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The effects of students

University identification on student's extra role behaviours and turnover intention

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Abstract

Purpose – The purpose of this paper is to investigate the role of university identification to explain students' involvement in extra-role behaviours and turnover intentions. The theoretical model developed, specifies the relationships between university identity and identification and between identification and behavioural patterns.

Design/methodology/approach – Data have been collected from a sample of 338 students from an Italian University. Then, they have been analysed adopting linear regression models (multiple when occurs) and a path analysis through structural equations models has been developed. The Sobel test has been used in the analysis to verify the mediator role of variables.

Findings – The results show that: the university identity perception of students have significant effect on university identification process; and student-university identification have significant effect on student's advocacy, that is negatively related to turnover intention.

Originality/value – This paper provides support for the importance of brand management in higher educational context. Institutions would benefit from communicating their identities clearly, coherently and in a persuasive manner, emphasising those aspects of the university's identity that students and future students will perceive as prestigious and similar to their identities.

Keywords Value co-creation, Extra-role behaviours, Student-university identification, University image

Paper type Research paper

1. Introduction

Nowadays, in Europe, some economic and social trends in educational environment, such as globalisation, increasing budgetary constraints and greater mobility of the students, have increased the pressure on university to improve the quality of education, research and innovation to be more attractive enroling good students and attracting faculty members. In Italy, the mobility of students still growing in all areas of the country: the share of those who matriculate outside their region of residence has risen from 18 per cent in 2007/2008 to 22 per cent in 2015/2016. Even among students that continue after the bachelor degree, the share of those who choose universities of other regions has increased. Among the residents in the South of Italy, the incidence of those who choose a university of the Center-North is progressively increasing, especially in the islands (in 2014, among graduates 28.9 per cent wanted another Italian university and 3 per cent wanted one abroad). In order to overcome the competitive pressure, universities need to modernise to become more effective and to reinforce their role in society. According to Gounaris *et al.* (2007), in order to find ways of attracting and retaining their potential and current students, the higher education sector has to focus on increasing service quality and consumer perceived value. Quality improvement has been generally emphasised as a critical strategy to enhance the functioning of the university system. In the last few years, the scientific literature pointed out the need to increase students' involvement in value co-creation processes. Balaji *et al.* (2016) recommend that universities should engage in branding activities that develop strong student-university identification in order to

enhance the students' university supportive behaviours. In this context, for the university it has become more important to build distinct brand identity in order to create a sustainable competitive advantage (Aaker *et al.*, 2004; Hemsley-Brown and Goonawardana, 2007). From the perspective of service-dominant logic (SDL), customers engage in dialogue and interaction with their suppliers during product design, production, delivery and consumption. Moreover, brand identity is co-created with the participation of customers and other stakeholders such as university stakeholders, who are people (or groups) having an interest or stake in the university's activities. Therefore, we define university brand as a co-creation of universities' stakeholders based on their actual experiences in education. Research conducted in a variety of contexts, including higher education, has confirmed a positive relationship between an individual's identification with an organisation and their voluntary behaviours towards that organisation (Mael and Ashforth, 1992; Ahearne *et al.*, 2005; Wu and Tsai, 2007; Hong and Yang, 2009; Kim *et al.*, 2010; Wilkins and Huisman, 2013a, b). This study aims to discover whether identification with the university among students is associated with their voluntary behavioural intentions for that university. There is consensus in the literature that universities with a favourable identity are more likely to benefit from student-university identification (Bhattacharya and Sen, 2003), increased student loyalty (Andreassen and Lindestad, 1998) and increased student value co-creation behaviours (Yi and Gong, 2013).

Yi and Gong (2013) conceptualised the customer value co-creation behaviour as a multidimensional concept which consists of two factors: customer participation behaviour, which refers to required (in-role) behaviour necessary for value co-creation, and customer citizenship behaviour, which is voluntary (extra role) behaviour that provides extraordinary value to the organisation. Despite the abundance of studies in the literature, few studies have examined the effects of identification on student extra-role behaviours (DiPaola and Hoy, 2005).

Specifically, this study aims to provide a better understanding of the antecedents and consequences of university identification. While antecedents of identification like prestige (Cialdini *et al.*, 1976; Mael and Ashforth, 1992; Kim *et al.*, 2010; Porter *et al.*, 2011) are well cited in the literature, this study introduces self-brand connection (SBC) and university brand personality into the model (Balaji *et al.*, 2016). Similarly, this study examines the role of university identification on some student co-creation behaviours, such as advocacy intentions, university affiliation, suggestions for improvement and participation in future activities. Moreover, we also examine the effects student-university identification on turnover intention.

The originality of this study relates to the development and examination of an integrated model of student-university identification in the field of higher education. The findings of this study have important implications for university institutions in developing and executing brand management strategies that turn students into university ambassadors.

The paper is organised as follows. First, the theoretical background of the study is explained along with a review of relevant literature and proposed hypotheses. Next, the research methodology employed is detailed. Finally, we provide a summary of the key findings and discuss the implications for higher education institutions.

2. Theoretical background
2.1 Student extra-role behaviour and value co-creation
From the SDL perspective (Vargo and Lusch, 2004, 2008, 2011, Lusch and Vargo, 2006, 2014), the customers are always active participants and collaborative partners in exchanges; customers co-create value with the firm, and as a consequence they become a value

co-creator. Prahalad and Ramaswamy (2004a, b) gave a massive contribution in value co-creation literature arguing that co-created experience becomes an important basis of value. Further, Lusch and Vargo (2004, 2006, 2014) highlight that the value-creation process occurs when a customer consumes, or uses, a product or service, rather than when the output is manufactured. Moreover, brand identity is co-created with the participation of customers, such as university stakeholders, who are people having an interest in the university's activities. Therefore, the source of value co-creation has to be found at various levels of consumer-company interaction. This participation has a dual nature (Bettencourt and Brown, 1997). On the one hand, customers develop necessary behaviours for the service delivery, such as needs description, service payment, punctuality in appointments, and so on. On the other hand, they develop voluntary character behaviours that are useful but dispensable for the main delivery service. Early research has identified two types of customer value co-creation behaviours: customer participation behaviour, which refers to require in-role behaviour that is necessary for successful value co-creation, and customer citizenship behaviour, which is voluntary extra-role behaviour that provides unique value to the company (Bove *et al.*, 2008; Groth *et al.*, 2004; Yi and Gong, 2008). Despite the abundance of studies in literature (Ahearne *et al.*, 2005; Groth *et al.*, 2004), research on extra-role behaviour has been scarce in educational contexts and little work has focussed on the relationship with organisational identification. In terms of value co-creation, these constructs are more important for their implications because students, voluntarily, employ their knowledge in service creation and improve it with their feedback and suggestions. Literature on customer citizenship behaviour suggests different dimensions, such as positive word-of-mouth (advocacy) (Harrison-Walker, 2001; Bove *et al.*, 2009); providing suggestions for service improvement (Groth, 2005; Bove *et al.*, 2009); participation in the organisation's activities; helping other customers, displays of affiliation (Bove *et al.*, 2009); benevolent acts of service facilitation; tolerance of service failures (Tat Keh and Teo, 2001); commitment to the service organisation (Ford, 1995).

2.2 University identity

Social identity theory (Tajfel, 1978) defines social identity as "that part of an individual's self-concept which derives from his knowledge of his membership of a social group together with the value and emotional significance attached to that membership". The social identity approach also holds that social-group memberships have significant effects on an individual's perceptions, emotions and behaviour. More specifically, social identity leads to a tendency to act and feel in accordance with one's group membership and, as a consequence, is associated with more positive feelings about the group members, cooperation and positive group-related attitudes and behaviours (Hogg and Abrams, 1988). According to Albert and Whetten (1985), identity is the central, distinctive and enduring characteristic of an organisation and plays a central role in the strategic process of a university, providing an image of the organisation and what it wishes to represent. Organisational image is described as the overall impression made on the minds of the public about an organisation (Barich and Kotler, 1991; Nguyen and LeBlanc, 2001). Barich and Kotler (1991) state that image refers to a stakeholder's personal impression of an organisation, which is formed immediately on the basis of their knowledge, experiences, emotions, feelings and beliefs—which is the approach we follow—whereas reputation is based on the aggregated multiple images that are held by its stakeholders over time, usually over several years. Kennedy (1975) claims that corporate image comprises functional and emotional components. The functional component is related to tangible characteristics, which are easily measured (e.g. product features), while the emotional component is concerned with psychological aspects, such as an individual's feelings and attitudes towards the organisation. The feelings and attitudes result from personal experiences and the processing of multiple sources of information. Bhattacharya and Sen

(2003) argue that as consumers aim to satisfy their fundamental needs for self-continuity, self-distinctiveness and self-enhancement, their evaluation of an organisation's image will depend on the extent to which they perceive the organisation's identity to be similar to their own, the extent to which the organisation is distinctive in ways that they value and the extent to which the organisation is regarded as prestigious among stakeholders whose opinions they value. Escalas and Bettman introduced the concept of self-brand connection that indicates "the degree to which consumers have incorporated the brand into their self-concept". Their findings suggest that when there is a strong association between consumers and reference groups, the consumers are more likely to develop self-brand connection. Thus, SBCs capture an important part of students' construction of self. Previous studies show that the significance of institutional image can be extended to the higher educational context. The image of universities is a new topic that is receiving greater attention as universities recognise the importance of attracting students and having distinct images in the competitive market. As some scholars point out (Dutton *et al.*, 1994), the more attractive an individual perceives an organisation's image, the stronger the person's identification with the organisation will be. As a result of increased competition, universities have been pushed to brand themselves as having a set of unique and desirable attributes that appeal to potential students. For this reason, in recent years, many universities have increased their investments in order to reinforce the image of "prestige" or "quality". In a study conducted by Sung and Yang (2008), university image attractiveness was measured through three variables: university personality (friendly, stable, practical, warm); external prestige (looked upon as a prestigious school in society overall, acquaintances think highly, high rankings, positive media coverage); and university reputation (student care top priority, strong prospects for future growth, well managed, socially responsible, financially sound). Organisational members who believe their organisation has a distinctive culture, strategy, structure, or some other configuration of distinctive characteristics (i.e. the distinctiveness of the image they perceive from their organisation) are likely to experience strong levels of organisational identification. Based on these arguments, it seems reasonable to believe that the greater the distinctiveness of a university's image, the stronger a graduate identifies with it. Indeed, in the higher educational context, Mael and Ashforth (1992) found that alumni of a religious college who perceived their university as distinctive in attitudes, values and practices had high levels of organisational identification, in terms of a perception of oneness or belongingness to an organisation. Some scholars suggest that students withdraw as the result of a series of factors including negative perceptions of the university environment (Christie *et al.*, 2004). Balaji *et al.* (2016) examine the role of university brand personality, university brand knowledge and university brand prestige in developing student-university identification. The study's findings indicate that university brand knowledge and university brand prestige play a key role in determining the student-university identification. Several studies have found organisational prestige to predict member's organisational identification. The stronger the student's perceptions of their organisation's prestige, the stronger their identification with the university will be, which results in shared goals, identities and values between the university and the students. Hence, the following hypothesis has been proposed:

H1. Prestige, personality, university brand knowledge and self-brand connection have a positive effect on students-university identification.

2.3 Student-university identification

From the works of Dutton *et al.* (1994), and Bhattacharya and Sen (2003), we define student-university identification as the degree to which students perceive themselves and the university as sharing the same defining attributes and values, in an attempt to satisfy one or more personal definition needs. This identification has been recognised as an important

factor in the well-being of organisational members. According to this view, in the present study university identification is considered as a student's perceived sense of belongingness or oneness with the university following their direct interaction (Wilkins *et al.*, 2015). The organisational behaviour literature indicates that university identification has emerged as a predictor of various individual outcomes such as extra-role behaviours (Wilkins and Huisman, 2013a, b; Balaji *et al.*, 2016; Heffernan *et al.*, 2018) and turnover intentions (Meyer *et al.*, 2002; Riketta, 2005). Thus, university identification is a very important factor in fostering student university co-creation process that encompasses: feelings of solidarity in relation to the institution and support to the university; the sharing of characteristics with the university in terms of vision and values; and developing university extra-role behaviours. This study examines the impact of university identification on students' extra-role behaviours, such as advocacy intention, suggestions for improvement, display of affiliation, participation in future university activities and turnover intention.

Advocacy (or word-of-mouth) refers to recommending the university to others such as friends or family. Students' advocacy behaviours include positively speaking about the university, representing the university to external audiences, recruiting for the university and lending support to the university. In the context of value co-creation, advocacy indicates allegiance to the university and promotion of the university's interests beyond the individual customer's interests. Advocacy through positive word-of-mouth is often an indicator of customer loyalty, and it contributes greatly to the development of a positive firm reputation, promotion of the firm's products and services, higher service quality evaluations and increase in the customer base size. These studies suggest that when students strongly identify with the higher education institution they are more likely to enjoy talking about their experiences at the institution with others and recommend the institution to other people. The above discussion frames the following hypothesis:

H2. University identification has a positive impact on advocacy intentions.

Suggestions for improvement are information, opinions and ideas that students voluntarily share with the employee, which help the university to improve the service creation process and provide better service to the students (Groth *et al.*, 2004). In terms of value co-creation, students should share information with employees in order to improve the quality. If customers do not share the essential information and do not make suggestions for improvement, the organisation can have difficulty in augmenting the quality of value co-creation. Beaudoin (2003) suggests that the voice of the students plays a crucial role in university improvement and student motivation and engagement. With the SDL context and value co-creation, university brand value is co-created with the value of students and all of the stakeholders. The students who have strong identification with the university will provide high levels of feedback to the university. This is because the university identification helps students achieve self-esteem and they reciprocate by offering suggestions for improvement, becoming the channel for expanding the brand. The feedback from students can be valuable, and constitutes extra-role behaviour. The above discussion informs the following hypothesis:

H3. University identification has a positive impact on suggestions for improvement.

Display of affiliation occurs when the students communicate to others about their relationship with a university through the display of the university logo, university stickers and university merchandise. Some research suggests that university affiliation is greater among students who strongly identify with HEIs. For example, Stephenson and Yerger (2014) show that university identification is positively related to the promotion strategy of wearing clothing with the school's logo. Similarly, Oja *et al.* (2015) propose

that after successful games students show a greater tendency to wear university clothing to display their identification with the university. Thus, the following hypothesis is proposed:

H4. University identification has a positive impact on university affiliation.

Participation in future university activities relates to the readiness of students to attend university events and participating in activities sponsored by the university. In the HEI context, some scholars (Balaji *et al.* 2016) affirm that a strong sense of identification with the university determines the students' intentions to attend future events and courses in the university. Hence, the following hypothesis is proposed:

H5. University identification has a positive impact on participation in future university activities.

Previous research indicates that organisational identification should be a reliable predictor of turnover intention (Willcoxson, 2010). This construct was chosen as it is relevant to the universities because it predicts the student's intention to leave or change the university in future. Although a few studies have investigated the salient factors preceding withdrawal (Christie *et al.*, 2004; Johnson, 1994; Yorke, 2000), there is little research investigating the relationship between students' experience of university in second or third year and decisions to leave or change the university after degree (Revilla-Camacho *et al.*, 2015). Therefore, anticipating students' turnover intentions seems to be crucial. An appropriate management of the relationships with students should allow university to anticipate the loss of students. Furthermore, universities should focus on students when trying to retain them is still possible. The above discussion informs the following hypothesis:

H6. Turnover intention should be negatively associated with student-university identification, in addition extra-role behaviours should have effects on turnover intention.

Figure 1 shows a framework for examining the antecedents of university identification and its effect on student value co-creation behaviours and turnover intention.

3. Research method
3.1 Sample, context and procedure
The research is conducted in the context of higher education in an Italian University. In order to fulfil our research purpose, we initially assembled a questionnaire utilising measurement items that were sourced from the existing literature and adapted to the educational context. A group of academic members with vast experience and relevant academic positions revised the initial questionnaire to provide an informed opinion about it. Some modifications to the questionnaire items were made, based on the feedback we received. We, then, administered the preliminary draft questionnaire to a pilot test group of graduates. The questionnaire was again revised, drawing on the feedback from the pilot experiment. Next, we conducted the main survey study and, to test our model, we conducted a convenience sample to collect responses from students enroled in the second and third year of a business management course of an Italian university. The survey questionnaire was administered in classrooms supervised by a team member and the class instructor. The instructor is asked not to share the research topic with the students so that the responses are not biased. Students were also instructed that the questionnaire concerned their overall university experience and not any specific class. The present sample consisted of 338 university students. They took part in the present study on a voluntary basis. A total of 338 questionnaires were returned, representing a response rate of 100 per cent.
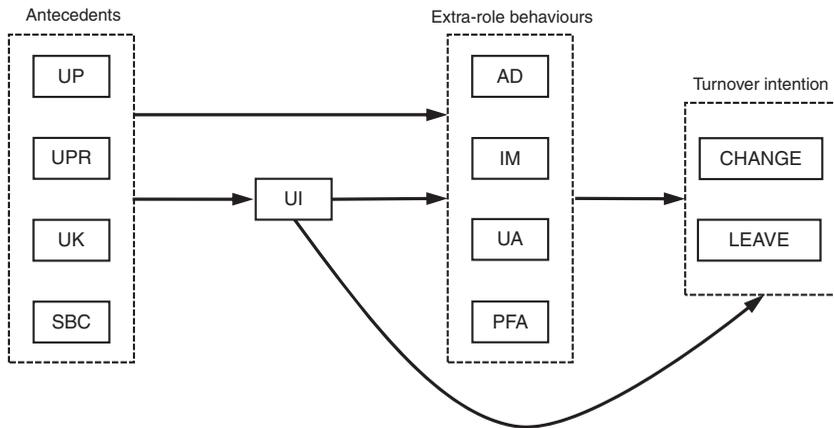
Notes: UP = University brand personality; UPR = University brand prestige; UK = University brand knowledge; SBC = Self-brand connection; UI = Student-university identification; AD = Advocacy intentions; IM = Suggestions for unversity improvements; UA = Affiliation with university; PFA = Participation in future university activities
Source: Own elaboration

Figure 1.
Theoretical path model

From an initial sample, researchers discarded five questionnaires due to missing values, leaving a final sample of 333. The sample comprised of 145 males (43.5 per cent) and 188 female (56.5 per cent), ranged between 19 and 45 with an average age of 22.

3.2 Measurement instrument

In total, 11 variables have been considered in this research, 9 of which are continuous and examined as constructs, with the other two examined as discrete variables. The measurement items for nine study constructs were developed based on previous studies shown in Table I in the original language with the corresponding loading factors (Balaji *et al.*, 2016). All items were answered using a five-point Likert scale which ranged from 1 = strongly disagree to 5 = strongly agree. The questionnaire was originally written in English and then translated into the Italian language. The face validity and content validity of the measures are assessed by three academic staff and one doctoral student. Further, they evaluated the measurement items and survey questionnaire for completeness, wording, clarity, structure and the appropriateness of the items.

Concerning the variables, university brand personality (UP) (Sung and Yang, 2008) is well defined by Aaker (1997) as a scale often used to assess brand perceptions. According to him, brand personality is "the set of human characteristics associated with a brand", which is developed based on consumers' direct and indirect experiences with the brand. University brand knowledge (UK) (Baumgarth and Schmidt, 2010) describes the cognitive representation of the brand within a student's mind. University brand prestige (UPR) (Mael and Ashforth, 1992) refers to the relative high status position of the university, and more specifically it represents the "overall appeal of the university that develops over time through brand communications and advertisements, as well as students' personal experiences with the university" (Balaji *et al.*, 2016). The concept of student-university identification (UI) (Jones and Kim, 2011) refers to the degree to which students perceive themselves and the university as sharing the same defining attributes and values in an attempt to satisfy one or more personal definition needs. Regarding extra-role behaviours as advocacy intentions (AD) (Zeithaml *et al.*, 1996; Stephenson and Yerger, 2014) referring to

Constructs and items	Loading factor
University brand personality (UP)	
Friendly	0.78
Stable	0.62
Practical	0.79
Warmth	0.75
University brand knowledge (UK)	
I am aware of the university goals	0.76
I have sound knowledge about the values represented by the university	0.61
I understand how students can benefit from the university	0.71
I know how university differentiates us from the competitors	0.79
University brand prestige (UPR)	
People think highly of the university	0.87
The university maintains a high standard of academic excellence	0.79
It is considered prestigious to be an alumnus of the university	0.81
University has a rich history	0.87
Student-university identification (UI)	
This university reflects who I am	0.78
I find it easy to identify with university	0.81
This university has as great deal of personal meaning for me as it helps me become a type of student I want to be	0.68
Advocacy intentions (AD)	
I will recommend university to others	0.84
I will recommend university to those who ask or seek my advice	0.91
I will recommend others on the university social media (e.g. Facebook or twitter)	0.93
I will post positive comments about the university on my social media (e.g. Facebook)	0.92
Suggestions for university improvements (IM)	
I would make suggestions to university as to how it can be improved	0.91
I would let the university know of ways that could make it better serve my needs	0.92
I would share my opinions with my university if I felt they might be of benefit	0.79
I would contribute ideas to my university that could help it improve service	0.79
Affiliation with university (UA)	
I would wear cloths (apparel) with my university logo	0.85
I would display a sticker (e.g. car or self) with my university	0.91
I would display merchandize (e.g. umbrella, mug) with my university	0.87
Participation in future university activities (PFA)	
I would attend future events being sponsored by my university	0.73
I would attend future functions held by my university	0.70
Self-brand connection (SBC)	
My personal values matches with the university values and culture	0.91
The values of university are consistent with how I see myself	0.93
The university values and culture provide a good fit to the things I valued in my life	0.89

Table I.
Constructs, items and
loading factor

positively speaking about the university, representing the university to external audiences, recruiting for the university and lending support to the university, suggestions for university improvements (IM) (Bove *et al.*, 2009), adapted to the university context, refers to providing the university with ideas and suggestions that can develop improvements that do not derive from specific instances of consumption dissatisfaction. Affiliation with university (UA) (Johnson and Rapp, 2010) represents the willingness of students to communicate to

others about their relationship with a university through the display of the university logo, university stickers and university merchandise. Participation in future university activities (PFA) (Bove *et al.*, 2009) is related to the participation of students in events and in other university sponsored activities, such as marketing research, outside of typical service delivery. SBC (Cableand DeRue, 2002) regards situations in which brand associations (meanings) are used to construct one's self or to communicate one's self to others, where a strong connection is formed between the brand and the consumer's self-identity.

Changing or leaving faculty intention, interpreted as components of turnover intention, has been measured through two items from the studies of Hom *et al.* (1984) and adapted for the university context. More specifically, in order to evaluate Cchange faculty intention, "How often do I intend to change university?" has been asked. To assess leave faculty intention, "How often do I intend to leave the university after graduation?" has been asked. Answers were given on a temporale scale (from 1 = "never" and 5 = "always").

3.3 Data analysis

All the variable means and standard deviations from this data have been calculated in this study. Scale reliability has been tested with Cronbach α value (α), considering an acceptable value from 0.60 (Ponterotto and Ruckdeschel, 2007; Robinson *et al.*, 1991), since the tools adopted in this research are characterised by a few of the items in our questionnaire (Schwartz *et al.*, 2001). The internal consistency of each scale was assessed by examining the composite reliability (CR). Value of CR 0.70 or higher has been considered acceptable (Fornell and Larcker, 1981). The convergent and discriminant validities of each scale were assessed by examining the average variance extracted (AVE). Convergent validity has been considered acceptable when the AVE of the latent variable is at least 0.50. For discriminant validity, the AVE should be greater than its squared correlation with any other latent variable (Fornell and Larcker, 1981).

The associations among all the 11 variables have been verified through Spearman's correlation index rho (ρ) for non-parametric measures given that changing or leaving faculty, both measured with an Item, are not expressed with a continuous scale. Causality relationships among variables have been assessed using a linear (multiple when occurs) regression model. In addition, a stepwise forward selection has been applied with the aim to simplify the model. A path analysis has been conducted using structural equations models, with maximum likelihood solution method, by the structural equations programme (EQS 6.1) (Bentler, 1995). Concerning fit indexes, comparative fit index (CFI; Bentler, 1989, 1990) and non-normed fit index (NNFI; Bentler and Bonett, 1980; Tucker and Lewis, 1973) have been considered within 0.90 and 1.00, respectively. Also, χ^2 values have been observed including those of degrees of freedom and p-value (Bentler, 1989, 1990). With regards to root mean square error of approximation (RMSEA), values equal or less than 0.08 have been considered acceptable. Furthermore, values within 0.90 and 1.00 of goodness of fit index (GFI) and within 0.85 and 1.00 for the adjusted goodness of fit index (AGFI) (Bentler, 1989, 1990) were considered acceptable. The Sobel test has been used in the analysis to verify the mediator role of variables (Sobel, 1982).

4. Results

Table II shows mean, standard deviation, correlations and measurement validation. The indexes of Cronbach, AVE and CR show the adequacy of scales for the adopted measures because they respect the requirements described in the data analysis section of this study. Therefore, Cronbach values from 0.60 to 0.90 have been obtained, AVEs indexes are over 0.50 as well as CRs that are coherent with consistency criteria because all the values are over 0.70.

	M (SD)	α	CR	1	2	3 (PER)	4 (KNO)	5 (PRE)	6 (SBC)	7 (UI)	8 (AD)	9 (IM)	10 (UA)	11 (PFA)
1. Change faculty	2.36 (1.32)	–	–	–										
2. Leave faculty	3.78 (1.30)	–	–	0.32***	–									
3. (PER) University brand personality	3.26 (0.66)	0.71	0.83	–0.22***	–0.18**	(0.55)							0.04	0.03
4. (KNO) University brand knowledge	3.14 (0.66)	0.60	0.81	–0.17**	–0.12*	0.45***	(0.52)						0.03	0.03
5. (PRE) University brand prestige	2.96 (0.86)	0.76	0.90	–0.25***	–0.28***	0.45***	0.50***	(0.70)					0.06	0.10
6. (SBC) Self-brand connection	3.13 (0.82)	0.90	0.94	–0.26***	–0.18**	0.34***	0.43***	0.47***	(0.83)				0.09	0.20
7. (UI) Student-university identification	3.01 (0.91)	0.63	0.80	–0.19**	–0.14*	0.23***	0.27***	0.50***	0.43***	(0.57)			0.12	0.04
8. (AD) Advocacy intentions	2.84 (0.96)	0.87	0.95	–0.36***	–0.31***	0.49***	0.52***	0.66***	0.55***	0.55***	(0.81)		0.08	0.12
9. (IM) Suggestions for university improvements	4.10 (0.82)	0.80	0.92	–0.11*	0.06	–0.09	0.06	0.02	0.16**	0.14**	0.08	(0.73)	0.03	0.04
10. (UA) Affiliation with university	2.51 (1.22)	0.78	0.91	–0.10	–0.03	0.20***	0.18**	0.25***	0.30***	0.34***	0.29***	0.18**	(0.77)	0.13
11. (PFA) Participation in future university activities	3.12 (1.01)	0.60	0.68	–0.12*	–0.27***	0.17**	0.18**	0.32***	0.45**	0.21***	0.34***	0.20***	0.36***	(0.51)

Notes: α, Chronbach's α values; CR, composite reliability. AVE's values are reported in brackets. Below the diagonal are the Spearman correlations of the constructs, above the diagonal are shown the squares of the correlations between constructs. $*p < 0.05$; $**p < 0.01$; $***p < 0.001$

Table II.
Descriptive statistics,
correlations and
validation measures

Table II highlights that university identification is positively related to supportive behaviour dimensions. In particular, results show that the relationship with advocacy is strong, but, conversely, they do not show important levels of correlation between university identification and suggestion for university improvements. Moreover, advocacy shows a high correlation index with the other dimensions considered. It is worth mentioning that university identification is positively related to its antecedents: university brand personality ($\rho = 0.23$), university brand knowledge ($\rho = 0.27$) and university brand prestige ($\rho = 0.50$). University brand prestige is also positively related to university identification ($\rho = 0.50$) and advocacy ($\rho = 0.66$). The inverse correlation between turnover Intentions and advocacy suggests that students who adopt supportive behaviours (extra-role behaviours) with their university are not tempted to change university ($\rho = -0.36$) or leave university ($\rho = -0.31$). This relationship is stronger than one identified by university identification ($\rho = -0.19$ and $\rho = -0.14$).

A multiple linear regression model, shown in Table III, explains 31 per cent of the variance ($R^2 = 0.31$), university brand prestige ($\beta = 0.44$) and self-brand connection ($\beta = 0.26$) are strong predictors of university identification. Thus, an increase in these values causes an increase in identification. Brand knowledge and brand personality, in this model, did not have predictors of identification ($p > 0.05$). These results partially confirm *H1*, because only university brand prestige and self-brand connection having a positive effect on students-university identification have been observed.

Several linear regressions, as shown in Table III, show that an increase in the identification determines an increase in advocacy ($\beta = 0.55$) and, in affiliation ($\beta = 0.32$), participation ($\beta = 0.21$) and suggestions for university improvements ($\beta = 0.20$).

These results confirm *H2–H5*, which regards university identification as having a positive impact on advocacy intentions, suggestions for improvement, university affiliation and participation in future university activities (Table IV).

Dependent variable	Predictors	R^2	β	Sig.
Student-university identification (UI)		$0.31_{(adj)}$		
	University brand prestige (UPR)		0.44	0.000
	Self-brand connection (SBC)		0.26	0.000
	University brand knowledge (UK)		−0.05	0.360
	University brand personality (UP)		−0.03	0.532
Advocacy intentions (AD)		0.30		
	Student-university identification (UI)		0.55	0.000
Affiliation		0.11		
	Student-university identification (UI)		0.32	0.000
Participation in future activity		0.05		
	Student-university identification (UI)		0.21	0.000
Suggestions for university improvements		0.04		
	Student-university identification (UI)		0.20	0.000

Source: Own elaboration

Table III.
Relationship between identification antecedents and its outcomes

Dependent variable	Predictors	$R^2_{(adj)}$	B	Sig.
Change Faculty		0.12		
	Self-brand connection (SBC)		−0.16	0.008
	University brand prestige (UPR)		−0.16	0.013
	University brand personality (UP)		−0.13	0.026

Table IV.
Changing faculty relationships

Ultimately, the values promoted by the faculty, brand prestige and personality are important elements that the university management must take into account and boost as they determine the student's identification with the faculty and favour extra-role behaviours promotion. In order to understand these links between antecedents, extra-role behaviours and turnover intention, several path models have been tested, which have not given good fit index (Table V). The valid empirical model obtained is presented in Figure 2.

Considering all of these fit indexes, the model elaborated can be considered acceptable despite the significance of χ^2 being less than 0.05 (Fida and Barbaranelli, 2005). Indeed, the ratio $\chi^2/df = 1.87$ is within the range of acceptability of the model (Bollen, 1989). The empirical model suggests that the brand prestige and self-brand connection are crucial antecedents of university identification in the student sample, and they explain 31 per cent of variance. These variables (brand prestige, value congruency and identification) explain together 57 per cent of advocacy variance. Thanks to the application of the Sobel test, it has been possible to establish that university identification has a mediator effect between university brand personality and advocacy ($z = 8.04$, $p < 0.001$). In addition, university identification has been noticed as capable to mediate the effect between self-brand connection and advocacy ($z = 7.03$, $p < 0.001$). In conclusion, advocacy gives an important contribution in explaining decreases in turnover intention, in terms of 16 per cent in changing faculty intention and 9 per cent in leaving faculty intention after graduation. Advocacy and identification (influenced by its antecedents) show a crucial role in influencing turnover Intentions. It is important to underline that not all the variance of turnover intention can be explained by antecedents and outcomes of identification, or identification itself. Many other variables can be potentially considered, and they can affect choices and turnover intention, but only a few of them can be affected by a university in order to reduce turnover intention. The results of this research highlight those variables that university management should consider and can work on. These variables mainly consist of university prestige which derives from the image communicated, and also values which are promoted by a university itself. Therefore, *H6* is only partially confirmed because no direct relationship has been found between turnover intention and the university identification. However, it is worth mentioning that an extra-role behaviour (advocacy) affects turnover intention directly.

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Fit index	χ^2 (df)	p-value	CFI	RMSEA	NFI	NNFI	GFI	AGFI
Values	28.09 (15)	0.01	0.96	0.08	0.95	0.97	0.97	0.92

Source: Own elaboration

Table V.
Fit index of final path model
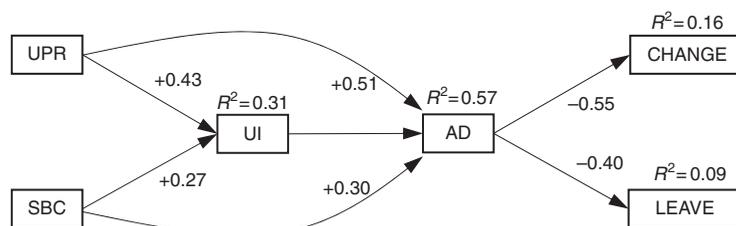
Notes: UPR=University brand prestige; SBC=Self-brand connection; UI=Student-university identification; AD=Advocacy intentions

Figure 2.
Final path model

5. Discussion, implication and limits

As explained in the introduction, university stakeholders, such as students, play a very important role in the value co-creation process, and that such students are likely to feel that their experiences have effect on university branding. Research has found that organisations with a favourable corporate identity are more likely to benefit from consumer-organisation identification (Bhattacharya and Sen, 2003), positive service evaluations, increased student loyalty (Andreassen and Lindestad, 1998) and increased student extra-role behaviours, such as positive word-of-mouth (Hong and Yang, 2009). Extant literature indicated that individuals who strongly identify with a brand or an organisation perceive it as a part of their self and express this association through different supportive behaviours. The purpose of this investigation was to understand the relationship between university identity and identification and the relationships between identification and extra-role behaviours and turnover intention. Consistent with previous studies (Kim *et al.*, 2010; Mael and Ashforth, 1992; Wu and Tsai, 2007; Wilkins and Huisman, 2013a, b), the results show that prestige and SBC are important drivers of students' supportive attitudes towards the university. According to this view, university identification occurs when students perceive it as prestigious and similar to themselves (SBC). We conclude that students who are strongly identified with the university are probably more willing to engage in extra-role behaviours that promote or serve the university. In this way, students, through their experiences, co-create the core value and quality of the university brand and become the channel through which the university image is exposed to and shared with other stakeholders. The findings of this study suggest that when students strongly identify with the higher education institution they are more likely to enjoy talking about their experiences with others and recommend the institution to other people. This implies that potential students' perception of a university might be influenced by actual students' perception advocacy. Positive word-of-mouth is often an indicator of customer loyalty, and it contributes greatly to the development of a positive reputation, promotion of the university services and higher service quality evaluations. Moreover, this study establishes a direct connection between advocacy and student turnover intention. This finding suggests that students' extra-role behaviour enhances the consolidation of the relationship with the students and reduces the intention to leave or change the university in the future. Our findings make a theoretical contribution, which also has implications in a higher educational context. Like any other type of organisation, higher education institutions are now interested in developing and maintaining a positive image in order to influence students' choices and to increase the sense of belonging among its students. This indicates that universities have to adopt students' branding strategies and the preferred channel through which organisations should promote appeal to students.

Successful branding and marketing have become increasingly important activities for institutions. Universities must now go to greater lengths to differentiate themselves from competitors.

Today, effective strategic planning and brand management require more than traditional adv ertising, marketing or identity development. Institutions that craft, present and manage a unified brand message, experience and environment achieve a competitive advantage in recruiting, retaining and building loyalty amongst their students. Such branding activities help both potential students and current students to better understand the university characteristics and its personality, and this motivates them to enrol in the university and to engage in university supportive behaviours. Marketers must promote and emphasise those aspects of the university's identity (such as quality, student-centred processes) that stakeholders (such as potential students, parents, media) will perceive as prestigious and similar to their own identities. For example, Princeton University in the UK, in order to improve the internal awareness and deliver the core brand message and values to its

students and target audience, declares on its homepage that "Princeton University has a longstanding commitment to service, reflected in Princeton's informal motto—Princeton in the nation's service and the service of humanity—and exemplified by the extraordinary contributions that Princetonians make to society." These brand strategies help students and potential students to better understand the university characteristics, increasing the degree to which students incorporate the university brand into his or her self-concept (Aaker *et al.*, 2004). To achieve image improvement, it is necessary for institution managers to pay attention to what students and other stakeholders consider important. If students identify themselves with a university brand, and if they want to be associated with it, they are more likely to enter into a long-term relationship with that university (de Chernatony and Segal-Horn, 2003). A primary objective of branding is to identify the current gap between desired and perceived images among stakeholders by a survey of current students and the local community (Alves and Raposo, 2010; Alves, 2011) and then to conduct an analysis of those factors that explain the variability in individual ratings on perceived external prestige, in order to better understand how students construct their perceived images. In order to increase the prestige and the appeal of the university, it becomes important to improve the reputation of the university. This can be achieved by communicating its position in certain ranking categories, the number of international students, the amount of research published, international collaborations, the number of papers published in top journals, the significant awards, the academic excellence or the rate at which its graduating students are able to procure jobs.

We acknowledge that our study has its limitations. The study is limited as it concerns students from one business management course of an Italian public university. Therefore, the findings may reflect the specific situation of this particular university and cultural issues which are very important in student identification with the organisation.

Future research could be replicated in different institutions and countries and should focus on emerging trends in the use of technology to both attract prospective students and boost overall student-university identification.

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