 |
| 4° | 37 | 8.1 |
| Sex | | |
| Men | 116 | 25.49 |
| Women | 339 | 74.50 |
| Age | | |
| 18 years | 38 | 8.4 |
| 19 years | 90 | 19.8 |
| 20 years | 75 | 16.5 |
| 21 years | 87 | 19.1 |
| 22 years | 73 | 16.0 |
| 23 years | 38 | 8.4 |
| 24 years | 17 | 3.7 |
| 25 years or more | 37 | 8.1 |
| Reason for access to the Degree | | |
| It's the one I like. | 341 | 75.1 |
| I like the job that I will get | 79 | 17.4 |
| I could not access another | 34 | 7.5 |
| Total | 455 | 100 |

efficacy and expectatios' subscale of the study by Gargallo et al. (2009).

The perceived utility of academic tasks (UTTA) was defined with three indicators that included, first, the perception of being able to apply what was learned in other subjects and in the future professional career; second, the perceived importance of learning the contents of the subjects for their value in the initial training of the students; and, third and last, consideration of the relevance of understanding the topics set out in the curriculum. This set of indicators was taken from the 'task value' subscale of the study by Gargallo et al. (2009).

On the other hand, three items were used to measure emotional well-being (EMWB). More specifically, the indicators expressed the following content: "I usually feel emotionally well", "my mood is usually positive and I feel good" and "I maintain an appropriate state of mind to study". This set of indicators was taken from the 'emotional well-being' subscale of the study by Gargallo et al. (2009).

The last variable analyzed in this study refers to the desire for social reinforcement (SREI) from the environment. A total of five indicators were included to define this dimension: the desire to be valued by peers, the desire not to be rejected by any teacher, the desire for their intelligence to be valued by other people, the desire to be praised by the family and teachers, and finally the desire not to receive contempt from other colleagues. This set of indicators was taken from the 'social reinforcement goals' subscale of the questionnaire used in the study by Durán-Aponte and Arias-Gómez (2015).

For all the dimensions of the study, the items were measured on a Likert-type evaluation scale with five possible responses (1-5), since we tried to respect the measure originally adopted by their authors. The number "5" indicated "totally agree" with the indicator, while "1" meant "totally disagree". In sum, in this second part the participants responded to 20 items. The questionnaire was sent to the participants by email and answered on an online platform.

3.3. Data analysis

The methodology that supports this study corresponds to Structural Equation Models (SEM) with latent variables. This approach makes it possible to estimate and evaluate measurement models and structural models based on solid statistics (Bentler, 2006). The models in this study were estimated with the MPLUS version 7.4 software package, using robust maximum likelihood (Muthén & Muthén, 1998, 2007). These estimations were carried out considering the statistics and robust goodness-of-fit indexes as a reference to the multivariate non-normality. In this regard, the corrections proposed by Satorra and Bentler (1994) were fixed for the goodness of fit statistics and, in turn, for the estimates of the standard errors of the estimated parameters.

First, the measurement model was tested. For this purpose a confirmatory factor analysis was carried out with the indicators of the theoretical constructs arranged. The standardized factor loads of the observed indicators are considered evidence of the reliability of the latent variables. As a consequence, their explained variance coefficients should indicate an evident relationship with the underlying factor (or latent variable) ($R^2 > 0.50$). The measures of precision of the latent variables were evaluated using the AVE and CRC coefficients. Regarding the AVE coefficient of Fornell and Larcker (1981), a minimum reference value of 0.50 was taken, whereas a minimum value of 0.70 was considered adequate for McDonald's (1985) omega coefficient (CRC).

After that, the structural model with latent variables was evaluated taking different statistics and goodness-of-fit indexes of the global modeling adjustment as a reference. Specifically, the robust Satorra-Bentler χ^2 statistic was specified for the model. The RMSEA, SRMR and CFI were also used. According to Hu and Bentler (1999), a RMSEA value in a range between 0.05 and 0.10 indicates an adequate fit. On the other hand, the values for the SRMR can vary from 0 to 1, although those models with a more adequate fit obtain values below 0.05. Even so, and as pointed out by Hair et al. (2006), a value as high as 0.08 could be considered within the limits of the acceptable. Finally, a CFI value greater than or equal to 0.95 would demonstrate a good fit (Hooper et al., 2008).

It was proposed that the relationship between the variables should satisfy the following conditions: first, emotional well-being and desire for social reinforcement have a direct effect on the intrinsic motivation to learn. Second, this intrinsic motivation influences the establishment of positive academic goals. And, finally, intrinsic motivation also has an indirect effect on academic expectations as the

Table 2

Descriptive statistic and measurement model for emotional well-being, social reinforcement and intrinsic motivation.

| | M (Sd) | EMWB | SREI | INM |
|---|-------------|------|------|-----|
| EMWB1. I usually feel good emotionally. | 3.13 (1.11) | .60 | | |
| EMWB2. Usually my mood is positive. | 3.59 (1.00) | .80 | | |
| EMWB3. I maintain an appropriate frame of mind to study. | 3.63 (.91) | .90 | | |
| SREI1. I want to be valued by my friends. | 2.09 (.98) | | .72 | |
| SREI2. I do not want any teacher to reject me. | 2.01 (.96) | | .77 | |
| SREI3. I want people to see how smart I am. | 2.00 (.97) | | .83 | |
| SREI4. I want to be praised by my parents and teachers. | 2.32 (1.10) | | .76 | |
| SREI5. I do not want my colleagues to make fun of me. | 1.57 (.78) | | .61 | |
| INM1. I study because I like the challenge of difficult problems. | 3.11 (.96) | | | .71 |
| INM2. I study because I feel good when I solve difficult tasks. | 3.58 (.92) | | | .79 |
| INM3. I study because I find it interesting to solve problems. | 3.65 (.88) | | | .79 |
| INM4. I study because I like to use my knowledge. | 3.83 (.85) | | | .63 |
| INM5. I study because I feel good when I overcome obstacles. | 4.19 (.79) | | | .60 |
| α | | .80 | .86 | .83 |
| CRC | | .77 | .74 | .70 |
| AVE | | .59 | .55 | .49 |

perceived utility of the tasks performed in the university environment is increased. Such perceived utility directly influences favorable academic expectations. In all these effects, the following control variables were considered: gender, academic year, and reason for accessing the degree.

4. Results

4.1. Descriptive statistics

Table 2 shows that the emotional well-being of the sample of students participating in the study varies at intermediate levels on a scale of 1 to 5. The indicator rated with the highest score refers to general emotional well-being (M = 3.77, SD = .88), followed by maintaining an appropriate state of mind for studying and working (M = 4.63, SD = .91). Lastly, there is the perception of a positive state of mind and a sense of habitual well-being (M = 3.59, SD = 1.00). On the other hand, and regarding the desire for social reinforcement that university students, it should be noted that the scores of the items were slightly below the average. The desire to be praised by their parents and teachers received the highest average rating (M = 2.32, SD = 1.10), while the desire not to be teased by peers was the indicator with the lowest score (M = 1.57, SD = .78). Situated between the two, there is the desire that people value their intelligence (M = 2.00, SD = .97), the desire not to be rejected by any teacher (M = 2.01, SD = .96), and the desire to be valued by friends (M = 2.09, SD = .98).

In general terms, these students' intrinsic motivation for learning is high, since mean values of the items higher than 3 are detected on a scale of 1 to 5. Specifically, the good feelings perceived by students when they overcome certain obstacles or failures received the highest mean score (M = 4.19, SD = .79). The lowest score was obtained in the challenge linked to solving difficult problems (M = 3.11, SD = .96). Regarding the descriptive statistics of academic expectations, the means of the indicators were high, all of them exceeding 3.50. Hence, students consider themselves widely capable of learning the basic concepts of the different subjects (M = 4.24, SD = .60). However, the average score decreases when referring to the most difficult content of the subjects (M = 3.59, SD = .91). Finally, the average values of the perceived utility of the task are above 4, on a scale of 1 to 5. The generalization of the content learned in some subjects to others and to their professional future was positively assessed (M = 4.15, SD = .80), as were learning the contents of the subjects for the value they have for training (M = 4.00, SD = .78) and, lastly, the importance of understanding of the contents of the subjects (M = 4.17, SD = .73).

4.2. Measurement model

To estimate the proposed measurement structure, a confirmatory factor analysis was defined, which would correspond to the measurement model. The statistics and goodness of fit indexes of these measurement models (Tables 2 and 3) led to these structures not being rejected. Thus, the confirmatory analyses show a reasonable fit ($\chi^2[160] = 273.68$, RMSEA = .04, SRMR = .04, CFI = .96). Considering the parameter estimates, there is evidence of reliability and convergent validity. The factor loads are significant. Finally, the reliability coefficients of the latent variables exceed the minimum cut-off points, while the minimum value of AVE is .49 and that of CCR is .70. Table 4 shows the correlations between the questionnaire indicators, and Table 5 shows the correlations between the latent variables of the study.

4.3. SEM analysis

Once the dimensional structure of the latent variables had been evaluated, the hypothesized effects in the theoretical model were analyzed. Table 6 shows three proposed models: in Model 0, the effects of the personal and social variables on the latent variables are presented. In Model 1, the effects between the latent variables are observed without including the control variables. Finally, in Model 2 the complete structural model has been included in which the set of hypothesized relationships between the latent variables and the effects of the control variables have been tested. In this Model 2, the goodness-of-fit statistics are reasonable enough and allow us to consider that the global model has a good fit ($\chi^2 [255] = 435.76$, RMSEA = .04, SRMR = .05, CFI = .94).

Firstly, the positive and statistically significant effect that emotional well-being and the desire for social reinforcement have on the

Table 3
Descriptive statistic and measurement model for utility of academic tasks and academic expectations.

| | M (Sd) | UTTA | ACEX |
|---|------------|------|------|
| UTTA1. Transfer of what has been learned to other subjects future. | 4.15 (.80) | .69 | |
| UTTA2. Value of the content of the subjects for my training. | 4.00 (.78) | .85 | |
| UTTA3. Importance of understanding the contents of the subjects. | 4.17 (.73) | .64 | |
| ACEX1. I can understand the most difficult content of the subjects. | 3.59 (.91) | | .67 |
| ACEX2. I can learn the basic concepts of the subjects. | 4.24 (.60) | | .68 |
| ACEX3. I am able to achieve in these studies what I propose. | 4.01 (.74) | | .76 |
| ACEX4. I can master the skills teachers teach me in subjects. | 3.98 (.70) | | .77 |
| α | | .76 | .80 |
| CRC | | .73 | .72 |
| AVE | | .53 | .52 |

Table 4
Correlations between the latent variables of the study.

| | EMWB1 | EMWB2 | EMWB3 | SREI1 | SREI2 | SREI3 | SREI4 | SREI5 | ACEX1 | ACEX2 | ACEX3 | ACEX4 | UTTA1 | UTTA2 | UTTA3 | INM1 | INM2 | INM3 | INM4 | INM5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| EMWB1 | 1.00 | | | | | | | | | | | | | | | | | | | |
| EMWB2 | .51 | 1.00 | | | | | | | | | | | | | | | | | | |
| EMWB3 | .50 | .71 | 1.00 | | | | | | | | | | | | | | | | | |
| SREI1 | .06 | -.03 | .02 | 1.00 | | | | | | | | | | | | | | | | |
| SREI2 | .04 | -.08 | -.04 | .63 | 1.00 | | | | | | | | | | | | | | | |
| SREI3 | .05 | -.05 | -.01 | .59 | .61 | 1.00 | | | | | | | | | | | | | | |
| SREI4 | .04 | -.04 | -.01 | .52 | .56 | .67 | 1.00 | | | | | | | | | | | | | |
| SREI5 | .03 | -.09 | -.07 | .37 | .49 | .52 | .47 | 1.00 | | | | | | | | | | | | |
| ACEX1 | .21 | .30 | .27 | .02 | -.03 | .02 | -.07 | -.02 | 1.00 | | | | | | | | | | | |
| ACEX2 | .15 | .19 | .31 | -.06 | -.11 | -.02 | -.06 | -.10 | .48 | 1.00 | | | | | | | | | | |
| ACEX3 | .17 | .21 | .32 | -.03 | -.07 | -.01 | -.08 | -.11 | .50 | .49 | 1.00 | | | | | | | | | |
| ACEX4 | .09 | .21 | .28 | -.01 | -.08 | -.06 | -.07 | -.10 | .51 | .52 | .61 | 1.00 | | | | | | | | |
| UTTA1 | .09 | .08 | .15 | .05 | .08 | .05 | .08 | -.01 | .03 | .19 | .13 | .14 | 1.00 | | | | | | | |
| UTTA2 | .12 | .12 | .18 | .02 | -.03 | .02 | .05 | -.04 | .13 | .29 | .20 | .18 | .60 | 1.00 | | | | | | |
| UTTA3 | .12 | .12 | .21 | .01 | .02 | .01 | .01 | .01 | .17 | .25 | .23 | .23 | .42 | .55 | 1.00 | | | | | |
| INM1 | .12 | .20 | .29 | .09 | .07 | .05 | .02 | .01 | .19 | .15 | .16 | .14 | .17 | .20 | .17 | 1.00 | | | | |
| INM2 | .21 | .23 | .33 | .14 | .08 | .13 | .11 | .06 | .19 | .24 | .17 | .17 | .18 | .19 | .19 | .61 | 1.00 | | | |
| INM3 | .10 | .15 | .25 | .17 | .09 | .10 | .09 | .02 | .11 | .17 | .13 | .10 | .24 | .29 | .25 | .55 | .62 | 1.00 | | |
| INM4 | .03 | .07 | .19 | .06 | .03 | .06 | .06 | .02 | .07 | .16 | .16 | .14 | .25 | .19 | .20 | .39 | .46 | .53 | 1.00 | |
| INM5 | .02 | .05 | .20 | .12 | .05 | .10 | .12 | -.02 | .01 | .13 | .16 | .13 | .22 | .23 | .14 | .36 | .41 | .43 | .52 | 1.00 |

Table 5
Correlations between the latent variables of the study.

| | EMWB | SREI | INM | UTTA | ACEX |
|------|------|------|------|------|------|
| EMWB | 1.00 | | | | |
| SREI | -.04 | 1.00 | | | |
| INM | .36 | .15 | 1.00 | | |
| UTTA | .24 | .03 | .38 | 1.00 | |
| ACEX | .43 | -.09 | .28 | .33 | 1.00 |

Table 6
Results of the structural model.

| | EMWB | SREI | INM | UTTA | ACEX |
|--------------------------------|--|-------|--------|--------|-------|
| MODEL 0 | | | | | |
| Sex | | | | | |
| Women | .00 | .07 | .09 | .09 | -.06 |
| Academic course | | | | | |
| 2st | -.13 | .11 | .10 | .02 | -.13 |
| 3st | -.30*** | .08 | -.01 | -.08 | -.17* |
| 4st | -.26*** | -.04 | -.14 | -.13 | -.10 |
| Reason for access | | | | | |
| I like the job that I will get | .03 | -.15* | .16* | .18* | .07 |
| I could not access another | -.01 | .06 | .10 | .08 | .08 |
| R ² | .04 | .06 | .04 | .03 | .01 |
| Goodness of Fit: | χ^2 [250]=396.77 RMSEA=.04 CFI=.95 SRMR=.04 | | | | |
| MODEL 1 | | | | | |
| EMWB | | | .38*** | | |
| SREI | | | .16*** | | |
| INM | | | | .39*** | .20** |
| UTTA | | | | | .25** |
| R ² | | | .16 | .15 | .14 |
| Goodness of Fit: | χ^2 [164]=312.71 RMSEA=.05 CFI=.95 SRMR=.06 | | | | |
| MODEL 2 | | | | | |
| Sex | | | | | |
| Women | .00 | .07 | .08 | .06 | -.10 |
| Academic course | | | | | |
| 2st | -.12 | .11 | .13 | .02 | -.16* |
| 3st | -.30*** | .08 | .08 | -.07 | -.15* |
| 4st | -.26*** | -.04 | -.04 | -.07 | -.03 |
| Reason for access | | | | | |
| I like the job that I will get | .03 | -.15* | .17* | .18* | -.01 |
| I could not access another | -.01 | .06 | .09 | .05 | .04 |
| EMWB | | | .37*** | | |
| SREI | | | .16*** | | |
| INM | | | | .37*** | .21** |
| UTTA | | | | | .26** |
| R ² | .04 | .06 | .20 | .17 | .16 |
| Goodness of Fit: | χ^2 [255]=435.76 RMSEA=.04 CFI=.94 SRMR=.05 | | | | |

intrinsic motivation of university students' learning is observed (EMWB: $\beta = .37, p < .00$; SREI: $\beta = .16, p < .00$). This intrinsic motivation is strongly and positively associated with the perceived utility of the tasks ($\beta = .37, p < .00$) and with academic expectations ($\beta = .21, p < .01$). In turn, the perceived utility of the tasks also predicts more positive academic expectations ($\beta = .26, p < .01$). On interpreting these relationships, it can be deduced that the more favorable the emotional well-being and the desire for social reinforcement perceived by Higher Education students are, the more positive the intrinsic motivation for learning will be. In parallel, a high motivation for learning will lead to better academic expectations.

Considering the direct effects of the control variables on each of the constructs in the model, no statistically significant differences were observed between women and men. On the other hand, and compared to first-year university students, the emotional well-being of the students enrolled in the last years is significantly lower (3rd year: $-.30, p < .00$; 4th year: $-.26, p < .00$). In the desire for social reinforcement, certain differences have also been found, specifically depending on the reason why these students have accessed the degree course. The desire for social reinforcement perceived by those who chose to study the Teaching Degree because they were attracted to employment, was less ($-.15, p < .05$) than that perceived by the students who accessed the degree due to vocational reasons. In turn, the employment-oriented students have shown a higher intrinsic motivation ($.17, p < .05$) when compared to the students who agreed because they liked the degree. Finally, there are statistically significant differences in the academic expectations of the university students of the intermediate courses (2nd and 3rd), compared to the first course (2nd course: $-.16, p < .05$; 3rd course: $-.15, p < .05$). It can be seen that the effects of the control variables are practically identical in Models 0 and 2 proposed. Therefore, the stability of the results shows the robustness of the proposed model.

4.4. Mediation analyses

In parallel, the total and specific indirect effects of the predictor variables on the outcome variables were calculated (Table 7). First, the results reveal that the mediating effect of intrinsic motivation on the relationship established between the variables of emotional well-being and desire for social reinforcement, with the perceived utility of the tasks, is significant ($\beta = .15, p < .00, \beta = .06, p < .01$). This fact shows evidence that the effect of emotional well-being and desire for social reinforcement on the perceived utility of the tasks that students perform at university could be increased if the intrinsic motivation for learning was increased.

Intrinsic motivation also significantly but only partially mediates the relationship between emotional well-being and academic expectations ($\beta = .08, p < .01$) and also mediates the relationship between desire for social reinforcement and academic expectations ($\beta = .03, p < .01$). Consequently, in order to increase the effect of emotional well-being and desire for social reinforcement on academic expectations, the need to increase the intrinsic motivation for learning should be emphasized again. On the other hand, a positive indirect effect has been found between intrinsic motivation and academic expectations through the perceived utility of the tasks ($\beta = .10, p < .01$). Therefore, the effect between the two variables (motivation and expectations) will be increased if the first of the two results in a higher perceived utility of the tasks. By including the mediating variable (perceived utility of tasks) in the model, the direct effect of the intrinsic motivation for learning on academic expectations is less than the total effect. Consequently, it would be considered a partial mediation model. Finally, statistically significant indirect effects are observed between the two distal variables (emotional well-being and social reinforcement) on academic expectations through the joint mediations of "intrinsic motivation" and "task utility" ($\beta_{EMWB} = .04, p < .05$) ($\beta_{SREI} = .02, p < .05$). Fig. 2 illustrates a visual synthesis of the direct and indirect effects of the estimated structural model.

5. Discussion

With the intention of answering the research questions raised at the beginning of this study and considering the findings of the same as a whole, these associations between the analyzed variables reflect the diversity of influencing factors that can determine certain academic expectations that a student manifests in a given context. After estimating the measurement and mediation models, the results allow us to contribute a series of relevant conclusions to the literature. First, intrinsic motivation can promote certain academic factors that are, directly or indirectly, associated with performance, as evidenced in the study by Patall et al. (2008). Nevertheless, in this study, high levels of intrinsic motivation have been directly linked to high academic expectations and a higher perceived utility of tasks, in addition, an indirect effect of intrinsic motivation on academic expectations has been found, explained, in part, by the utility of tasks. However, in other studies such as that of Vansteenkiste et al. (2006) it was found that intrinsically motivated learning objectives entailed deeper levels of cognitive processing and a better understanding of learning. For their part, the results of the research by Crumpton and Gregory (2011) led to the conclusion that higher levels of intrinsic motivation were related to a more significant interest in learning and a more active participation in the classroom.

Considering the educational stage in which this study is carried out, intrinsic motivation plays a substantial role because it will determine, among other issues and as Grant (2008) points out, performance, persistence and productivity in future job performance. Furthermore, and taking as a reference the research results of recent years (Ceci & Kumar, 2015; Gao & Edelman, 2016), this type of intrinsic goals for learning also lead to states of happiness and satisfaction with life. Prosocial behaviors that become altruistic behaviors, concern for the well-being of others and the formation of a sense of community have also been linked to intrinsic motivation (Grant, 2008).

The study also found a predictive effect of the intrinsic motivation for learning determined by emotional well-being and by the desire for social reinforcement of the environment. One of the most relevant implications that derives from this refers to the fact that a good emotional state contributes to the achievement of success in academic performance, which is caused by an intrinsic motivation to learn in Higher Education. A clear example of this is seen in previous research (Salami & Ogundokun, 2009), which supports the hypothesis that emotional well-being predicts the behavior and attitude of students (understanding this attitude as intrinsic motivation and self-discipline). Other studies (Van Petegem et al., 2008) have also shown the high correlation between intrinsic motivation and a positive mood, loaded with vitality and personal growth.

From a broader perspective, the effect of emotional well-being and desire for social reinforcement on academic success and expectations has been widely documented in the previous literature (Márquez et al., 2006; Ogundokun & Adeyemo, 2010). In general terms, results have revealed the positive and significant relationships between academic success and the management of emotional competencies, such as the capacity for emotional regulation, problem solving and intrapersonal and interpersonal skills. In addition, the implications of this research include the presence of several indirect effects in which emotional well-being affects other variables

Table 7
Results of the mediation analysis.

| | UTTA | ACEX |
|-------------------------|--|-------|
| INDIRECT EFFECTS | | |
| EMWB | .15*** | .18** |
| SREI | .06** | .03** |
| INM | | .10** |
| Goodness of Fit: | $\chi^2 [255]=435.76$ RMSEA=.04 CFI=.94 SRMR=.05 | |

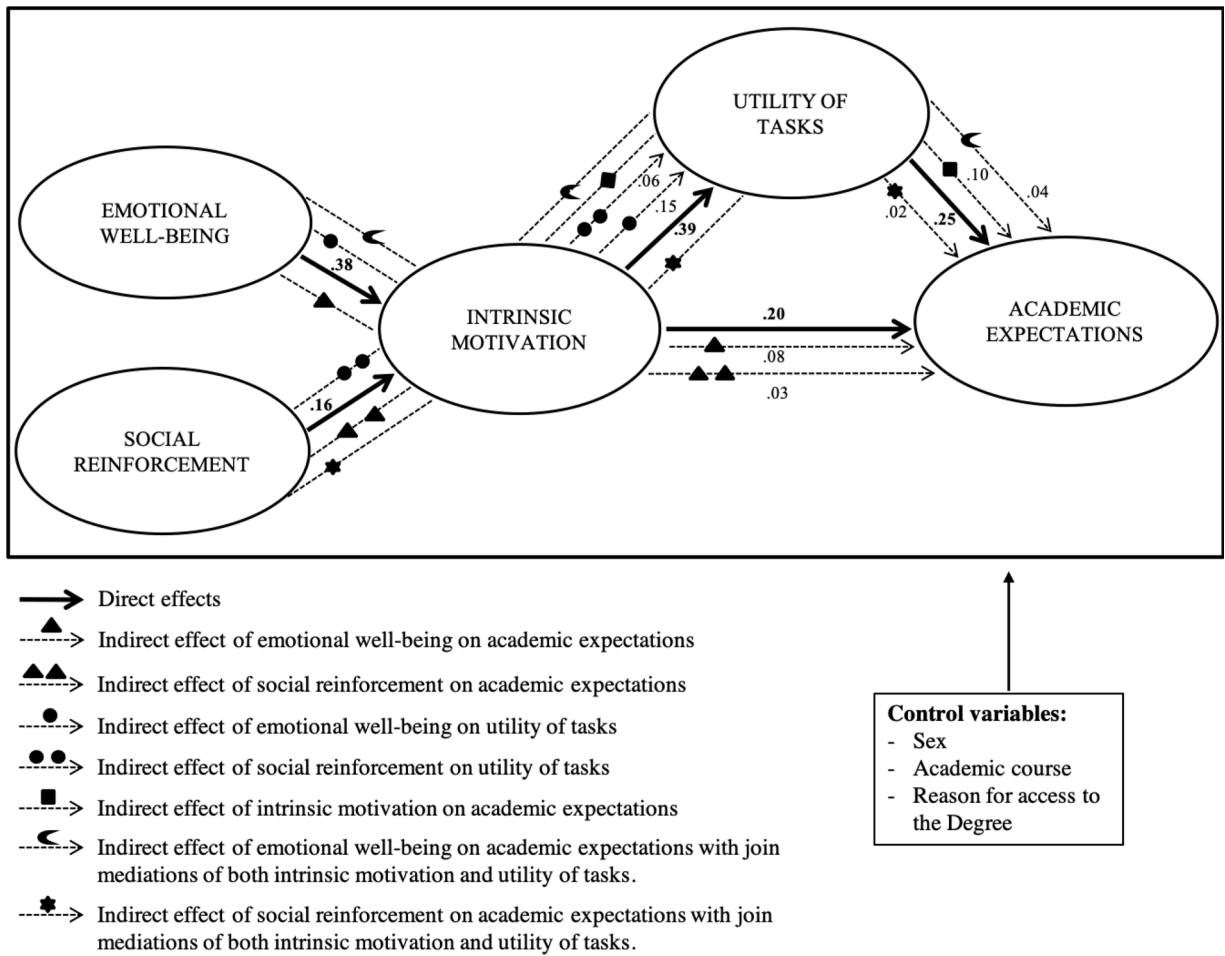


Fig. 2. Diagram of results and effects of the structural model.

such as academic expectations or the utility of tasks. In fact, there is a third indirect effect of emotional well-being on academic expectations, that it is mediated by intrinsic motivation and utility of tasks. Consequently, becoming aware of one’s emotional well-being can imply good academic performance and more favorable attitudes towards learning (Nabi, 2020).

The effects of the desire for social reinforcement are consistent with what was found in the previous literature. In this regard, Emadpoor et al. (2015) found that social reinforcement explained 13% of academic motivation. Along the same lines, other authors (Li et al., 2018) have suggested that achievement and desirable academic performance were influenced by the contextual social conditions and by the social reinforcement that the university students received around them, among other important factors. In this sense, it should be noted that this research has found a direct effect of social reinforcement on intrinsic motivation, that is, a greater social reinforcement will translate into greater intrinsic motivation. Therefore, and as concluded by Emadpoor et al. (2015), the favorable relationships and social environment of university students can stimulate an intrinsic motivation that leads to high academic expectations. Likewise, other indirect effects have been found in this research, these effects relate social reinforcement with academic expectations and utility of tasks. In this way, the important role played by the emotional well-being of university students and the desire for social reinforcement for the achievement of satisfactory academic expectations is highlighted. At this point, it should be noted that the results of the present study should be interpreted with caution. The sampling process was not random because the questionnaires were answered completely voluntarily by those students with a more positive motivation or predisposition. Therefore, these results would have a more limited external validity.

6. Conclusions

Higher Education systems play a very important role in promoting intrinsic motivation and improving the academic expectations of university students (Abeysekera & Dawson, 2015). This intrinsic motivation can be stimulated in many different ways that include the university teaching staff, the social environment that surrounds the students (family environment and friends, for example) and also the action of themselves based on their role as students. In addition, it has been found that emotional well-being and the desire for

social reinforcement are factors that influence intrinsic motivation, homework value, and academic expectations of university students. Therefore, the development of a curriculum in which emotional well-being is a priority will constitute an effective solution to promote the acquisition of emotional strategies among university students that give the university academic process a satisfactory personal, cognitive and social value for all its stakeholders.

Achieving a high degree of emotional well-being can be a very effective resource to ensure intrinsically motivated learning and academic success among Higher Education students (Salami, 2008). The lack of tools and strategies for the development and management of a higher degree of well-being could affect their motivation and performance (Zulkifli et al., 2019). In general terms, some of the most prominent concepts related to emotional well-being are self-motivation, perseverance in desired efforts, impulse control, mood management, empathy and confidence stand out above the rest (Goleman, 1996). Taken together, they promote personal development and allow states of emotional well-being to be achieved.

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