Understanding the relationship between university characteristics and prestige

University characteristics and prestige

Başak Topaler and Nur Ayvaz-Çavdaroğlu Kadir Has University, Istanbul, Turkey

> Received 3 May 2020 Revised 8 October 2020 11 January 2021 Accepted 6 March 2021

Abstract

Purpose – Being a prestigious institution depends on gaining respect in the eyes of various stakeholders with diverse expectations. Existing research is silent on how university characteristics affect judgments of prestige and, therefore, presents an incomplete picture of prestige dynamics in higher education. This paper aims to fill this gap in the literature by empirically examining the stakeholders' evaluation of university characteristics in terms of prestige value.

Design/methodology/approach – The entire population of universities (public and private) in Turkish higher education constitutes the sample of the study. The analytic hierarchy process technique is applied to ascertain how stakeholders prioritize university characteristics in terms of prestige value, and regression analysis is used to determine the effects of these characteristics on university selectivity.

Findings – The findings suggest a novel conceptual model of university prestige, which establishes its multilayered and fragmented nature. Accordingly, universities may be subject to multiple prestige hierarchies based on universal or context-specific criteria, in the eyes of various stakeholders, and based on different markers of success.

Research limitations/implications – The empirical analyses are limited to the stakeholder groups that are key to university outcomes in Turkish higher education, and to selectivity in admissions as the only visible marker of success in this context.

Originality/value – The study enhances existing literature that posits that universities are subject to a single prestige hierarchy based on common metrics of performance. It illustrates the uneven landscape in which university prestige evolves by developing a wider and deeper focus on university characteristics.

Keywords Universities, Stakeholders, Higher education, Prestige

Paper type Research paper

1. Introduction

In recent years, increased competition together with decreased government and private funding have forced universities to adopt a market orientation and become more competitive (Levy, 2006). Prestige serves as a valuable asset for universities, as it attracts talented students, academic staff and administrators (Espeland *et al.*, 2016). Accordingly, universities try to attain, grow and protect prestige (Askin and Bothner, 2016; Breznik and Law, 2019).

Existing research in the context of higher education posits rankings published by institutional intermediaries as the main indicator of university prestige [1] (Dearden *et al.*, 2019; Hazelkorn, 2015; Rindova *et al.*, 2018; Torres-Olave *et al.*, 2020). Universities with higher scores on metric-based measures applied by these ranking systems are considered to be more prestigious (Dill and Soo, 2005; Espeland *et al.*, 2016). Although visible markers of success such as rankings surely contribute to university prestige, they present an incomplete picture of prestige dynamics in higher education. Prestige, as a social judgment, reflects the evaluator's opinion (Bitektine, 2011; Bitektine *et al.*, 2020; Park *et al.*, 2020). Being a prestigious university depends on gaining respect in the eves of various stakeholders with



International Journal of Organizational Analysis © Emerald Publishing Limited 1934-8835 DOI 10.1108/IJOA-05-2020-2166 diverse expectations (Bloch and Mitterle, 2017). Given the lack of consensus on what constitutes quality in higher education (Altbach and Salmi, 2011; Tsinidou *et al.*, 2010), these stakeholders may attach prestige value to a wide variety of university characteristics (Campbell *et al.*, 2019; Holland and Ford, 2020; Ressler and Abratt, 2009). A full theoretical account of university prestige thus requires a wider and deeper focus on organizational characteristics.

Existing research does not provide an in-depth understanding of the way university characteristics contribute to university prestige. Some research that focuses on the organizational characteristics of universities suggests that those with better financial strength, academic support practices and organizational climate have higher performance in ranking systems (Kok and McDonald, 2017; Uslu, 2017). No study, to our knowledge, has investigated how stakeholders evaluate university characteristics in terms of prestige value.

The current study aims to fill this gap in the literature by investigating the relationship between university characteristics and prestige. As the concept of university prestige encompasses stakeholder judgments together with visible markers of success, the study targets the following research objectives:

- understanding how university characteristics affect stakeholder judgments of prestige; and
- understanding how university characteristics affect visible markers of success.

To meet these objectives, we conducted an exploratory empirical study in the Turkish higher education field. Our findings paved the way for proposing a novel conceptual model of university prestige that establishes the multilayered and fragmented nature of this construct.

2. Literature review

The concept of prestige denotes an actor's position in a social hierarchy where higher ranks are associated with greater esteem and respect (Sauder *et al.*, 2012). Organizational research conceptualizes prestige as a valuable resource possessed by the organization, providing greater reward for the same effort and improved survival (Chae *et al.*, 2020; Piazza and Castellucci, 2014). Given its abstract nature, the concept of organizational prestige is usually associated with visible markers such as prominent affiliates and endorsement by institutional intermediaries (Pollock *et al.*, 2019; Rindova *et al.*, 2018).

As a social judgment, though, prestige lies in the eyes of the beholder (Bitektine, 2011). It is formed by the collective experiences of stakeholders that an actor engages with Altura (2020) and Kakkar *et al.* (2020). These stakeholders may evaluate organizations based on various features of their identity, depending on their preferences and desires for the organization (Jensen *et al.*, 2011). Accordingly, the set of organizational characteristics that is relevant for prestige assessment and their significance depend on different stakeholders' points of view. Further, stakeholders' judgments of prestige may be shaped by various contextual factors, and be loosely coupled with actual quality or esteem (Elsbach and Cable, 2019). Existing literature on prestige is mostly silent on this "evaluator's perspective," and there have been recent calls for understanding the way audiences make sense of actors in a social setting (Bitektine *et al.*, 2020; Park *et al.*, 2020).

Research on prestige in the context of higher education also fails to account for this evaluator's perspective. University prestige is usually associated with visible markers of success, such as rankings published by institutional intermediaries (Dearden *et al.*, 2019; Hazelkorn, 2015; Torres-Olave *et al.*, 2020). Yet, stakeholders of universities have diverse expectations, which may not be fully captured by the metric-based measures of success

applied by these ranking systems (Bloch and Mitterle, 2017; Brankovic, 2018; Jung and Lee, 2019). Indeed, there exist diverse perspectives on what constitutes quality in higher education (Altbach and Salmi, 2011; Tsinidou *et al.*, 2010). In this context, a wide variety of features that build up a university's identity may have prestige value (Briggs, 2006; Campbell *et al.*, 2019; Holland and Ford, 2020; Ressler and Abratt, 2009).

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3. Methodological framework

The entire population of universities (public and private) in the Turkish higher education field constitutes the sample of the study. Stakeholder groups who are key to the operations and outcomes of universities in this field are:

- academicians;
- white-collar managers who recruit university graduates; and
- high school counselors who play an important role in advising pupils in university selection.

Selectivity in admissions is the most visible marker of university success in the Turkish higher education field [2], as well as in other contexts of higher education (Alon, 2009; Askin and Bothner, 2016).

The subsections below explain the three-step methodological framework applied in the study.

3.1 Identifying the university characteristics that the stakeholders consider in evaluating universities

We conducted ten interviews with each of the three stakeholder groups (i.e. academicians, managers and counselors). Although the respondents were recruited by convenience sampling, a heterogeneous sample was formed in terms of tenure, gender and location [3]. The interviews were designed to apply card-sorting techniques (Budhwar, 2000) which began by handing the informants laminated cards with the names of selected universities and asking how they would classify these universities. To ensure feasibility in the card-sorting exercise, a sample of 30 universities [4] was presented. The informants were asked to cluster the universities, using any criteria they preferred and making as many clusters as they liked. When they finished putting all the cards into clusters, they were asked to name each cluster and describe its characteristics. During this process, any characteristics mentioned by the informants for distinguishing universities was recorded.

Stakeholder interviews lasted between one and one and a half hours and were taped with the informants' consent. Our informants mentioned ten distinct university characteristics for distinguishing universities. Two of these – political stance and financial resources – were eliminated from our consideration set due to a lack of reliable archival data. The remaining eight characteristics are operationalized as described below:

- (1) Research orientation: publications in journals covered by the Web of Science database per member of full-time academic staff;
- (2) Academic resources (academic staff per student): ratio of the total number of full and associate professors to the total number of students;
- (3) Size: total student intake of a university:
- (4) Ownership: 1 if the university is a state university, 0 if private university;
- (5) *Location*: 3 for the three largest cities (i.e. Istanbul, Ankara and Izmir), 2 for other large cities, and 1 for the remaining cities;

- (6) Faculty of medicine: 1 if the faculty exists in the university, 0 otherwise;
- (7) English-medium instruction: proportion of departments in the university in which instruction is in English; and
- (8) Specialism in technical disciplines: proportion of faculties in engineering and architecture.

3.2 Documenting stakeholders' evaluation of university characteristics in terms of prestige value

To document stakeholders' prioritization of the abovementioned university characteristics in terms of prestige value, surveys were conducted with separate samples of the three stakeholder groups. Responses were received from 22 academicians, 24 managers and 18 high school counselors. Although survey participants were recruited by convenience sampling, a heterogeneous sample was formed in terms of tenure, gender and location was composed [5].

These questionnaires were designed to apply multiple-criteria decision-making (MCDM) techniques, which are frequently used to solve problems with multiple criteria (Triantaphyllou, 2000). Among these techniques, the analytic hierarchy process (AHP) is applied to document how significant each stakeholder group perceived each characteristic as an indicator of university prestige. Due to the uncertainty of information and vagueness in human cognitive processes, it may be difficult for the decision makers to provide exact numerical values for the criteria under consideration. Accordingly, they may prefer intermediate judgments rather than exact values. The fuzzy extension of the AHP technique (fuzzy AHP) deals with this fuzziness in human decision-making [6] (Kahraman, 2008; Saaty, 1980).

Different methods for the fuzzification of AHP have been proposed in the literature. In designing our questionnaires, we followed the pioneers of this topic and expressed fuzzy ratios as captured by Chang's triangular membership functions (1996). In this method, the extent analysis for the synthetic extent values of the pairwise comparisons is based on triangular fuzzy numbers (TFN). TFN is represented with three points as A = (a1, a2, a3). The membership function is illustrated in the following equation:

$$\mu_{A}(x) = \begin{cases} 0, & x < a1 \\ \frac{x - a1}{a2 - a1}, & a1 \le x < a2 \\ \frac{a3 - x}{a3 - a2}, & a2 \le x < a3 \\ 1, & a3 < x \end{cases}$$
 (1)

We applied the fuzzy AHP scale prepared by Chang (1996) (Table 1), asking for a prioritization of the university characteristics that the stakeholders considered in evaluating

Linguistic scale	Fuzzy scale
Equally important Moderately important Important Very important Much more important	(1,1,1) (2/3,1,3/2) (3/2,2,5/2) (5/2,3,7/2) (7/2,4,9/2)

Table 1. Fuzzy AHP scale used in surveys

universities. The respondents were asked for a pairwise comparison of these eight characteristics according to the linguistic scale in Table 1.

The responses are analyzed following the steps below:

Step 1. Let $X = \{x_1, x_2, x_3, ..., x_4\}$ be the criteria set and $U = \{u_1, u_2, u_3, ..., u_m\}$ be the goal set. After performing extent analysis on each goal respectively, one obtains m extent analysis values for each criterion with the following signs:

 $M_{qi}^1, M_{qi}^2, M_{qi}^3, \dots M_{qi}^m,$

the steps below:
the criteria set and
$$U = \{u_1, u_2, u_3, ..., u_m\}$$
 be the is on each goal respectively, one obtains m extent

for all $i = 1, 2, \ldots n$.

These values are triangular fuzzy numbers, and M_{gi}^{j} shows the triangular fuzzy number related to goal j according to criterion i. In particular, the verbal comparisons obtained from each of the respondents were converted to triangular fuzzy numbers as illustrated in Table 1, and each $M_{g_i}^j$ is obtained.

Step 2. The value of fuzzy synthetic extent with respect to the i-th criterion is defined according to the following equation:

$$S_{i} = \sum_{j=1}^{m} M_{gi}^{j} \odot \left[\sum_{i=1}^{n} \sum_{j=1}^{m} M_{gi}^{j} \right]^{-1}$$
 (2)

To obtain $\left[\sum_{i=1}^{n}\sum_{j=1}^{m}M_{gi}^{j}\right]^{-1}$, one performs the fuzzy addition operation on the m extent analysis values and takes the inverse of the resulting vector, i.e.:

$$\left[\sum_{i=1}^{n} \sum_{j=1}^{m} M_{gi}^{j}\right]^{-1} = \left(\frac{1}{\sum_{j=1}^{m} l_{j}}, \frac{1}{\sum_{j=1}^{m} m_{j}}, \frac{1}{\sum_{j=1}^{m} u_{j}}\right)$$
(3)

Step 3. The significance vector is computed to measure the likelihood of one triangular fuzzy number being larger than the other. In particular, the degree of possibility of $M_1 \ge M_2$ is defined as:

$$V(M_1 \ge M_2) = \begin{cases} 1, & m_1 > m_2 \\ 0, & l_2 > u_1 \\ \frac{(l_2 - u_1)}{(m_1 - u_1) - (m_2 - l_2)}, & otherwise \end{cases}$$
(4)

To compare M_1 and M_2 , both values of $V(M_1 \ge M_2)$ and $V(M_2 \ge M_1)$ are required. Then, for each criterion i, $d(A_i) = min \ V(M_i \ge M_i)$ for all criteria j is computed, and the possibility of a fuzzy number being larger than the other n-1 fuzzy numbers can be stated by the significance vector $W = (d(A_1), d(A_2), \dots d(A_n))^T$. This vector is attained by normalizing $W = (d'(A_1), d'(A_1), d'(A_2), \dots d'(A_n))^T$, where $d'(A_i) = min \ V(S_i \ge S_k), k = 1, 2, \dots n$, and $k \ne i$. Elements of W are calculated according to the following formula:

$$d(A_i) = \frac{d'(A_i)}{\left[d'(A_1) + d'(A_2) + \dots + d'(A_n)\right]}, \quad i = 1, 2, \dots n$$
(5)

This vector W was finally used to express the weights that the stakeholders attach to the university characteristics.

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3.3 Determining the effects of university characteristics on selectivity

The effects of the university characteristics on university selectivity are estimated using regression analysis. Universities in Turkey admit students through a centralized entrance examination. A university's selectivity in admissions is calculated as the mean entrance score of each of its programs. We use archival data for all variables belonging to the year 2014 (the nearest year to our stakeholder interviews), gathered from three sources:

- the annual central university examination manuals (Student Selection and Placement Center, 2014);
- (2) annual higher education statistics (Council of Higher Education, 2014); and
- (3) the Web of Science database.

Below is a formal representation of the ordinary least squares (OLS) regression model that was estimated:

```
\begin{split} Y &= \beta_0 + \beta_1(a cademic\ resources) + \beta_2(size) + \beta_3(faculty\ of\ medicine) \\ &+ \beta_4(English\ medium\ instruction) + \beta_5(state\ university) \\ &+ \beta_6(technical\ specialization) + \beta_7(location) \\ &+ \beta_8(research\ orientation) + \varepsilon \end{split}
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All independent variables were standardized using z-scores prior to their inclusion in the regression model. Visual assessments for normality in quantile-quantile plots showed that all observed values closely followed expected normality lines.

4. Results

4.1 Stakeholders' prioritization of university characteristics

The results of the fuzzy AHP analysis provide the priority assigned to each university characteristic by the stakeholders in terms of prestige value. Table 2 presents this prioritization in terms of weights (and ranks) of university characteristics across the three stakeholder groups [7].

As can be seen in Table 2, there are overlaps as well as some important differences between the stakeholder opinions. The responses by academicians and managers are mostly compatible. These two stakeholder groups perceive *academic resources* as the most valuable characteristic, and *research orientation* and *English-medium instruction* share the next two ranks (although in opposite order for the two groups). According to both groups, *faculty of medicine* is the fourth valuable characteristic, and *location* (i.e. establishment in larger cities)

		University characteristics	Academicians Weight (rank)	Managers Weight (rank)	Counsellors Weight (rank)
Table 2. The prestige value attached to university characteristics across the stakeholder groups	1 2 3 4 5 6 7 8	Academic resources Size Faculty of medicine English-medium instruction Ownership Technical specialization Location Research orientation	0.27 (1) 0.03 (8) 0.13 (4) 0.14 (3) 0.08 (6) 0.11 (5) 0.05 (7) 0.18 (2)	0.31 (1) 0.10 (5) 0.12 (4) 0.23 (2) 0.00 0.08 (6) 0.00 0.16 (3)	0.93 (1) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.06 (2)

is ranked among the lowest-priority characteristics. However, the views of the academicians and the managers differ regarding the remaining three characteristics. Although both academicians and managers regard *technical specialization* as a moderately valuable feature (Rank 5 for academicians, Rank 6 for managers), their opinions about *university size* and *ownership* are somewhat different. Academicians perceive *university size* as having the least prestige value, while managers rank it as the fifth valuable characteristic. In another difference, academicians view *ownership* as the sixth most important feature for determining prestige, while managers attribute no importance to this feature at all (weight zero).

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High school counselors assign highest priority to *academic resources* and *research orientation*, which is compatible with the academician responses. Multiple characteristics getting zero weight scores in the counselor sample leads to a somewhat limited interpretation of fuzzy AHP results. Accordingly, a Mann–Whitney U test is conducted to compare the stakeholder sample medians. This test reveals that counselors assign a higher priority to *university size* than academicians do (p value = 0.02) and a higher priority to *ownership* than managers do (p value = 0.024).

4.2 The effects of university characteristics on university selectivity

As indicated above, ordinary least squares (OLS) regression analysis was applied to determine the effects of university characteristics on university selectivity. The means, standard deviations and correlations of all study variables are shown in Table 3. Problems associated with multicollinearity were ruled out because the variance inflation factors in both models were less than 2.5 for all variables.

The regression results are summarized in Table 4. Accordingly, academic resources, faculty of medicine, English-medium instruction, location (i.e. establishment in larger cities) and research orientation have significant positive effects on university selectivity. To compare the strength of these effects, effect sizes (calculated as eta-squared values) are also presented in this table. These show that location has the strongest effect on university selectivity, followed by academic resources, English-medium instruction, research orientation and faculty of medicine.

5. Discussion and conclusions

Despite voluminous research on prestige dynamics in higher education, the relationship between university characteristics and prestige has remained a black box. The current study provides important insights into this issue by developing a wider and deeper focus on

	Variables	Mean	SD	1	2	3	4	5	6	7
1	Academic resources	0.190	0.133							
2	Size	0.462	0.421	-0.196						
3	Faculty of medicine	0.491	0.501	0.233	0.530					
4	English-medium instruction	0.246	0.334	0.038	-0.395	-0.286				
5	Ownership	0.626	0.485	-0.091	0.519	0.227	-0.550			
6	Technical specialization	0.214	0.156	-0.007	-0.351	-0.463	0.347	-0.163		
7	Location	1.098	0.848	0.352	-0.264	-0.027	0.575	-0.645	0.192	
8	Research orientation	0.418	0.566	0.377	-0.079	0.045	0.379	0.077	0.220	0.339

Notes: *n = 163. Correlations greater than 0.04 are significant at 0.05 (two-tailed test). Ownership takes the value of 1 for state universities, and 0 otherwise

Table 3. Descriptive statistics and correlations (regression analysis)*

Variable	β coefficient	Effect size
Academic resources	0.10**(0.03)	0.063
Size	-0.02(0.04)	0.003
Faculty of medicine	0.07* (0.03)	0.026
English-medium instruction	0.12** (0.04)	0.059
Ownership	0.08 (0.05)	0.017
Technical specialization	-0.04(0.03)	0.012
Location	0.25*** (0.04)	0.181
Research orientation	0.09** (0.03)	0.043
Constant	-0.06* (0.03)	
Model F	30.85***	
R^2	0.62	

Table 4. Regression analysis results*

Notes: *n = 163. Standard errors are in parentheses. *p < 0.05, **p < 0.01, ***p < 0.001. Ownership takes the value of 1 for state universities, and 0 otherwise. Effect sizes show Eta-squared values

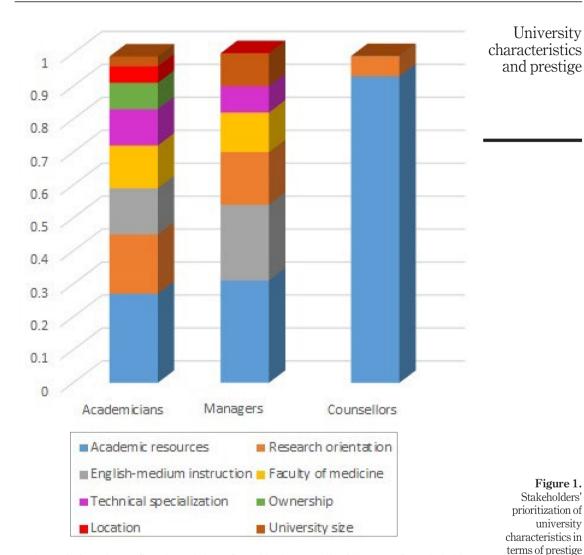
the characteristics that build up a university's identity, and empirically examining how these characteristics affect stakeholder judgments of prestige and visible markers of university success.

The empirical investigation that was conducted in the Turkish higher education field is *first* indicative of the multilayered nature of prestige dynamics. Stakeholders evaluate universities based not only on "universal" standards of excellence such as high research output and institutional size (Altbach and Salmi, 2011; Dill and Soo, 2005) but also on features that have context-specific meaning and value. University characteristics such as English-medium instruction, the presence of a faculty of medicine and specialism in technical disciplines have prestige value; perhaps because they represent the diagnostic characteristics of highly prominent, archetypal university identities in the Turkish higher education field (Barblan *et al.*, 2008).

The *second* important finding of our research is the *fragmented* nature of prestige dynamics due to the discrepancy between stakeholders' appreciation of university characteristics and the effects of these characteristics on visible markers of university success (Figures 1 and 2). As the most notable difference, the feature location (establishment in larger cities) has a significant influence on selectivity scores, whereas it has almost no prestige value in the eyes of stakeholders. It is further observed that stakeholders are not homogeneous in their judgments of prestige. As Figure 2 shows, the priority assigned to university characteristics varies significantly across the three key stakeholder groups.

In light of these insights, we propose a novel conceptual model of university prestige that accounts for the *multilayered* and *fragmented* nature of prestige dynamics in higher education. As presented in Figure 3, university prestige is shaped by "universal" as well context-specific characteristics of universities, and in a fragmented environment where stakeholders' criteria for granting prestige to universities may be different from visible markers of university success. Producing further fragmentation, different groups of stakeholders may have varying views on what constitutes university prestige, and there usually exist multiple markers of university success whose requirements do not fully align with each other [8].

This conceptual model significantly enhances existing literature that posits that universities are subject to a single prestige hierarchy based on common metrics of performance (Rindova *et al.*, 2018). The model suggests that prestige dynamics in higher education are more complex than is often theorized: Universities may be subject to multiple prestige hierarchies based on "universal" or context-specific criteria, in the eyes of various



Notes: Priority values reflect the weights reflected in the normalized W vector for stakeholder groups (academicians, managers and counsellors). Color should be used in print

value

stakeholders, and based on different markers of success. More generally, in contexts where organizations' offerings have multiple dimensions of value, it may be irrelevant to project them onto a one-dimensional prestige ranking. Indeed, such an intention of global university rankings has been subject to much controversy. The criteria for ranking universities are questioned in terms of validity and relevance (Collins and Park, 2016; Dearden *et al.*, 2019; Salmi and Saroyan, 2007). Our findings in this research extend these arguments by demonstrating indigenous determinants of university prestige and multiplicity of stakeholders' perspectives.

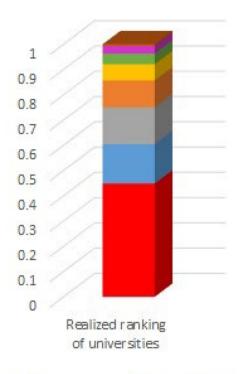


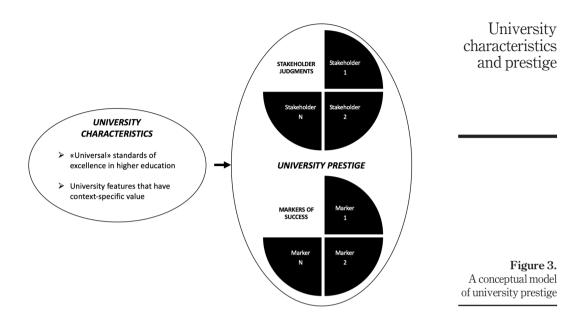


Figure 2. Significance of stakeholders' criteria in determining university selectivity

 $\bf Notes:$ "Significance values reflect normalized effect sizes in regression analysis. Color should be used in print

As a second theoretical contribution, the study provides evidence for the loose coupling of organizational prestige and quality (Elsbach and Cable, 2019, for a comprehensive discussion). Our empirical findings show that a wide variety of university characteristics – including ownership structure, location and technical specialization – have prestige value, although they do not, by themselves, indicate higher quality or excellence. As another important note, demonstrating quality or performance based on widespread metrics may not guarantee gaining respect in the eyes of some key stakeholders. We accordingly suggest that the determinants of prestige need to be contextually examined, as they represent the values of a particular time and place.

The third theoretical contribution of our research is to the literature on strategic management of universities. Intangible assets like prestige have strategic importance for



organizations, as they provide sustainable competitive advantage (Barney, 1991). According to the findings of this study, building up this asset requires dealing with the fragmented demands of stakeholders and public markers of success. This implies a new type of strategic trade-off for universities (Rosenzweig and Easton, 2010, for more on this topic), which relates to internal allocation of organizational resources. The pursuit of research at the expense of teaching, for instance, may lead to dissatisfied students, although it appeals to a more general audience of universities. Getting an accreditation may signal quality to external audiences, but it may be perceived negatively by internal audiences like academic staff because of the increased administrative work required. Understanding such trade-offs will significantly contribute to strategic management of universities (Siegel and Leih, 2018). Further, the way universities prioritize objectives like research, education, community service and entrepreneurship with an aim to maximize their prestige has important implications for the social and economic development of the society (Leyden and Link, 2017; Rothaermel *et al.*, 2007).

Using the AHP technique to investigate the relative prestige value of university characteristics makes a methodological contribution. This method may be superior to the direct ratings of universities, which are subject to various forms of rater bias (Salmi and Saroyan, 2007). Techniques such as the AHP can be applied to document the relative valence of university characteristics, which can then be used to check the validity of published ratings and rankings of universities.

The insights developed in this study also have practical implications for universities. Most significantly, universities will benefit from an in-depth understanding of indigenous notions of prestige in their context of higher education. In the case of Turkish higher education, features such as language of instruction and ownership structure are perceived to have prestige value, although they have no place in global notions of university prestige. On a different note, financial resources (or endowments), which significantly contributes to university rankings in the global context (Michael, 2005), is not considered by our

interviewees as a characterizing feature of universities. Such a divergence may be observed because the Turkish higher education field has traditionally been populated by publicly owned state universities whose budgets are determined by the state, and private universities can only be established by nonprofit foundations and cannot be for-profit. Understanding such context-specific dynamics is highly important for universities as they try to gain a respectful place in the eyes of key stakeholders in their field.

Overall, universities should recognize that prestige evolves in an uneven and complex landscape, as illustrated in this study. An increasing variety of stakeholders that frame higher education and the proliferation of metrics at international, disciplinary, and institutional scales (Bloch and Mitterle, 2017; Collins and Park, 2016) may intensify this complexity. The empirical context of this study is mostly isolated from these influences, as universities in the Turkish higher education field have limited representation in global rankings and accreditation systems, and such devices at the national level are at a very early stage of development. Yet, the conceptual model that this study proposes is comprehensive and can be fruitfully applied by future research to understand prestige dynamics in more complex terrains.

Another limitation of our research is that it is a single case study. One might argue that our findings are specific to the Turkish higher education field. In fact, similar to what is observed in this setting, universities in other contexts of higher education are categorized based on their language of instruction (Lau and Lin, 2017), technical orientation (Kyvik, 2004) or ownership structure (Marginson, 2007). Still, the prestige value of these characteristics may be highly dependent on context (Collins and Park, 2016). In this respect, future studies on prestige in other contexts of higher education would increase confidence in the generalizability of our findings and conclusions.

Notes

- The concept of *prestige* is often used interchangeably with similar concepts, such as *reputation*.
 In this study, we prefer to use *prestige*, which is theoretically more relevant in the context of the higher education field (Bloch and Mitterle, 2017; Brankovic, 2018).
- Selectivity in admissions constitutes the only visible marker of success in the Turkish higher education field, as universities have limited representation in global ranking and accreditation systems, and such devices at the national level are at a very early stage of development.
- 3. Sample statistics are available from the corresponding author upon request.
- This set is randomly selected among the whole set of universities in the Turkish higher education field. It is available from the first author upon request.
- The surveys are web-based. Both the surveys and sample statistics of participants are available from the corresponding author upon request.
- Please refer to Saaty (1980) for the details of AHP, and to Chang (1996) and Kahraman (2008) for the details of fuzzy AHP.
- The fuzzy synthetic vectors and normalized W significance vectors are available from the first author upon request.
- 8. Universities may interact with a wider variety of stakeholders and different markers of success, such as rankings or accreditations (Bloch and Mitterle, 2017; Brankovic, 2018). Accordingly, Figure 2 presents stakeholders and markers as multiple (indicated as "1, 2 ..., N") to offer a comprehensive conceptual model of university prestige.

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Corresponding author

Başak Topaler can be contacted at: basak.topaler@khas.edu.tr

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