The student–university identification and its impacts on the students’ extra role behaviours. An empirical investigation

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Abstract

In this study we investigated the role of University identification to explain students’ involvement in extra-role behaviours. More specifically, we developed a theoretical model that specifies the relationships between university identity and identification and, in turn, between identification and behavioural patterns, such as extra-role behaviours and turnover intention. Our results from a sample of 338 students of an Italian university supported these hypotheses. The results show that (1) the university identity perception by students have significant effect on university identification process; (2) student-university identification have significant effect on student’s extra-role behaviour, while it is negatively related to turnover intention. This research offers support for the importance and value of brand management in higher educational context. The findings suggest that institutions would benefit from articulating and communicating their identities clearly, coherently and in a persuasive manner, emphasising those aspects of the university’s identity that future students will perceive as prestigious and similar to their own identities.

Keywords
University image, student-university identification, value co-creation, extra-role behaviour
1. Introduction

Nowadays, in Europe, some economic and social trends in educational environment, such as globalization, 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 collecting good students and faculty members. In order to overcome the competitive pressure, universities need to modernize to become more effective and to reinforce their role in society. According to Gounaris, Tzempelikos and Chatzipangiotou (2007), in order to find ways of attracting and retaining their potential and current students, the higher education sector have to focus on increasing service quality and consumer perceived value. The creation of value has been identified as a means of differentiation and crucial to the creation of sustainable competitive advantage (Woodruff, 1997; Gounaris et al., 2007; Fuller-Love, 2009; Muga & Santamaria, 2010). In this context, for the university has become more important to build distinct brand identity. As with commercial brand management, the development of a distinctive brand helps to create a sustainable competitive advantage in the higher educational sector (Aaker, 2004; Hemsley-Brown, and Goonawardana, 2007). Balaji et al. (2016) recommend that universities should engage in branding activities that develop a strong student–university identification in order to enhance the students' university supportive behaviours. From the perspective of Service Dominant Logic (SDL), customer engage in dialogue and interaction with their suppliers during product design, production, delivery and consumption. The core concept of SDL is that the customer is always a co-creator of value (Vargo & Lusch, 2004). 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 organization and their voluntary behaviours towards that organisation (Mael & Ashforth, 1992; Ahearne et al., 2005; Wu & Tsai, 2007; Hong & Yang, 2009; Kim et al., 2010; Wilkins & Huisman, 2013). This study aims to discover whether identification with the university among students is associated with their voluntary behavioural intentions for that university.

These arguments suggest that Universities need to create new management organization structures that affect students, as well as other stakeholders, through organizational identity. In order to design a specific organizational identity, university managers need to know how their institutions are perceived by stakeholders—or rather how the signs that represent their institutions are received and transformed into corporate images—and the criteria used to evaluate image attractiveness. Previous research has investigated the university image-formation process of students and the influence of university image on student behaviour (Alves & Raposo, 2010; Sung & Yang, 2008). Some scholars argue that students are often motivated by institutional rankings and their perceptions of academic quality and prestige when choosing the institutions to which they will apply. There is consensus in the literature that university with a favourable identity are more likely to benefit from students-university identification (Bhattacharya & Sen, 2003), increased student loyalty (Andreassen & Lindestad, 1998), and increased students value co-creation behaviours (Yi Y., Gong T., 2013). Like any other type of organization, higher education institutions are now increasingly interested in developing and maintaining a positive identity in order to influence potential students’ choice of institution. Image, prestige, personality are dimensions of university identity.
While these studies confirm that university identification can enhance students' perception towards the university, there is a lack of understanding of how university identification is formed and how this influences students' value co-creation behaviours. Yi & 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 provide extraordinary value to the organization. Despite the abundance of studies in the literature, a few studies have examined the effects of identification on students' extra-role behaviours (DiPaola & 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 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. Specifically, the research question is “do students that experience strong identification promote and safeguard the interest of the university, or voluntary share their opinions and contribute ideas to help the university provide better service to the students?"

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

The paper is organized 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. Value co-creation and student’s extra role behavior.

Despite value concept has been widely investigated since ’90 by academics and it represent one of the foundations of last decades’ managerial literature, several and not definitive definitions have been elaborated. Starting from this consideration, value has been studied from the perspective of creating and supplying value to the customer, from the perspective of client value to the company and from the value perceived by the client (Alves 2011). So referring to educational field, value represent one of the main issue to consider for both managerial researchers and educators, since values impact on behaviour, both within an educational environment and in marketing practice (Ledden et al. 2007). In particular, considering perceptions – attitude - intention – behavior sequence provided by the Reasoning Action Theory (Fishbein & Aizen 1975) perceived value emerge, and it affect customer satisfaction and intentions to repurchase (Alves 2011). Several authors in high educational field argue that students’ perceptions of value underpin their decision making in terms of choice of institution (Fisher et al., 2007), affect evaluation of the education provision received, and influence satisfaction with the educational experience (Ledden et al., 2007). Taking an organisational perspective, others have focused on value as a tool to identify and satisfy student/stakeholder needs and to inform strategic planning to meet institutional goals. Moreover, it is worth mentioning that value concept has been described differently (Payne & Holt 2001, Fornell et. al 1996, Mc Dougall & Levesque 2000, Ledden and Kalafatis 2010).
also in educational field. (Ledden & Kalafatis 2010, Brooks and Everett 2009); despite this variety, the literature evidences common elements (both conceptual and empirical) in terms of value as a multifaceted and complex construct that is a distinct concept from quality and satisfaction. Furthermore, value perceptions of the same offering are found to vary across different situation (Grönroos, 1997), vary across time and experience (Eggert and Ulaga, 2002; Flint et al., 2002), vary depending on the type of offering under, be relative to existing competition (Eggert and Ulaga, 2002), and it is determined by customer characteristics (Baker et al., 1991; Cronin et al., 1997; Brady and Robertson, 1999, McDougall and Levesque, 2000; Eggert and Ulaga, 2002). Concerning educational field, again, one of the definition concern the trade off approach, in terms of the overall evaluation made of the utility of services based on the perception of that which is received and that is given (Alves et al. 2010). Value has been also conceptualised within a multidimensional framework that considers all the functional, emotional and psychological benefits and sacrifices of a consumption experience (Sánchez-Fernández and Iniesta-Bonillo, 2007). Looking at structural relationships between value and other constructs, quality is the most often researched antecedent of value, whether in a services or products context (Baker et al., 1991; Teas and Agarwal, 2000). In traditional marketing settings, the purpose of an organisation is achieving corporate goals through matching customer needs better than the competitors (Jobber, 2004). This view has been influenced the marketing approach until now, also in higher educational field. In particular managerial literature defines this perspective as ‘goods-centred’ dominant logic with an artificial separation of production and consumption (Vargo & Lush, 2004). As a consequences, customers are often seen as passive responders to various marketing activities rather than active participations in the value creation-process. Nowadays things are radically changing; with the introduction of Service Dominant Logic (SDL) (Vargo & Lush 2004, 2008, 2011, Lush & Vargo 2006, 2014), managerial literature referring to value creation has been reformulating. A key concept within this field is that of value cocreation, the idea that value is not solely being created for the customer by the provider of a service but for and by both parties throughout the time of their interaction (Neghina et al 2014). The main assumption of service-dominant logic (SDL) is that the customers are always active participants and collaborative partners in exchanges; customers co-create value with the firm basically, and as a consequence he become a value cocreator. Prahalad & Ramaswamy (2004, 2004) gave a massive contribution in value cocreation literature arguing that co-created experience becomes an important basis of value. It allows the customer to co-construct the service experience, jointly define the problem and then involve in the problem solving process. Further, Lush and Vargo (2004, 2006, 2008, 2011, 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. Indeed, the main assumption of sd logic is that the customer is always a value cocreator. Considering the customer like the centre of the value co-creation process lead inevitably to valorising the customer engagement behaviour and process in order to best enhance value cocreation (Lush & Vargo 2006). Turning to educational field, in which intangible assets and human competence are key sources in value creation process, although the scares number of studies, sdl is one of the most significant field appropriate to be applied. More specifically, the consumer transforms into an operant resource or ‘co-producer’ and acts on operand resources as a ‘resource integrator’ (Vargo and Lusch, 2004; Prahalad and Ramaswamy, 2004). Individual co-creation experiences give the chance to obtain value co-creation, facilitated by the company to produce personalised unique value. Therefore, the source of value co-creation has to be found at various level of consumer-company interaction. This participation has a dual nature (Bettencourt & 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 required in-role behaviour that is necessary for successful value co-creation, and customer citizenship behaviour, which is voluntary extra-role behaviour that provides unusual value to the company. (Bove et al., 2008; Groth, 2005; Yi & Gong, 2008). In terms of value co-creation, these constructs are more important because they are behaviors necessary for a successful service creation. Customers employ their knowledge in services creation and improve it with their feedback and suggestions. Literature defines customer participation as the source of value creation, since customers’ participation increases simultaneously to their motivation and their commitment to the organization. These circumstances permit a greater service quality perception (Dong, Evans, & Zou, 2008). In recent years, there has been an increasing focus on customer citizenship behavior in the managerial and marketing literature (Aherne et al., 2005; Bettencourt, 1997; Groth, 2005). Despite the abundance of studies in the OCB literature, research on citizenship behaviour has been scarce in educational contexts. A few studies have examined the effects of OCB among university faculty members and school teachers on task performance and student achievement (DiPaola & Hoy, 2005). Even less is known about students’ citizenship behavior and its implications for their academic and social development. Empirical studies show there are different antecedents and consequences for extra-role behaviors (Groth, 2005). Although the study of customer citizenship behaviors has increased remarkably in the past few years, little work has focused on the relationship with organizational identification. Literature on customer citizenship behavior suggests different dimensions of customer citizenship behavior, like as positive word of mouth (Harrison-Walker, 2001; Bove et.al. 2009); providing suggestions for service improvement ( Groth 2005; Bove 2009, ); participation in the organization’s activities; helping other customers, displays of affiliation (Bove et al. 2009); benevolent acts of service facilitation; tolerance of service failures (Keh and Teo 2001); commitment to the service organization (Ford,1995).

2.2. University identity

Tajfel (1978) defined social identity as “that part of an individual’s self-concept which derives from his knowledge of his membership of a social group. According to Social Identity Theory (SIT), the people classify themselves and others into various social categories (Ashforth and Mael 1989; Turner 1975) as a mechanism to create order in their social environment. Tajfel (1978) defines social identity as, ‘that part of an individual’s self-concept which derives from his/her knowledge of his/her membership in 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 behavior. 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 behaviors (Hogg and Abrams, 1988). The central hypothesis of social identity theory is that group members of an in-group will seek to find negative aspects of an out-group, thus enhancing their self-image.

According to Albert and Whetten (1985), identity is the central, distinctive, and enduring characteristic of an organization: It is how the collective answers the question “who are we as an organization?” Organizational identity plays a central role in the strategic process of a University, providing image of the organization and what it wishes to represent. Identities are usually an amalgam of the perceived characteristics (e.g., values, goals, beliefs) and the perceived characteristics of its members. Organizational image is described as the overall impression made on the minds of the public about an organization (Barich and Kotler 1991; Nguyen and LeBlanc 2001). Karaosmanoglu and Melewar (2006), define corporate image as,
“the set of meanings by which an object is known and through which people describe, remember, and relate to it. That is, it is the result of the interaction of a person’s beliefs, ideas, feelings, and impressions about an organization at a particular moment in time” (p. 198).

Barich and Kotler (1991) state that image refers to a stakeholder’s personal impression of an organization, 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. The construction of corporate images is influenced by personal and social factors as well as organizational factors. Kennedy (1977) 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 toward the organization. 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 organization’s image will depend on the extent to which they perceive the organization’s identity to be similar to their own, the extent to which the organization is distinctive in ways that they value, and the extent to which the organization is regarded as prestigious among stakeholders whose opinions they value. The more attractive an individual perceives an organization’s image, the stronger the person’s identification with the organization will be (Dutton, Dukerich, & Harquail, 1994). Perhaps, more importantly to organizations, the more attractive an individual perceives an organization’s image, the more likely the individual will engage in supportive behaviours for the organization, such as becoming a customer, remaining loyal to the organization and recommending the organization to others (Bhattacharya & Sen, 2003). Previous studies show that the significance of institutional image can be extended to the higher education context. The image of universities is a new topic that is receiving greater attention as universities recognize the importance of attracting students and having distinct images in the competitive market. 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). Organizational members who believe their organization has a distinctive culture, strategy, structure, or some other configuration of distinctive characteristics (i.e., the greater the distinctiveness of the image they perceive from their organization) are likely to experience strong levels of organizational identification. It is coherent to believe that the way an organization is perceived by others and its image, directly affects organizational identification (Dutton et al. 1994). Based on these arguments, it seems reasonable to believe that the greater the distinctiveness of a university’s image, the stronger a graduate’s identification with it. Indeed, in the higher education 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 organizational identification, in terms of a perception of oneness or belongingness to an organization.
2.3. University identification

As a specific form of social identification, organizational identification reflects the specific ways in which individuals define themselves in terms of their membership in a particular organization (Mael & Ashforth, 1995). Organizational identification is the degree to which a member defines him- or herself by the same attributes that he or she believes define the organization. Dutton, Dukerich, and Harquail (1994) argue that the more attractive an individual perceives an organisation’s identity, the stronger the person’s identification with it will be, and the more an individual identifies with an organisation, the more likely he/she is to take the organisation’s perspective and act in the organisation’s best interests. Individuals with strong identification with a specific group define themselves in relations with the group and evaluate any group threats to the self. When a person's self-concept contains the same attributes as those in the perceived organizational identity, we define this cognitive connection as organizational 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. Through this organizational identification, individuals perceive themselves as being linked with the organization. They see the organization’s successes and failures as their own successes and failures. This identification has been recognized as an important factor in the wellbeing of organizational members. According to the social identity theory, self-concept is formed by personal identity, which includes idiosyncratic characteristics, and social identity, which encompasses the salient characteristics of the group to which the individual belongs or would like to belong. Bergami and Bagozzi (2000), argue that the most developed conceptualization of identification in institutions analyses the phenomenon as a form of social identification where the individual sees himself as a member of a social entity – the organization. This phenomenon occurs through a cognitive process of classification, where each individual forms self-categories of organizational affiliation and similarities of himself with other members of the organization. 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). Escalas and Bettman (2003) 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. In sum, consumers choose to have relationships with brands because such relationships help them develop a sense of who they are and communicate about themselves to others (Escalas and Bettman 2003). Balaji, Roy, and Saadeque examines 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 organizational prestige to predict member’s organizational identification. Student’s perceptions of their organization’s prestige more strongly will be their identification with the university, which results in shared goals, identities, and values between the university and the students. According to this view, University identification occurs when students perceive it as prestigious, distinctive (personality) and similar (self-brand connection), in which case students are more likely to engage in supportive behaviours. The organizational behaviour literatures indicate that organizational identification has emerged as a predictor of various individual outcomes such as customer participation behaviour/customer citizenship behaviors (Ashforth & Mael, 1989; Bergami and Bagozzi 2000), commitment and turnover intentions. Thus, university identification is a very important factor in fostering students’ university co-
creation process that encompasses: (1) feelings of solidarity in relation to the institution and support to the university, (2) the sharing of characteristics with the university in terms of vision and values, and (3) 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 and participation in future university activities.

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 publics, 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 (Bettencourt, 1997). 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 (Bettencourt, 1997). 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. H1: 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 suggestion for improvement, the employees cannot begin or perform their duties and the quality of value co-creation may be poor. Beaudoin (2005) suggests that student voice 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 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 of expanding brand. The feedback from students can be valuable, and constitutes extra-role behavior. The above discussion informs the following hypothesis. H2: University identification has a positive impact on suggestions for improvement.

Display of affiliation occur when the students communicate to others of their relationship with an 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 promotion strategy of wearing clothing with the school's logo. Similarly, Oja, Bass, and Gordon (2015) propose that after successful game students show a greater tendency to wear university clothing to display their identification with the university. Thus, the following hypothesis is proposed. H3: 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 M.S. 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 H4: University identification has a positive impact on participation in future university activities.
Previous research indicates that organizational identification should both be reliable predictors of turnover intention. This study aims to discover whether identification with the university is negatively associated with intentions to turnover. This construct was chosen because it is relevant for the universities because it predicts the student’s intention to leave in future the university. Therefore, anticipating students’ turnover intention seems to be crucial. An appropriate management of the relationships with students should allow university to anticipate students’ loss. Furthermore, universities should focus on students when trying to retain them is still possible. The above discussion informs the following hypothesis. Hence H5: Turnover intention should be negatively associated with organizational identification. In this study we propose that organizational identification is negatively related to turnover intentions and positively related to extra-role behaviour toward the organization. Fig. 1 shows a framework for examining the antecedents of university identification and its effect on students value co-creation behaviours and turnover intention.

**Figure 1. General Path Model**

\[PER \rightarrow AD\]
\[KNO \rightarrow IM\]
\[PRE \rightarrow PFA\]
\[SBC \rightarrow UA\]

PER = University Brand Personality  
KNO = University Brand Knowledge  
PRE = University Brand Prestige  
SBC = Self-Brand Connection  
UI = Student-University Identification  
AD = Advocacy Intentions  
IM = Suggestions for University Improvements  
PFA = Participation in Future University Activities

Source: own elaboration

3. Research method

3.1 Sample, context and procedure

We conducted our research 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 long 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
Next, we conducted the main survey study and, to test our model, we conducted a convenience sample to collect responses from students enrolled at the second and third year in 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 a 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%. From an initial sample, researchers discarded 5 questionnaires due to missing values, leaving a final simple of 333. The sample comprised of 145 males (43.5%) and 188 female (56.5 %), ranged between 19 and 45 years with an average age of 22 years old.

3.2 Measurement Instrument

Four theoretical constructs were measured to test the proposed model. The questionnaire was originally written in English and then translated into the Italian language. The measurement items for study constructs were developed based on previous studies (Balaji et al. 2016) The measures for student-university identification were adapted from established scales developed by Sung & Yang (2008), Mael & Ashfort (1992). Table 1. Respondents indicated their levels of agreement with each statement on a 5-point Likert-type scale anchored at ‘1’ strongly disagree and ‘5’ strongly agree. The face validity and content validity of the measures are assessed by three academic staffs and one doctoral student. Further, they evaluated the measurement items and survey questionnaire for completeness, wording, clarity, structure, and the appropriateness of the items.

3.3 Data analysis

Scales reliability has been tested using the Cronbach’s alpha (\(\alpha\)) index. Moreover, a correlation analysis with Spearman's rank correlation coefficient (\(\rho\) (rho)), has been used in order to investigate association between both continuous and discrete variables for non parametric measures. Causality relationships among variables have been assessed using a linear (multiple when occurs) regression models. In addition, a stepwise forward selection has been applied with the aim to simplify the model. A path analysis has been conducted using SEM (Structural Equations Models), with Maximum Likelihood Solution Method, by the Structural Equations Program (EQS 6.1) (Bentler, 1995). Concerning fit indexes, Comparative Fit Index (CFI; Bentler, 1989, 1990) and Non-Normed Fit Index (NNFI; Bentler & Bonett, 1980; Tucker & Lewis, 1973) have been considered within .90 and 1.00. Also \(\chi^2\) 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 .08 (Steiger, 1989) have been considered acceptable. Furthermore, value within .90 e 1.00 of Goodness of Fit Index (GFI) and within .85 e 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 moderator role of variables (Sobel 1982).
3.4 Results

The correlation among variables are presented in Table 1.

Table 1 – Mean, standard deviation, Cronbach’s alpha, correlations

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<td>1. Change faculty</td>
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<td>2. Leave Faculty</td>
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<td>3. [PER] University brand personality</td>
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<td>4. [KN] University brand knowledge</td>
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<td>5. [P] University brand prestige</td>
<td>2.96 (1.66)</td>
<td>.76</td>
<td>-25*</td>
<td>-18*</td>
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<td>6. [BC] Self-brand connection</td>
<td>3.13 (1.62)</td>
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<td>.47**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7. [UI] Student-university identification</td>
<td>3.01 (1.91)</td>
<td>.63</td>
<td>-19*</td>
<td>-14*</td>
<td>.35**</td>
<td>.25**</td>
<td>.50**</td>
<td>.43**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8. [AB] Advocacy intentions</td>
<td>2.84 (1.96)</td>
<td>.87</td>
<td>-26*</td>
<td>-15*</td>
<td>.49**</td>
<td>.53**</td>
<td>.56**</td>
<td>.55**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9. [BI] Suggestions for university improvements</td>
<td>4.10 (1.82)</td>
<td>.85</td>
<td>-.12</td>
<td>.06</td>
<td>.06</td>
<td>.05</td>
<td>.16*</td>
<td>.08</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10. [AUI] Affiliation with university</td>
<td>2.51 (1.22)</td>
<td>.76</td>
<td>-.10</td>
<td>.10</td>
<td>.16**</td>
<td>.18*</td>
<td>.25**</td>
<td>.30**</td>
<td>.54**</td>
<td>.29**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11. [PS] Participation in future-university activities</td>
<td>3.12 (1.01)</td>
<td>.65</td>
<td>-.13</td>
<td>-.27**</td>
<td>-.17*</td>
<td>.14*</td>
<td>.32**</td>
<td>.45*</td>
<td>.21**</td>
<td>.34**</td>
<td>.26**</td>
<td>.36**</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* p<.05, ** p<.01, *** p<.001

Table 1 highlights that university identification is positively related to supportive behaviours 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 high correlation index with other dimensions considered. It is worth mentioning that University identification is positively related to its antecedents: University Brand Personality (ρ= .23), University Brand Knowledge (ρ= .27), and University Brand Prestige (ρ= .50). University Brand Prestige is also positively related to University Identification (ρ= .50) and Advocacy (ρ= .66). The inverse correlation between Turnover intentions and Advocacy, suggest that students who adopt supportive behaviours (extra-role behaviours) with their University are not tempted to Change it (ρ= -.36) or Leaving it (ρ= -.31). This relationship is stronger than one identified by University Identification (ρ= -.19 e ρ= -.14).

In a multiple linear regression model, shown in Table 2, which explains 31% of the variance (R2 = .31), University Brand Prestige (β = .44) and Self Brand Connection (β = .26) are strong predictors of University Identification, so that 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> .05). Several linear regression, as shown in Table 2, shows that an increase in the Identification determines an increase in Advocacy (β = .30) and, in Affiliation (β = .11), Participation B = .05, and Suggestions for University Improvements (β = .04). Therefore, it can be argued that the hypothesis of this research work are confirmed given that University Identification has a positive impact on Advocacy (H1), on Affiliation (H3), on Participation in future activities (H4), and even if that impact on Suggestion for improvements variable is not markedly strong (H2).
Table 2 – Relationship between identification antecedents and its outcomes

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictors</th>
<th>R²_(adj)</th>
<th>β</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification</td>
<td>Brand Prestige (PRE)</td>
<td>.31</td>
<td>.44</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Self brand connection (SBC)</td>
<td></td>
<td>.26</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Brand Knowledge (BK)</td>
<td></td>
<td>-.05</td>
<td>.360</td>
</tr>
<tr>
<td></td>
<td>Brand Personality (PER)</td>
<td></td>
<td>-.03</td>
<td>.532</td>
</tr>
<tr>
<td>Advocacy</td>
<td>Identification</td>
<td>.30</td>
<td>.55</td>
<td>.000</td>
</tr>
<tr>
<td>Affiliation</td>
<td>Identification</td>
<td>.11</td>
<td>.32</td>
<td>.000</td>
</tr>
<tr>
<td>Participation in future activity</td>
<td>Identification</td>
<td>.05</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Suggestions for University improvements</td>
<td>Identification</td>
<td>.04</td>
<td></td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: own elaboration

Two multiple linear regression models has been conducted in order to assess the relationship between Turnover Intention and its predictors (Self Brand Connection, University Brand Prestige, University Brand Personality) with a stepwise forward. The only model which proved significance was the one belonging to Changing faculty (see Tab. 3); the other one, related to Leaving the faculty, didn’t show significance (p>.05).

Table 3 – Changing faculty relationships

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Predictors</th>
<th>R² (adj)</th>
<th>B</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changing Faculty</td>
<td>Self brand connection</td>
<td>.12</td>
<td>-.16</td>
<td>.008</td>
</tr>
<tr>
<td></td>
<td>University Brand Prestige</td>
<td></td>
<td>-.16</td>
<td>.013</td>
</tr>
<tr>
<td></td>
<td>University Brand Personality</td>
<td></td>
<td>-.13</td>
<td>.026</td>
</tr>
</tbody>
</table>

Source: own elaboration

As illustrated in Table 3, variables capable of influencing the Changing the Faculty variable are the University Brand Personality (β = -.13), University Brand Prestige (β = -.16) and Self Brand Connection (β = -.16). As each of these variables grows, the intention to change faculty decreases. These results suggest that University Brand Prestige and Personality are not the only factors capable of contributing to the development of an attitude of abandoning the faculty, they explaining only the 12% of the variance indeed. This give also information about other factors not taken into account in this research which could be involved, such as, for example, public transport, accommodation, comfort of classrooms as well as various university services, etc., which are all worthy of further investigations. 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 and they significantly reduce the intentions of leaving the faculty. Several path models have been tested, which have not given good fit index. The valid empirical model obtained is presented in the following Figure.

Fig. 2 – Final Path Model

![Final Path Model Diagram](image)

PRE = University Brand Prestige  
SBC = Self-Brand Connection  
UI = Student-University Identification  
AD= Advocacy Intentions  
 CHANGE  
 LEAVE  

Table 1 – Fit index of Final Path Model

<table>
<thead>
<tr>
<th>Fit index</th>
<th>$\chi^2$ (df)</th>
<th>$\ p$- value</th>
<th>CFI</th>
<th>RMSEA</th>
<th>NFI</th>
<th>NNFI</th>
<th>GFI</th>
<th>AGFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values</td>
<td>28.09 (15)</td>
<td>.01</td>
<td>.96</td>
<td>.08</td>
<td>.95</td>
<td>.97</td>
<td>.97</td>
<td>.92</td>
</tr>
</tbody>
</table>

Considering all of these fit index the model elaborated can be considered acceptable despite the despite the significance of $\chi^2$ being less than .05 (Fida & 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 students sample, and they explain 31% of variance. These variables (Brand prestige, value congruency and Identification) explain together the 57% 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, $p$<.001): in addition University Identification it has been noticed that is capable to mediate effect between Self Brand Connection and Advocacy ($z$=7.03, $p$<.001). In conclusion, Advocacy gives an important contribution in explaining decreases in Turnover intention, in terms of 16% in Changing Faculty intention and 9% 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 few of them can be affected by University in order to reduce Turnover Intention. The results of this research highlight those variables that University management should consider.
and on which can work. These variables mainly consist of University prestige which derives from the image communicated, and also values which are promoted by University itself.

4. Discussion, implication and limits

As explained in the introduction, university stakeholders, like students, play a very important role in 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-organization identification (Bhattacharya & Sen, 2003), positive services evaluations, increased students loyalty (Andreassen & Lindestad, 1998), and increased students extra-role behaviors, such as positive word of mouth (Hong & 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 behaviors and turnover intention. Consistent with previous study (Kim et al., 2010; Mael & Ashforth, 1992; Wu&Tsai, 2007; Wilkins & Huisman, 2013), the results show that prestige and self brand connection are important drivers of students’ supportive attitudes toward the university. We conclude that when students are strongly identified with the university are probably more willing to be engaged in extra role behaviours that promote or serve the university. Our findings make a theoretical contribution, which also has implications in a higher educational context. Like any other type of organization, higher education institutions are now increasingly interested in developing and maintaining a positive image in order to influence students’ choice. This indicates that universities would benefit from investing in order to create a strong, exceptional and distinctive identity. Universities should develop a brand campaign in order to deliver the core brand message and values to its students and target audience. Such branding activities help students better understand the university characteristics and its personality, and this motivates them to engage in university supportive behaviours. To improve self-brand connection, universities might look into factors such as academic experience, quality, and student-centred processes. University management have to improve the visibility and reputation of the university’s identity through external communication with the aim to enhance perceived external prestige. To achieve image improvement, it is necessary for institution managers to first identify the current gap between desired and perceived images among stakeholders by a survey current students, and the local community (Alves & Raposo, 2010) and then, in order to better understand how students construct their perceived images, to conduct an analysis of the those factors that explain the variable in individual ratings on perceived external prestige. The study is limited as that 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. Future research efforts should be directed in considering multiple institutions.
References


Beaudoin, M. F. (2003). Distance education leadership for the new century. Online Journal of Distance Learning Administration, 6(2).


Appendix 1 - Construct and item
All items were answered using a five-point Likert scale which ranged from 1=strongly disagree to 5= strongly agree.

*Prestigious* This construct was measured using three Items that were adapted from Mael & Asforth, 1992
People think highly of the university.
The university maintains a high standard of academic excellence.
It is considered prestigious to be an alumnus of the university.

*Personality* This construct was measured using four Items that were adapted from Sung & Yang, 2008.
Friendly
Stable
Practical
Warmth

*Self-brand connection* This construct was measured using three Items that were adapted from Cable & Derue, 2002
My personal values matches with the university values and culture.
The values of university are consistent with how I see myself.
The university values and culture provide a good fit to the things I valued in my life.

*University Identification.* Items were based on Abrams et al. (1998; cf. Hinkle, Taylor, Fox-Cardamone, & Crook, 1989):
```
''I feel strong ties with this company;''
'this company is important to me;''
''I feel proud to be a member of my company;''
''I feel a strong sense of belonging to this company;''
‘belonging to this company is an important part of my self-image;’’
''I often regret that I belong to this company’’ (reversed); and ‘’I am glad to be a member of this company.’’
```

*Suggestions for improvement.* The following five statements were used to measure this construct (Bove et.al., 2009):
would make suggestions to [university] as to how it can be improved
I would let the [university] know of ways that could make it better serve my needs
I would share my opinions with my [university] if I felt they might be of benefit
I would contribute ideas to my [university] that could help it improve service

*Advocacy.* This construct was measured using three Items were adapted from Yi Y. and Gong T. (2013).
I will say positive things about my university to others
I will recommend my university to others
I will encourage friends to enroll in my university
I will post positive comments about the university on the social media (e.g. Facebook or twitter)
Display of affiliation. This construct was assessed through three items developed by Johnson & Rapp. A. (2010).

- Would wear clothes (apparel) with my [university] logo;
- I would display a sticker (e.g. car or self) with my [university];
- I would display merchandise (e.g. umbrella, mug) with my [university].

Turnover Intention
- How often I intend to change this university
- How often I intend to leave the university after graduation