


## ARTICLE

# Identity development and adjustment during emerging adulthood from a gender perspective

Inmaculada Sánchez-Queija | Paula Domínguez-Alarcón  |  
Marta Díez | Águeda Parra

Department of Developmental Psychology and Education, Universidad de Sevilla, Seville, Spain

**Correspondence**

Paula Domínguez-Alarcón, Department of Developmental Psychology and Education, Faculty of Psychology, Universidad de Sevilla, Seville, Spain.

Email: [pdalarcon@us.es](mailto:pdalarcon@us.es)

**Funding information**

Spanish Ministry of Economy and Competitiveness, Grant/Award Number: EDU2013-45687-R; Spanish Ministry of Science, Innovation and Universities; European Regional Development Fund, Grant/Award Number: RTI2018-097405-B-I00; Ministry of Economic Transformation, Industry, Knowledge and Universities of the Junta de Andalucía, Grant/Award Number: PROYEXCEL\_00766; European Social Fund; Junta de Andalucía, Grant/Award Number: 2019-Line\_2,PAIDI\_2020

**Abstract**

Identity development is a key task during emerging adulthood. The goals of the present study are to validate the Spanish version of the *Dimensions of Identity Development Scale* (DIDS) and to explore the relationship between identity dimensions and adjustment (flourishing and distress), from a gender perspective. The sample comprised 1502 Spanish university students (60.1% women). The results reveal that the DIDS is valid in the Spanish context and that significant gender differences were observed in some dimensions of identity development, with men scoring higher for identification with commitment and women scoring higher for exploration in depth and ruminative exploration. Finally, both dimensions of commitment and ruminative exploration had a stronger effect on men's than on women's adjustment, suggesting that the integration of the self has more impact on men's outcomes than on women's. These findings highlight the need to include the gender perspective in all future research in order to gain deeper insight into the relationship between the identity development process and adjustment during emerging adulthood.

**KEYWORDS**

emerging adulthood, flourishing, identity, psychological distress, validation

## IDENTITY THEORY AND THE EVOLUTION OF IDENTITY MODELS

The identity development process is a key developmental task in the transition from childhood to adulthood (Erikson, 1968). Identity development has always been considered an essential task during

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial License](https://creativecommons.org/licenses/by-nc/4.0/), which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2023 The Authors. *British Journal of Developmental Psychology* published by John Wiley & Sons Ltd on behalf of British Psychological Society.

### Statement of contribution

- It is known that identity development is related to well-being and adjustment in adolescents and emerging adults, but few studies in Spain address this matter. We aimed to explore that relationship in Spain during emerging adulthood from a gender perspective, priorly validating the *Dimensions of Identity Development Scale* (DIDS) to guarantee its validity and reliability in the Spanish population.
- DIDS is a valid and reliable measure for its use in the Spanish population.
- Identity development is related to well-being and adjustment in the Spanish population, with similarities and differences regarding other worldwide populations.
- Observed gender differences reflect the need to deepen in the study of identity development from a gender perspective.

adolescence, although it was also widely accepted that the process may continue during the third decade of life, particularly among those with a high socio-cultural status who could afford to continue exploring for longer (Erikson, 1968; Marcia, 1966). In recent years, however, globalization and the socio-political, economic, cultural and historical changes that have taken place in industrialized countries have delayed the acquisition of adult roles and commitments among the general population. This has resulted in the definition of a new developmental stage between the ages of 18 and 29 years known as *emerging adulthood* (Arnett, 2000, 2014) and the consideration of identity development as one of the key characteristics of this stage (Arnett, 2000, 2014; Schwartz et al., 2013). Understanding the impact of social and cultural changes on the identity development of emerging adults has been, and continues to be, one of the fundamental goals of 21st-century research (Arnett, 2015; Schwartz et al., 2013). However, most recent research into identity has been conducted in the United States and some European countries, with this field being largely unexplored in Spain.

Erikson's seminal work was later continued by his disciple Marcia, who developed a taxonomy dividing people into four different *identity status* groups in accordance with the presence or absence of two dimensions: *commitment* and *exploration*. *Exploration* is understood as individuals' active search for options to commit to, and *commitment* is understood as the individual's choice of those alternatives that best respond to their goals, values and interests, and which give them a sense of purpose and direction in life (Marcia, 1966; Marcia & Adelson, 1980). The four statuses are *identity diffusion*, or absence of exploration and commitment; *identity moratorium*, or exploration without commitment; *identity foreclosure*, or commitment without prior exploration; and *identity achievement*, or presence of exploration and commitment.

Marcia's model had some limitations in terms of explaining identity construction in the long term, since it considered identity to be an outcome achieved at a specific point in one's life. However, further research revealed that identity resolution is far from being a closed result; rather, it is a dynamic process that can fluctuate over the years. Individuals may shift status and change commitments (or not) due to the diverse events and experiences that they face in their lifespan, particularly during emerging adulthood. In light of these findings, this model has been expanded over recent decades. One avenue of research has sought to explore the meaning of commitment and exploration in greater depth (Bosma, 1985; Grotevant, 1987; Grotevant et al., 1982; Luyckx et al., 2005, 2008; Luyckx, Goossens, et al., 2006; Meeus, 1996; Meeus et al., 2002). In these models, the *commitment* dimension was divided into *commitment making*, defined as the choice of one or more key commitments in the development of one's identity, and *identification with commitment*, which reflects the degree to which a commitment is aligned with individual values, projects, goals, and ideals (Bosma, 1985). Other authors distinguish between two types of exploration (Luyckx et al., 2005, 2008; Luyckx, Goossens, et al., 2006): *exploration in breadth*, which is similar to the exploration defined by Marcia and typically takes place prior to commitment making, and *exploration in depth*, which refers to an individual's reassessment of their commitment and

may result in identification with commitment. Those findings led to the development of the *Dual-Cycle Model* (Luyckx et al., 2005), a comprehensive proposal that defines identity development as the result of two dynamic, interrelated and iterative cycles. The first cycle involves *exploration in breadth* and *commitment making*, and is similar to Marcia's proposal; the second involves *exploration in depth* and *identification with commitment*, during which individuals reassess their initial commitments in order to determine whether they identify with them, or not (Luyckx et al., 2005; Luyckx, Goossens, et al., 2006). This model is complemented by a third type of exploration, known as *ruminative exploration*, characterized by the presence of unproductive perfectionism behaviours and continuous rumination about the negative aspects of the explored opinions, alongside the feeling of being 'stuck' and the fear of committing to the 'wrong' option (Luyckx et al., 2008). High scores for ruminative exploration have been found among people with moratorium status, as well as, to a lesser extent, diffusion status, which suggests that this strategy is associated with an identity development process that is far removed from identity achievement and consolidation (Luyckx et al., 2008).

The Dual-Cycle Model has been studied in some European countries (Belgium, Luyckx et al., 2008; Finland, Flunger et al., 2016; France, Zimmermann et al., 2014; Greece, Mastrotheodoros & Motti-Stefanidi, 2017; Hungary, Rivnyák et al., 2022; Italy, Crocetti et al., 2011, and The Netherlands, van Doeselaar et al., 2020), United States (Schwartz et al., 2011) and other countries (Georgia, Skhirtladze et al., 2016; Ladakh, Ozer et al., 2019a; Ozer et al., 2019b), but it has not been validated in Spanish-speaking countries yet. For that reason, one of the aims of this research is the validation of the DIDS in Spain.

## LINKS BETWEEN IDENTITY DEVELOPMENT AND ADJUSTMENT

The identity development process has been associated in the extant literature with a range of different personal adjustment variables (Brinthaup & Scheier, 2022). The role of commitment seems to be fairly clear, with a negative association being found between this variable and anxiety and/or depression, and a positive association being found between statuses involving high commitment levels (achievement and foreclosure) and well-being. Positive associations have also been found between commitment making/identification with commitment and self-esteem (Luyckx, Klimstra, Duriez, Van Petegem, Beyers, Teppers, & Goossens, 2013), indicating that both statuses foster good adjustment (Schwartz et al., 2015).

There is less agreement regarding the association between exploration and adjustment. As Schwartz et al. (2011) state, early studies linked the moratorium status (characterized by exploration) with low self-esteem, low well-being and a weaker sense of purpose in life. A similar conclusion was reached by more recent studies, which found that exploration in breadth and exploration in depth correlated positively with symptoms of anxiety and depression (Luyckx, Soenens, & Goossens, 2006), and negatively with self-esteem (study 2 by Luyckx, Klimstra, Duriez, Van Petegem, Beyers, Teppers, & Goossens, 2013). However, exploration is defined by other authors as an adaptive dimension. One example of this is the study by Baggio et al. (2017), which reported a negative correlation between exploration and depression, and a positive correlation between exploration and life satisfaction. Finally, recent studies have failed to find any association at all between exploration (both in depth and in breadth) and depression during emerging adulthood (Luyckx, Klimstra, Duriez, Van Petegem, & Beyers, 2013). It was these inconsistencies that prompted the inclusion of ruminative exploration in the Dual-Cycle Model (Luyckx et al., 2008), under the premise that exploration concealed different sub-dimensions that needed to be defined in order to enable a better understanding of identity development. Ruminative exploration has been found to be consistently and positively associated with anxiety and depression, and negatively associated with self-esteem (Luyckx, Klimstra, Duriez, Van Petegem, & Beyers, 2013; Luyckx, Klimstra, Schwartz, & Duriez, 2013). Therefore, not all the dimensions of exploration have the same relationship with the different dimensions of psychological well-being and distress.

## IDENTITY DEVELOPMENT FROM A GENDER PERSPECTIVE

Although the study and promotion of gender equality have attracted an increasing amount of interest over recent decades (United Nations, 2015), most current research into identity fails to provide gender disaggregated data, and studies offer no in-depth analyses of the differences and similarities which exist between men and women. Traditional gender roles influence the construction of identity. The initial works by Erikson and Marcia identified differences between men and women in terms of the reference domains they used to define their identity (Erikson, 1968; Marcia & Adelson, 1980). Ideological and professional domains were considered key domains for men's identity development, whereas all things related to the maintenance of interpersonal relationships were defined as key domains for women. According to these same authors, the fact that interpersonal relationships are a key element in women's identity development process may indicate that this process lasts longer among women than among men (Erikson, 1968; Marcia & Adelson, 1980). Indeed, classic postulates state that men's identity precedes intimacy, whereas among women, the opposite is true (Erikson, 1968; Gilligan, 1982), a position that supports the aforementioned hypothesis. A third aspect in which men and women may differ is in the degree of exploration and experimentation in which they engage. Given that concepts such as individuation, agency and independence stand out in the construction of the traditional male identity, whereas everything related to care and communion with others is highlighted in relation to the traditional female identity, one may expect exploration to be significantly more facilitated for men than for women, a circumstance that impacts both genders' respective identity development processes.

As Cramer (2000) states, the first studies on identity found a higher proportion of men than women in the identity achievement status group, indicating (by definition) that men had higher levels of exploration and commitment, and other data also support the idea of a higher level of commitment and identification with commitment among men (Bogaerts et al., 2019). However, studies based on the Dual-Cycle Model have failed to find any gender differences in the DIDS dimensions (study 1 by Luyckx et al., 2008) or report higher levels of exploration in depth and ruminative exploration among women (Crocetti et al., 2013, 2015; study 2 by Luyckx et al., 2008; Merrill et al., 2016), along with higher commitment scores (Crocetti et al., 2015; Johnson et al., 2012; Morsunbul et al., 2014). This variability in the results reported may reflect the psychosocial nature of the *identity* construct. In other words, the heterogeneity of the results obtained to date may reflect socio-historical changes that have occurred in relation to gender roles, demonstrating the need to continue exploring identity development from a gender perspective in different contexts and in the present day.

The gap detected in the literature on the Dual-Cycle Model regarding gender differences is even greater in relation to the association between identity and the various indicators of adjustment. To the best of our knowledge, only two studies have sought to analyse this relationship and moreover, do so within the framework of different theoretical models. In a North American sample, Ritchie et al. (2013) found that ruminative exploration affected men's well-being more negatively than women's, and that whereas exploration decreased externalizing problems among women, it increased them among men. In both cases, the effect sizes were small. No gender differences were found in the association between exploration and well-being, ruminative exploration and externalizing problems, commitment and well-being, and commitment and externalizing problems. For their part, and working within the theoretical framework of identity styles, Berzonsky and Kinney (2019) found no gender differences in the association between different identity styles and depression.

## THE PRESENT STUDY

The present study analyses different aspects of identity development from the perspective of the Dual-Cycle Model in a sample of emerging adult students studying at Spanish universities. Spain

is one of the countries in Europe in which young people take the longest to become economically independent and adopt adult roles (Eurostat, 2022). This is reflected in the average age at which they leave the parental home, 30.3 years (29.5 years among women and 31 years among men). This age is nearly 4 years above the average age for youth across all European Union countries, which stands at 26.4 years (Eurostat, 2022). This disparity could be attributed to economic precariousness and the high rates of youth job instability and unemployment in Spain (INE, 2022). The characteristics of this socioeconomic context may delay young people's acquisition of adult roles and hamper the process of identity maturation, structuration and consolidation in the medium and long term. Bearing in mind the almost total lack of studies focusing on identity development in Spain and the specific characteristics of its youth population outlined in the previous paragraph, *Aim 1* was to validate the *Dimensions of Identity Development Scale (DIDS)* in a Spanish sample. *Aim 2* was to explore gender differences in the dimensions of the Dual-Model Cycle and *Aim 3* was to explore the association between said dimensions and two indicators of adjustment (*flourishing* and *general distress*), focusing particularly on the moderating role of gender. In the light of previous results described in the literature (Crocetti et al., 2011, 2013, 2015), we expected the DIDS to be valid in the Spanish context. Regarding aims 2 and 3, and due to the inconclusiveness of previous research findings, no specific hypotheses were established.

## METHOD

### Sample

Participants were 1502 students (39.9% men and 60.1% women) from the Universities of Sevilla and País Vasco. The sample was drawn from all five of the principal knowledge areas: Arts and Humanities, Social and Legal Science, Science, Health Science and Engineering, and Architecture. Ages ranged between 18 and 29 years ( $M = 20.32$ ,  $SD = 2.13$ ). The distribution of the sample in terms of socioeconomic status was as follows: 15.8% had a low, 70.1% a medium and 14.1% a high socioeconomic status.

### Instruments

The *sociodemographic variables* gathered were gender, age, socioeconomic status, knowledge area and university. Socioeconomic status was estimated by a question with six possible answers, ranging from 1. *We currently have trouble getting to the end of the month* to 6. *We have no financial worries*. Values 1 and 2 correspond to the *Low income* group, values 3 and 4 to the *Medium income* group and values 5 and 6 to the *High income* group.

### Identity

The *Dimensions of Identity Development Scale (DIDS)* by Luyckx et al. (2008) was used to measure identity development. This instrument comprises 25 items rated on a 5-point Likert-type scale that measure five subscales: *Commitment making* (CM, e.g., 'Decided on the direction I want to follow in life';  $\alpha = .91$ ), *Identification with commitment* (IC, e.g., 'Future plans give me self-confidence';  $\alpha = .90$ ), *Exploration in breadth* (EB, e.g., 'Try to find out which lifestyle would be good for me';  $\alpha = .86$ ), *Exploration in depth* (ED, e.g., 'Think about the future plans I have made';  $\alpha = .79$ ) and *Ruminative exploration* (RE, e.g., 'Doubtful about what I really want to achieve in life';  $\alpha = .85$ ).

## Well-being/flourishing

To measure well-being, participants completed the Spanish version (De la Fuente et al., 2017) of the *Flourishing Scale* (Diener et al., 2010). This instrument assesses an individual's level of flourishing using eight items rated on a 7-point Likert-type scale (e.g., 'I lead a purposeful and meaningful life'). The scale had an overall reliability value of  $\alpha = .81$ .

## Distress

The Spanish version (Bados et al., 2005) of the *Depression Anxiety Stress Scales* (DASS-21), developed by Lovibond and Lovibond (1995), was used to measure distress. This instrument comprises 21 items rated on a 4-point Likert-type scale (e.g., 'I felt down-hearted and blue';  $\alpha = .94$ ).

## Procedure

We contacted faculty at the Universities of Sevilla and País Vasco to explain the purpose of the study and request the participation of their students. The data were collected during class time. The members of the research team explained the aims of the study to students and administered the questionnaire in paper format. Students completed the questionnaire voluntarily, anonymously and after having been assured that they could withdraw at any time. All the students present at the time completed the questionnaire. The study was approved by the Andalusia Biomedical Research Ethic Coordinator Committee.

## Analysis plan

To evaluate the validity of the DIDS, a confirmatory factor analysis (CFA) was performed using Lisrel 8.0 and the RML (*Robust Maximum Likelihood*) estimator. With samples comprising over 250 participants and with 25 variables, the following values are required for a model to be deemed to have a good fit: a NNFI of over .92, a CFI of over .92 and an RMSEA of under .07 (Hair et al., 2009). However, the fit of the model may still be deemed acceptable if the RMSEA value is lower than .10 (Browne & Cudeck, 1992). Next, a one-way ANOVA was performed using the IBM SPSS v26 program to analyse gender differences in the five dimensions of the DIDS, calculating the effect size also. This was followed by correlational analyses with the General Distress and Flourishing scales and the DIDS dimensions. Effect sizes were interpreted bearing in mind the fact that, for the Pearson correlation and Cohen's  $d$ , values of between .00 and .05 and between .0 and .1 (respectively) are considered indicative of a negligible effect size, values between .10 and .20 and between .1 and .4 (respectively) are considered indicative of small effect size, values between .24 and .33 and between .5 and .7 (respectively), are deemed to indicate a medium effect size and values of over .37 and .8 (respectively) are deemed to indicate large effect sizes (Cohen, 1992). The *PROCESS* macro (Hayes, 2012) in the SPSS v26 program was used to analyse whether or not gender moderated the relationship between identity and adjustment. *PROCESS* performs regression analyses with centered variables in order to avoid multicollinearity. It also provides the data necessary to compile moderation graphs.

## Transparency and openness

The de-identified data used in the analysis of this study are available in an online repository. The study design, hypotheses and analytic plan were not preregistered. The data that support the findings of this study are available on the following link: <https://idus.us.es/handle/11441/137600>.

## RESULTS

Our first aim was to verify that the scale developed by Luyckx et al. (2008) was valid in the Spanish context. The results of the CFA were as follows: NNFI = .95; CFI = .95; RMSEA = .097, indicating an acceptable fit of the five-factor model proposed by the original authors, comprising Commitment Making, Identification with Commitment, Exploration in Breadth, Exploration in Depth, and Ruminative Exploration. Table 1 shows the factor loadings of the items of each subscale of DIDS.

Our second aim was to explore gender differences between the identity dimensions of the Dual-Cycle Model. Table 2 shows the gender differences observed in all five dimensions of the DIDS.

The data reveal that men identified more with commitment than women, and women scored higher in exploration depth and ruminative exploration. In all three cases, the effect size was small. No significant differences were found in commitment making or exploration in breadth.

Our third aim was to explore the association between identity dimensions and adjustment (*flourishing and general distress*), focusing particularly on the moderating role of gender. The correlations between the DIDS dimensions, flourishing and distress are shown in Table 3. Commitment making and identification with commitment correlated negatively with general distress and positively with flourishing. Exploration in breadth and exploration in depth correlated positively with both flourishing and distress. Ruminative exploration correlated negatively with flourishing and positively with distress.

TABLE 1 Factor loadings of the items of the DIDS subscales.

	Commitment making	Identification with commitment	Exploration in breadth	Exploration in depth	Ruminative exploration
Item 1	.75				
Item 2	.94				
Item 3	.96				
Item 4	.80				
Item 5	.77				
Item 6		.91			
Item 7		.94			
Item 8		.87			
Item 9		.68			
Item 10		.69			
Item 11			.80		
Item 12			.82		
Item 13			.69		
Item 14			.73		
Item 15			.62		
Item 16				.84	
Item 17				.67	
Item 18				.57	
Item 19				.48	
Item 20				.80	
Item 21					.80
Item 22					1.03
Item 23					1.16
Item 24					0.98
Item 25					.56

TABLE 2 Descriptive statistics and ANOVAs for the five subscales of the DIDS, comparing men and women.

	Men	Women	Total	<i>F</i> (df)	Cohen's <i>d</i>
	<i>M</i> (SD)	<i>M</i> (SD)	<i>M</i> (SD)		
Commitment making	3.75 (.87)	3.71 (.89)	3.73 (.88)	0.78 (1, 1491)	.05
Identification with commitment	3.72 (.86)	3.63 (.86)	3.67 (.86)	3.93* (1, 1490)	.11
Exploration in breadth	3.81 (.79)	3.88 (.79)	3.85 (.79)	2.32 (1, 1487)	.09
Exploration in depth	3.42 (.78)	3.52 (.79)	3.48 (.79)	5.70* (1, 1486)	.13
Ruminative exploration	3.05 (1.02)	3.16 (.96)	3.11 (.98)	4.33* (1, 1485)	.11

\* $p < .05$ .

TABLE 3 Correlation between the DIDS dimensions and distress and flourishing.

	Commitment making	Identification with commitment	Exploration in breadth	Exploration in depth	Ruminative exploration
Distress	-.21**	-.22**	.17**	.12**	.28**
Flourishing	.40**	.43**	.11**	.17**	-.25**

\*\* $p < .01$ .

To fully address aim 3, we analysed the potential moderating role of gender in the relationship between the different dimensions of the Dual-Cycle Model and young people's personal adjustment. Ten hierarchical linear regression analyses were carried out with gender as the moderator variable and flourishing and general distress (separately) as the dependent variables. Independent variables were the five dimensions of identity development, which were also analysed in separate models. In each model, gender and an identity dimension were included in the first step, and the interaction between this same identity dimension and gender was included in the second step. In the interest of space and parsimony, Table 4 only shows the data pertaining to this second step (interaction).

Commitment making and identification with commitment were positively associated with flourishing among both men and women (Figures 1 and 2), with the association being stronger among men. The association between ruminative exploration and flourishing, on the other hand, was negative, with this association again being stronger among men (Figure 3).

Commitment making was negatively associated with distress, with this association being stronger among men than among women (Figure 4). Ruminative exploration, on the other hand, was positively associated with distress, with this association again being stronger among men than among women (Figure 5).

## DISCUSSION

The aims of the present study were to validate the Spanish version of the DIDS and to explore the relationship between the identity development process and adjustment during emerging adulthood, from a gender perspective. The results obtained in the CFA indicate that, just as in other countries, the five-factor structure proposed by the original authors of the scale (Luyckx et al., 2008) fit the Spanish sample of emerging adult university students. This suggests that the DIDS is suitable for use in Spain and that the Dual-Cycle Model is adapted to this context.

Commitment making and identification with commitment were found to be positively associated with healthy adjustment, characterized by low distress and high flourishing. These two dimensions of commitment have been viewed as indicators of identity maturity, which in turn, plays a normative role in the construction of the *self* and young people's psychosocial functioning during emerging adulthood



TABLE 4 Interaction effects of the five dimensions of identity and flourishing/distress, moderated by gender.

	Flourishing			Distress		
	$\beta$	CI 95% (LLCI, ULCI)	<i>t</i>	$\beta$	CI 95% (LLCI, ULCI)	<i>t</i>
CM × Gender	-1.25**	(-1.84, -.66)	-4.12	3.03*	(.58, 5.47)	2.43
Men	3.28***	(2.81, 3.74)	13.83	-6.86***	(-8.77, -4.95)	-7.04
Women	2.03***	(1.66, 2.40)	10.75	-3.83***	(-5.36, -2.31)	-4.94
IC × Gender	-1.08**	(-1.68, -.49)	-3.56	1.93	(-.57, 4.44)	1.51
Men	3.49***	(3.03, 3.95)	14.79	-	-	-
Women	2.41***	(2.03, 2.78)	12.49	-	-	-
EB × Gender	.25	(-0.47, .98)	.68	-.85	(-3.60, 1.91)	-.61
ED × Gender	-.23	(-0.95, .50)	-.61	-.01	(-2.81, 2.80)	-.004
RE × Gender	.59*	(0.03, 1.14)	2.06	-2.30*	(-4.44, -.17)	-2.11
Men	-1.81***	(-2.23, -1.38)	-8.34	7.38***	(5.76, 9.00)	8.92
Women	-1.22***	(-1.59, -.86)	-6.48	5.08***	(3.69, 6.46)	7.16

Abbreviations: CM, commitment making; EB, exploration in breadth; ED, exploration in depth; IC, identification with commitment; RE, ruminative exploration.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

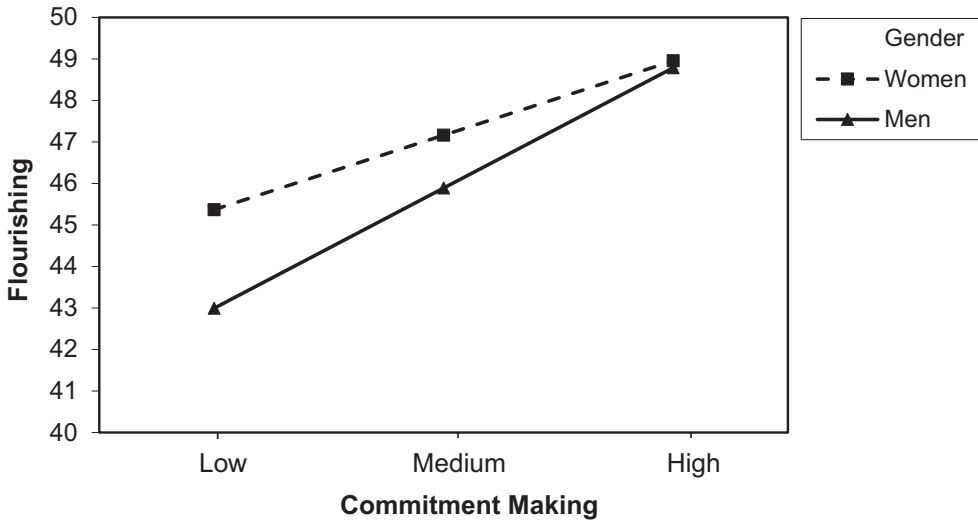


FIGURE 1 Association of commitment making on flourishing, moderated by gender.

(Luyckx, Klimstra, Duriez, Van Petegem, & Beyers, 2013; Meeus et al., 2010). The results of our study suggest that making commitments and identifying with them satisfactorily may facilitate the construction of a sounder and more structured identity during emerging adulthood, which in turn may foster greater flourishing and help mitigate or protect against general distress.

Exploration in breadth and in depth, on the other hand, were found to be positively associated with both distress and flourishing (Luyckx, Klimstra, Duriez, Van Petegem, & Beyers, 2013). The apparent ambivalence of exploration in breadth and in depth, in terms of their relationship with flourishing and distress, may be linked to the age and developmental stage of the sample. Luyckx, Klimstra, Duriez, Van Petegem, and Beyers (2013) observed a progressive decrease over time in the association between the commitment and exploration dimensions, which is particularly notable during emerging adulthood.

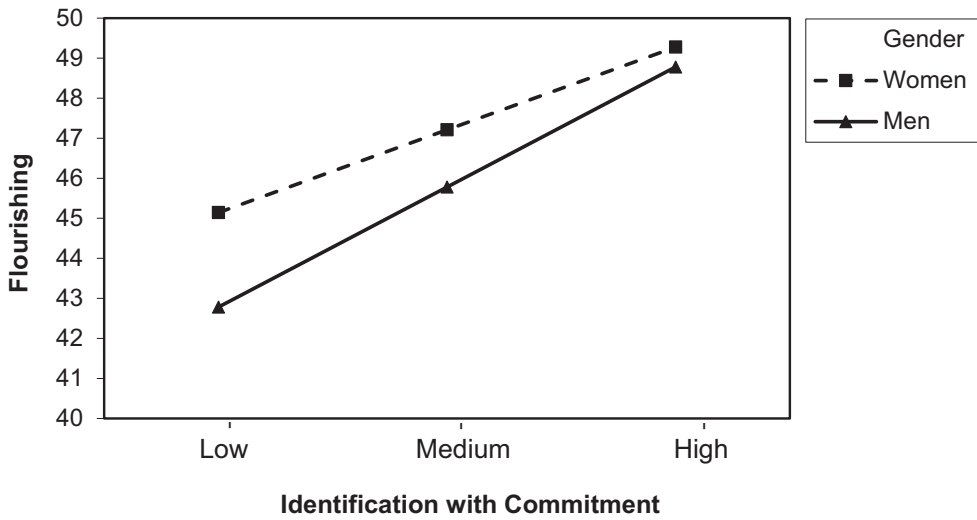


FIGURE 2 Association of identification with commitment on flourishing, moderated by gender.

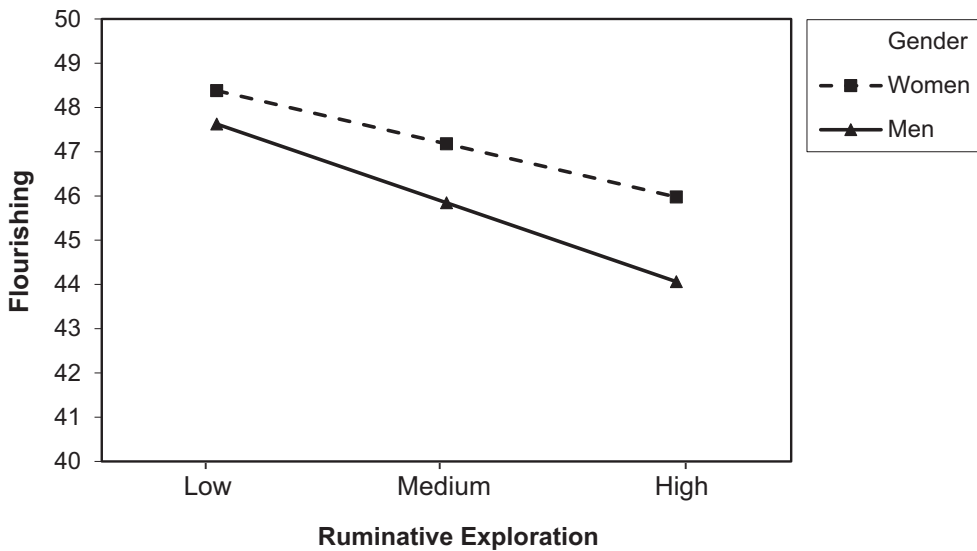


FIGURE 3 Association of ruminative exploration on flourishing, moderated by gender.

These authors found that commitment and identification with commitment correlated with exploration in breadth and in depth with medium and large effect sizes during adolescence. However, this correlation decreased during the early years of emerging adulthood (which is the stage in which our sample was at the time of the study) and became non-significant during the later years. These findings suggest that, while during adolescence exploration in breadth and in depth enable individuals to expand their world and give rise to commitment making, from age 20 onwards, their usefulness could decrease and become a less adaptive strategy for identity development. Indeed, in the same study, the authors found that the association between depressive symptoms and both types of exploration went from being non-significant during adolescence to being significant and positive during early adulthood, and grew notably stronger from age 20 onwards. The results of the present study are consistent with those

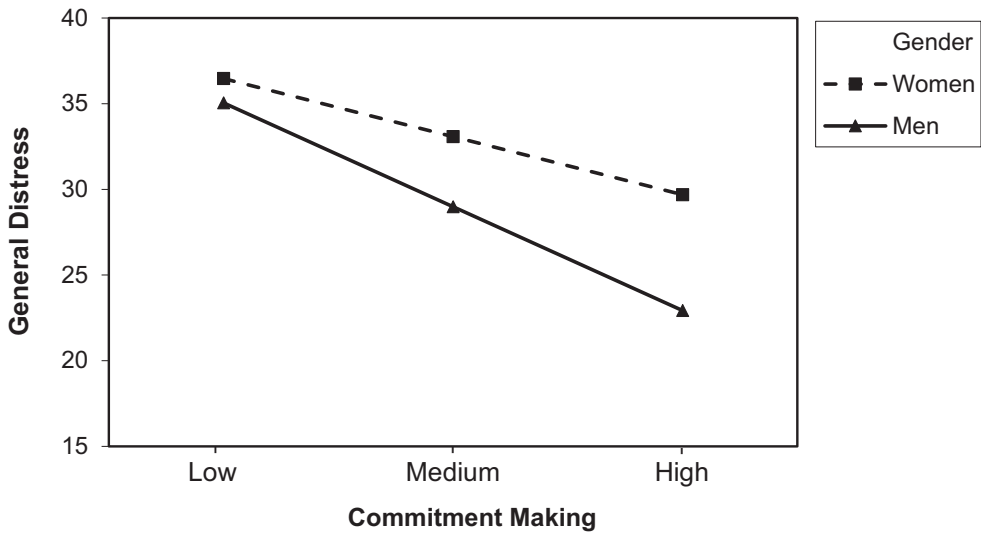


FIGURE 4 Association of commitment making on distress, moderated by gender.

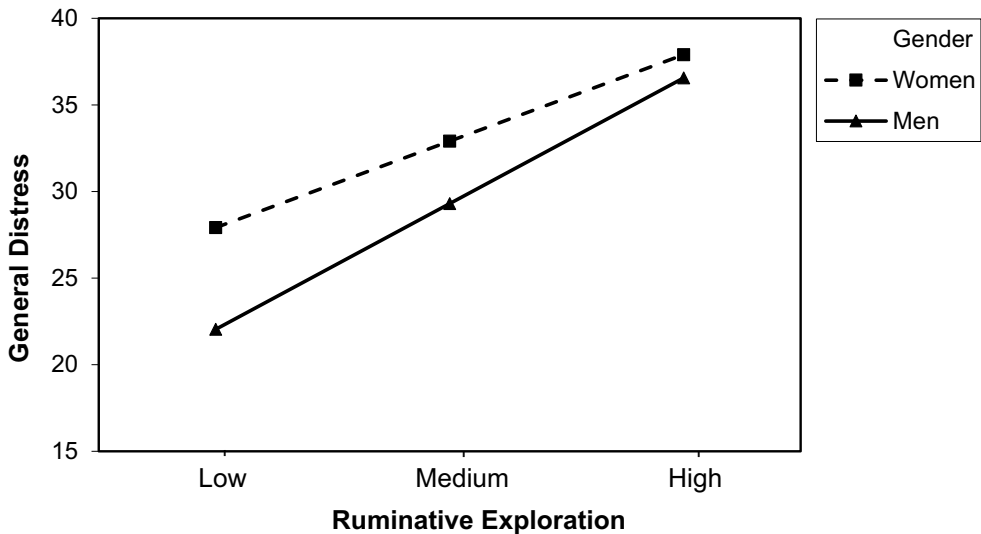


FIGURE 5 Association of ruminative exploration on distress, moderated by gender.

reported by these authors, revealing that, from this age or transitional stage onwards, these two types of exploration may have both advantages and drawbacks, which explains their positive association with both flourishing and distress.

In terms of gender, the results reveal no differences in the first cycle of the model: exploration in breadth and commitment making. This finding is consistent with that reported in previous studies, such as the one by Johnson et al. (2012) and Verschueren et al. (2017). Given that Spanish society is increasingly egalitarian in gender terms, it is hardly surprising to find a similar level of progress in these developmental tasks (which begin during the teenage years) among both emerging adult men and emerging adult women, particularly if we bear in mind also that our sample was made up of university students, all of whom face similar developmental tasks.

However, gender differences were observed in the second cycle, which focuses on identity reassessment. Whereas emerging adult women scored higher for exploration in depth, emerging adult men scored higher for identification with commitment. These findings may reflect the fact that men tend to resolve their identity earlier than women. According to the classification proposed by Marcia, commitment and identification with commitment may reflect either identity foreclosure, particularly in the absence of prior exploration, or achievement of identity, if commitment and identification with commitment are the result of previous exploration (Luyckx et al., 2005; Marcia & Adelson, 1980). In relation to the first hypothesis, men could have foreclosure status, whereas women, who are still exploring, may be closer to identity achievement. The study by Verschuere et al. (2017), which found that men were overrepresented in the foreclosure group and women were overrepresented in the moratorium group, seems to support this hypothesis. The study by Crocetti et al. (2013) suggests something similar, since it found that women were more oriented towards informative exploration, whereas men's exploration was more diffuse. In this case, women would be engaged in the second cycle of exploration, while their male counterparts would remain in foreclosure.

According to the second hypothesis, men would be more advanced than women in terms of identity, and their greater identification with commitment would be the result of a prior exploration in depth. The results reported by Luyckx, Klimstra, Duriez, Van Petegem, and Beyers (2013) on age trends in the association between identification with commitment and depression point towards this hypothesis. These authors found that identification with commitment was not associated with depression among adolescents, although it was associated with this variable among young emerging adults, with this association increasing with age. They, therefore, concluded that the stronger link between identification with commitment and adjustment is the result of a clearer and stronger integration of the identity in the self. If we accept this idea of the greater integration of identity in the self when the association between identification with commitment and adjustment is stronger, and bearing in mind that, in the present study, we found that the association between identification with commitment and both flourishing and distress was stronger among men than among women, we can conclude that the integration of commitment in the self is greater among emerging adult men than among their female counterparts. However, longitudinal studies which analyse the process sequentially are needed to confirm this. It should also be noted that all gender differences found had a small effect size.

Finally, the moderation effect of gender in the relationship between identity and adjustment was significant in the commitment making, identification with commitment and ruminative exploration dimensions, although no such moderation was found in the relationship between exploration (in breadth and in depth) and either flourishing or distress. In all the significant moderations found, the association between the corresponding identity and adjustment variables was stronger among men than among women. Previous research has shown that agency promotes both identity development (Schwartz et al., 2005) and well-being (Welzel & Inglehart, 2010). Given this, it would not be surprising to find that agency, which is likely to be promoted more actively in men, mediates the relationship between identity and well-being and explains the stronger relationship between these two variables. It is not possible to analyse this mediated relationship with the data gathered in the present study, but it is undoubtedly an interesting avenue to pursue in the future.

The results regarding ruminative exploration were as expected, with women scoring higher than men, consistently with that reported in previous studies (Luyckx et al., 2008; Luyckx, Klimstra, Duriez, Van Petegem, & Beyers, 2013). This stronger tendency among women to ruminate is not limited to the identity development process but has been found also in other areas of life, something which has been linked to the fact that women are twice as likely as men to suffer from depression (Johnson & Whisman, 2013). The positive association found between ruminative exploration and general distress, and the negative one found between this variable and flourishing, are consistent with the results of previous research (Beyers & Luyckx, 2016; Luyckx, Klimstra, Duriez, Van Petegem, & Beyers, 2013; Verschuere et al., 2017), and constitute another element confirming that the Dual-Cycle Model can be applied to the Spanish context.

## Limitations and future research

One of the principal limitations of this study is the origin of the sample. The university years constitute a key period which coincides with the beginning and development of emerging adulthood, but university students only represent part of the population going through this transition. It is therefore important for future research to (a) collect data from emerging adult men and women who are studying outside the university context, are working or are engaged in other pursuits and activities; (b) strive to obtain a more varied sample in terms of age, in order to analyse the changes that occur in identity development throughout emerging adulthood and to determine how this impacts adjustment.

The complexity of the identity development process is one of the principal reasons why it is so important to conduct longitudinal studies. It is vital to analyse the continuity of and/or the changes undergone in this process throughout emerging adulthood in Spain, in order to shed light on the development of the young men and women passing through this transitional stage. To this end, the aim of the present study is to provide data that can then be compared with those reported by future studies, in order to enable sound conclusions to be drawn in relation to identity and adjustment throughout emerging adulthood. This study, and future research, should serve to help develop strategies and interventions designed to regulate emerging adults' exploration processes and facilitate a choice of commitments that will have a positive impact on their adjustment.

## Public significance

The present study has two main findings. The first is the validation of the Spanish version of the DIDS. Having a valid version of the DIDS in the second most widely spoken language in the world will expand the frontiers of its use. The second key finding is the differential impact of identity development on men's and women's adjustment outcomes. Identity processes have a significantly stronger impact on men's adjustment than on women's, a finding that highlights the need to carry out further research into this identity model and its related adjustment outcomes, from a gender perspective.

## AUTHOR CONTRIBUTIONS

**Inmaculada Sánchez-Queija:** Conceptualization; investigation; funding acquisition; writing – original draft; methodology; validation; writing – review and editing; software; formal analysis; supervision; project administration; resources; visualization; data curation. **Paula Domínguez-Alarcón:** Investigation; writing – original draft; methodology; validation; writing – review and editing; formal analysis; software; data curation; supervision; conceptualization; visualization; resources. **Marta Díez:** Writing – review and editing; investigation; conceptualization; methodology; supervision; validation; visualization; software. **Águeda Parra:** Supervision; conceptualization; investigation; funding acquisition; writing – original draft; writing – review and editing; resources; visualization; methodology; validation; software; formal analysis; data curation; project administration.

## ACKNOWLEDGEMENTS

This work was supported by three grants, one from the Ministerio de Economía y Competitividad, Agencia Estatal de Investigación (Spanish Ministry of Economy and Competitiveness, EDU2013-45687-R), other from the Ministerio de Ciencia, Innovación y Universidades, Agencia Estatal de Investigación (Spanish Ministry of Science, Innovation and Universities), and European Regional Development Fund (RTI2018-097405-B-I00), and another one from the and Consejería de Transformación Económica, Industria, Conocimiento y Universidades de la Junta de Andalucía (Ministry of Economic Transformation, Industry, Knowledge and Universities of the Junta de Andalucía, PROYEXCEL\_00766). Marta Díez has received funding from the European Social Fund and the Junta de Andalucía (2019-Line\_2, PAIDI\_2020). This work was approved by the Andalusia Biomedical Research Ethic Coordinator Committee.

## CONFLICT OF INTEREST STATEMENT

All authors declare that they have no conflicts of interest to disclose.

## DATA AVAILABILITY STATEMENT

The de-identified data used in the analysis of this study are available in an online repository. The study design, hypotheses and analytic plan were not preregistered. The data that support the findings of this study are available on the following link: <https://idus.us.es/handle/11441/137600>.

## ORCID

Paula Domínguez-Alarcón  <https://orcid.org/0000-0003-4841-9006>

## REFERENCES

- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469–480. <https://doi.org/10.1037/0003-066X.55.5.469>
- Arnett, J. J. (2014). *Emerging adulthood: The winding road from the late teens through the twenties* (2nd ed.). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199795574.013.9>
- Arnett, J. J. (2015). Identity development from adolescence to emerging adulthood: What we know and (especially) don't know. In K. C. McLean & M. Syed (Eds.), *The Oxford handbook of identity development* (pp. 53–64). Oxford University Press.
- Bados, A., Solanas, A., & Andrés, R. (2005). Psychometric properties of the Spanish version of depression, anxiety and stress scales (DASS). *Psicothema*, 17(4), 679–683.
- Baggio, S., Studer, J., Iglesias, K., Daepfen, J. B., & Gmel, G. (2017). Emerging adulthood: A time of changes in psychosocial well-being. *Evaluation and the Health Professions*, 40(4), 383–400. <https://doi.org/10.1177/0163278716663602>
- Berzonsky, M. D., & Kinney, A. (2019). Identity processing style and depression: The mediational role of experiential avoidance and self-regulation. *Identity*, 19(2), 83–97. <https://doi.org/10.1080/15283488.2019.1567341>
- Beyers, W., & Luyckx, K. (2016). Ruminative exploration and reconsideration of commitment as risk factors for suboptimal identity development in adolescence and emerging adulthood. *Journal of Adolescence*, 47, 169–178. <https://doi.org/10.1016/j.adolescence.2015.10.018>
- Bogaerts, A., Claes, L., Schwartz, S. J., Becht, A. I., Verschuere, M., Gandhi, A., & Luyckx, K. (2019). Identity structure and processes in adolescence: Examining the directionality of between-and within-person associations. *Journal of Youth and Adolescence*, 48(5), 891–907. <https://doi.org/10.1007/s10964-018-0931-5>
- Bosma, H. A. (1985). *Identity development in adolescence: Coping with commitments*. Doctoral dissertation, Rijksuniversiteit Te Groningen.
- Brinhardt, T. M., & Scheier, L. M. (2022). Self, identity, and negative youth adaptation: Introduction to the special issue. *Self and Identity*, 21(1), 1–14. <https://doi.org/10.1080/15298868.2021.1979640>
- Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods and Research*, 21(2), 230–258. <https://doi.org/10.1177/004912419201002005>
- Cohen, J. (1992). Statistical power analysis. *Current Directions in Psychological Science*, 1(3), 98–101. <https://doi.org/10.1111/1467-8721.ep10768783>
- Cramer, P. (2000). Development of identity: Gender makes a difference. *Journal of Research in Personality*, 34(1), 42–72. <https://doi.org/10.1006/jrpe.1999.2270>
- Crocetti, E., Cieciuch, J., Gao, C. H., Klimstra, T., Lin, C. L., Matos, P. M., Morsünbül, Ü., Negru, O., Sugimura, K., Zimmermann, G., & Meeus, W. (2015). National and gender measurement invariance of the Utrecht-management of identity commitments scale (U-MICS) a 10-nation study with university students. *Assessment*, 22(6), 753–768. <https://doi.org/10.1177/1073191115584969>
- Crocetti, E., Luyckx, K., Scrignaro, M., & Sica, L. S. (2011). Identity formation in Italian emerging adults: A cluster-analytic approach and associations with psychosocial functioning. *European Journal of Developmental Psychology*, 8(5), 558–572. <https://doi.org/10.1080/17405629.2011.576858>
- Crocetti, E., Sica, L. S., Schwartz, S. J., Serafini, T., & Meeus, W. (2013). Identity styles, dimensions, statuses, and functions: Making connections among identity conceptualizations. *European Review of Applied Psychology*, 63(1), 1–13. <https://doi.org/10.1016/j.erap.2012.09.001>
- De la Fuente, R., Parra, A., & Sánchez-Queija, I. (2017). Psychometric properties of the flourishing scale and measurement invariance between two samples of Spanish university students. *Evaluation and the Health Professions*, 40(4), 409–424. <https://doi.org/10.1177/0163278717703446>
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143–156. <https://doi.org/10.1007/s11205-009-9493-y>
- Erikson, E. H. (1968). *Identity: Youth and crisis* (Vol. No. 7). WW Norton & company.

- Eurostat. (2022). *Estimated average age of young people leaving the parental household by sex*. Eurostat Publishing. [https://ec.europa.eu/eurostat/databrowser/view/YTH\\_DEMO\\_030\\_\\_custom\\_7603532/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/YTH_DEMO_030__custom_7603532/default/table?lang=en)
- Flunger, B., Marttinen, E., Tuominen-Soini, H., & Salmela-Aro, K. (2016). How do young adults orchestrate their multiple achievement-related goals? Associations of achievement goal orientations with identity formation and goal appraisals. *Research in Human Development, 13*(4), 342–362. <https://doi.org/10.1080/15427609.2016.1234309>
- Gilligan, C. (1982). New maps of development: New visions of maturity. *American Journal of Orthopsychiatry, 52*(2), 199–212. <https://doi.org/10.1111/j.1939-0025.1982.tb02682.x>
- Grotevant, H. D. (1987). Toward a process model of identity formation. *Journal of Adolescent Research, 2*(3), 203–222. <https://doi.org/10.1177/074355488723003>
- Grotevant, H. D., Thorbecke, W., & Meyer, M. L. (1982). An extension of Marcia's identity status interview into the interpersonal domain. *Journal of Youth and Adolescence, 11*(1), 33–47. <https://doi.org/10.1007/BF01537815>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). Advanced diagnostics for multiple regression. In *Multivariate Data Analysis* (7th ed.). Pearson Prentice Hall Publishing.
- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling.
- Instituto Nacional de Estadística [INE]. (2022). *Tasas de paro por distintos grupos de edad, sexo y comunidad autónoma [Unemployment rates by age group, sex and autonomous región]*. Instituto Nacional de Estadística. <https://www.ine.es/jaxiT3/Datos.htm?t=4247>
- Johnson, D. P., & Whisman, M. A. (2013). Gender differences in rumination: A meta-analysis. *Personality and Individual Differences, 55*(4), 367–374. <https://doi.org/10.1016/j.paid.2013.03.019>
- Johnson, H. D., Kent, A., & Yale, E. (2012). Examination of identity and romantic relationship intimacy associations with well-being in emerging adulthood. *Identity, 12*(4), 296–319. <https://doi.org/10.1080/15283488.2012.716381>
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the depression anxiety stress scales (DASS) with the Beck depression and anxiety inventories. *Behaviour Research and Therapy, 33*(3), 335–343. [https://doi.org/10.1016/0005-7967\(94\)00075-U](https://doi.org/10.1016/0005-7967(94)00075-U)
- Luyckx, K., Goossens, L., Soenens, B., & Beyers, W. (2006). Unpacking commitment and exploration: Preliminary validation of an integrative model of late adolescent identity formation. *Journal of Adolescence, 29*(3), 361–378. <https://doi.org/10.1016/j.adolescence.2005.03.008>
- Luyckx, K., Goossens, L., Soenens, B., Beyers, W., & Vansteenkiste, M. (2005). Identity statuses based on 4 rather than 2 identity dimensions: Extending and refining Marcia's paradigm. *Journal of Youth and Adolescence, 34*(6), 605–618. <https://doi.org/10.1007/s10964-005-8949-x>
- Luyckx, K., Klimstra, T. A., Duriez, B., Van Petegem, S., & Beyers, W. (2013). Personal identity processes from adolescence through the late 20s: Age trends, functionality, and depressive symptoms. *Social Development, 22*(4), 701–721. <https://doi.org/10.1111/sode.12027>
- Luyckx, K., Klimstra, T. A., Duriez, B., Van Petegem, S., Beyers, W., Teppers, E., & Goossens, L. (2013). Personal identity processes and self-esteem: Temporal sequences in high school and college students. *Journal of Research in Personality, 47*(2), 159–170. <https://doi.org/10.1016/j.jrp.2012.10.005>
- Luyckx, K., Klimstra, T. A., Schwartz, S. J., & Duriez, B. (2013). Personal identity in college and the work context: Developmental trajectories and psychosocial functioning. *European Journal of Personality, 27*(3), 222–237. <https://doi.org/10.1002/per.1903>
- Luyckx, K., Schwartz, S. J., Berzonsky, M. D., Soenens, B., Vansteenkiste, M., Smits, I., & Goossens, L. (2008). Capturing ruminative exploration: Extending the four-dimensional model of identity formation in late adolescence. *Journal of Research in Personality, 42*(1), 58–82. <https://doi.org/10.1016/j.jrp.2007.04.004>
- Luyckx, K., Soenens, B., & Goossens, L. (2006). The personality-identity interplay in emerging adult women: Convergent findings from complementary analyses. *European Journal of Personality: Published for the European Association of Personality Psychology, 20*(3), 195–215. <https://doi.org/10.1002/per.579>
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology, 3*(5), 551–558. <https://doi.org/10.1037/h0023281>
- Marcia, J. E., & Adelson, J. (1980). Identity in adolescence. In J. Adelson & M. Hersen (Eds.), *Handbook of adolescent psychology* (pp. 159–187). John Wiley & Sons.
- Mastrotheodoros, S., & Motti-Stefanidi, F. (2017). Dimensions of identity development scale (DIDS): A test of longitudinal measurement invariance in Greek adolescents. *European Journal of Developmental Psychology, 14*(5), 605–617. <https://doi.org/10.1080/17405629.2016.1241175>
- Meeus, W. (1996). Studies on identity development in adolescence: An overview of research and some new data. *Journal of Youth and Adolescence, 25*(5), 569–598. <https://doi.org/10.1007/BF01537355>
- Meeus, W., Iedema, J., & Maassen, G. H. (2002). Commitment and exploration as mechanisms of identity formation. *Psychological Reports, 90*(3), 771–785. <https://doi.org/10.2466/pr0.2002.90.3.771>
- Meeus, W., van de Schoot, R., Keijsers, L., Schwartz, S. J., & Branje, S. (2010). On the progression and stability of adolescent identity formation: A five-wave longitudinal study in early-to-middle and middle-to-late adolescence. *Child Development, 81*, 1565–1581. <https://doi.org/10.1111/j.1467-8624.2010.01492.x>

- Merrill, N., Waters, T. E., & Fivush, R. (2016). Connecting the self to traumatic and positive events: Links to identity and well-being. *Memory*, 24(10), 1321–1328. <https://doi.org/10.1080/09658211.2015.1104358>
- Morsunbul, U., Crocetti, E., Cok, F., & Meeus, W. (2014). Brief report: The Utrecht-Management of Identity Commitments Scale (U-MICS): Gender and age measurement invariance and convergent validity of the Turkish version. *Journal of Adolescence*, 37(6), 799–805. <https://doi.org/10.1016/j.adolescence.2014.05.008>
- Ozer, S., Meca, A., & Schwartz, S. J. (2019a). Identity processes in Ladakhi emerging adults: Testing the dimensions of identity development scale in an indigenous Himalayan population. *Emerging Adulthood*, 7(1), 45–51. <https://doi.org/10.1177/21676968187549>
- Ozer, S., Meca, A., & Schwartz, S. J. (2019b). Globalization and identity development among emerging adults from Ladakh. *Cultural Diversity and Ethnic Minority Psychology*, 25(4), 515–526. <https://doi.org/10.1037/cdp0000261>
- Ritchie, R. A., Meca, A., Madrazo, V. L., Schwartz, S. J., Hardy, S. A., Zamboanga, B. L., Weisskirch, R. S., Kim, S. Y., Whitbourne, S. K., Ham, L. S., & Lee, R. M. (2013). Identity dimensions and related processes in emerging adulthood: Helpful or harmful? *Journal of Clinical Psychology*, 69(4), 415–432. <https://doi.org/10.1002/jclp.21960>
- Rivnyák, A., Járdaházi, E., Arató, N., Péley, B., & Láng, A. (2022). The assessment of dual-cycle identity models among secondary school students: The Hungarian adaptation of DIDS and U-MICS. *Frontiers in Psychiatry*, 13, 804529. <https://doi.org/10.3389/fpsy.2022.804529>
- Schwartz, S. J., Beyers, W., Luyckx, K., Soenens, B., Zamboanga, B. L., Forthun, L. F., Hardy, S. A., Vazsonyi, A. T., Ham, L. S., Kim, S. Y., Whitbourne, S. K., & Waterman, A. S. (2011). Examining the light and dark sides of emerging adults' identity: A study of identity status differences in positive and negative psychosocial functioning. *Journal of Youth and Adolescence*, 40(7), 839–859. <https://doi.org/10.1007/s10964-010-9606-6>
- Schwartz, S. J., Côté, J. E., & Arnett, J. J. (2005). Identity and agency in emerging adulthood: Two developmental routes in the individualization process. *Youth & Society*, 37(2), 201–229. <https://doi.org/10.1177/0044118X05275965>
- Schwartz, S. J., Donnellan, M. B., Ravert, R. D., Luyckx, K., & Zamboanga, B. L. (2013). Identity development, personality, and well-being in adolescence and emerging adulthood: Theory, research, and recent advances. In R. M. Lerner, M. A. Easterbrooks, J. Mistry, & I. B. Weiner (Eds.), *Handbook of psychology: Developmental psychology* (pp. 339–364). John Wiley & Sons, Inc. <https://doi.org/10.1002/9781118133880.hop206014>
- Schwartz, S. J., Hardy, S. A., Zamboanga, B. L., Meca, A., Waterman, A. S., Picariello, S., Luyckx, K., Crocetti, E., Kim, S. Y., Brittan, A. S., Roberts, S. E., Whitbourne, S. K., Ritchie, R. A., Brown, E. J., & Forthun, L. F. (2015). Identity in young adulthood: Links with mental health and risky behavior. *Journal of Applied Developmental Psychology*, 36, 39–52. <https://doi.org/10.1016/j.appdev.2014.10.001>
- Skhirtladze, N., Javakishvili, N., Schwartz, S. J., Beyers, W., & Luyckx, K. (2016). Identity processes and statuses in post-soviet Georgia: Exploration processes operate differently. *Journal of Adolescence*, 47, 197–209. <https://doi.org/10.1016/j.adolescence.2015.08.006>
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. UN Publishing.
- van Doeselaar, L., McLean, K. C., Meeus, W., Denissen, J. J., & Klimstra, T. A. (2020). Adolescents' identity formation: Linking the narrative and the dual-cycle approach. *Journal of Youth and Adolescence*, 49, 818–835. <https://doi.org/10.1007/s10964-019-01096-x>
- Verschueren, M., Rassart, J., Claes, L., Moons, P., & Luyckx, K. (2017). Identity statuses throughout adolescence and emerging adulthood: A large-scale study into gender, age, and contextual differences. *Psychologica Belgica*, 57(1), 32–42. <https://doi.org/10.5334/pb.348>
- Welzel, C., & Inglehart, R. (2010). Agency, values, and well-being: A human development model. *Social Indicators Research*, 97, 43–63. <https://doi.org/10.1007/s11205-009-9557-z>
- Zimmermann, G., Lannegrand-Willems, L., Safont-Mottay, C., & Cannard, C. (2014). Building a bridge between the dual-cycle five-dimensional and the certainty-uncertainty three-dimensional models of identity formation in adolescence and emerging adulthood. The 14th biennial conference of the European Association for Research on Adolescence (EARA 2014).

**How to cite this article:** Sánchez-Queija, I., Domínguez-Alarcón, P., Díez, M., & Parra, Á. (2023). Identity development and adjustment during emerging adulthood from a gender perspective. *British Journal of Developmental Psychology*, 00, 1–16. <https://doi.org/10.1111/bjdp.12470>