




## Article

# Academic Intrapreneurs: Exploring the Antecedents of Academic Intrapreneurial Intention

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**Abstract:** It is widely accepted that intrapreneurial behavior is imperative for any type of organization to maintain sustainability in terms of growth and performance. In this context, it is also important to investigate the factors that play a role in promoting intrapreneurship within dynamic industries, such as the higher education industry. For this purpose, this study aimed to explore the antecedents of intrapreneurial intention in academic staff to provide theoretical as well as practical contributions for universities. We used a survey method to collect data with a sample consisting of 236 academic staff from universities in Northern Cyprus, and tested hypotheses through three different structural models by using structural equation modeling (SEM). Following a deductive approach to establish constructs in the models, we treated academic intrapreneurial intention as the dependent variable, and self-leadership, self-efficacy, and psychological capital as the independent variables. In addition, attitudes toward intrapreneurship, subjective norms, and perceived behavioral control were individually tested as mediating variables. The results of this study indicate that self-leadership, self-efficacy, and psychological capital have direct and indirect effects on academic intrapreneurial intention, and attitudes toward intrapreneurship, subjective norms, and perceived behavioral control play a mediating role between these antecedents and academic intrapreneurial intention.

**Keywords:** academic intrapreneurship; self-leadership; self-efficacy; psychological capital; higher education



**Citation:** Kanisoy, K.; Şeşen, H.; Ekemen, M.A. Academic Intrapreneurs: Exploring the Antecedents of Academic Intrapreneurial Intention. *Sustainability* **2024**, *16*, 4019. <https://doi.org/10.3390/su16104019>

Academic Editors: Ivan Paunović, Marc Dressler, Coralie Haller and Tatjana Mamula Nikolić

Received: 19 March 2024

Revised: 7 May 2024

Accepted: 8 May 2024

Published: 10 May 2024



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## 1. Introduction

Today, major changes have occurred in the roles of academic staff across higher educational institutes around the world. It is believed that employees who can take the initiative will undertake important tasks to enhance the performance of their organization as well as subsequently enhance their expertise [1,2]. In this context, it is determined that employees who exhibit intrapreneurial behavior have strategic importance across various realms of society [3]. While organizations encourage their employees to adapt to their innovative roles [4], employees are expected to be risk-taking, innovative, proactive, fearless, and autonomous in their approach [5,6].

The concept of intrapreneurship was first introduced by Pinchot as the entrepreneurial activities of employees within an established organization [7]. It is considered to be the case that intrapreneurship creates a significant difference and benefit for universities in an “academic” context as well [2]. It is feasible to analyze and comprehend this term through varied perspectives. In terms of a behavioral perspective, intrapreneurship is the embodiment of the spirit of business ownership and actions displayed by people working in businesses. It includes qualities that encourage individuals to create novel ideas while embarking on novel endeavors inside the boundaries established by their companies, which include creativity, independent thinking, taking calculated risks, and the prospect of recognition [7]. Ilonen et al. [8] believe that intrapreneurs have strong feelings of independence

from society, possession, and determination to generate value. By identifying gaps in the market, coming up with innovative approaches, and organizing resources, they help businesses become more successful and profitable. In terms of an intrapreneurial standpoint, the atmosphere, systems, and procedures that facilitate and encourage business ownership within long-standing establishments are reflected in intrapreneurship. It flourishes in work environments that encourage experimenting, accepting failures while acknowledging and honoring creativity. Soleimanof et al. [9] is of the view that organizations with autonomous decision making, flattened power structures, and transparent dialogue lines are frequently ideal environments for intrapreneurial ventures to thrive; they foster an environment that is conducive to the growth of intrapreneurial behavior by promoting multidisciplinary cooperation, information exchange, and the development of ideas. Ogbumbada et al. [10] argued that intrapreneurship strategically supports a business's objectives for expansion, diversity, and stability. By encouraging an environment of ongoing innovation and restoration, it helps firms to adjust to shifting marketplace conditions, technology changes, and competitive obstacles. Entrepreneurial endeavors function as catalysts for expansion and providers of an edge over the competition, enabling establishments to investigate novel marketplaces, create unique offerings, and grasp developing prospects before rivals. Today, the turbulence, compelling changes, budgetary constraints, and intense competition in the higher education sector have brought intrapreneurship and innovative thinking to the forefront [11]. In this framework, employees exhibiting intrapreneurial behavior are seen to play vital roles in the future of universities [2].

On the way to becoming an "entrepreneurial university" in order to gain a competitive advantage [12], universities strive for their employees to acquire an entrepreneurial culture [13]. Audretsch et al. [14] are of the view that the role of university in the quest for an entrepreneurial society has expanded and subsequently transformed to emphasize improving entrepreneurship capital and encouraging behavior to succeed in an entrepreneurial society; nevertheless, a fact that should not be overlooked is that universities were initially created to foster technology transfer and knowledge-based enterprises. The intrapreneurial behavior and intention of the academic staff in universities will be an important factor in increasing the skillsets available to universities [2]. Therefore, universities require employees who can demonstrate "intrapreneur" approaches in terms of the development of entrepreneurial ability and culture [11]. While academic staff represent an important part of intrapreneurial behavior and intention among university employees [9], it is of great importance for academics to demonstrate their intrapreneurial behavior and views [10]. In this regard, university administrators' desires to create entrepreneurs will result in an increase in the interest of intrapreneurial academics [11]. To differentiate scholastic intrapreneurship from generic intrapreneurship, it is necessary to place the idea inside the particular settings and goals of higher education institutions. Given the larger context of academia, intrapreneurship refers to the entrepreneurial ventures undertaken by academics, scholars, and faculty members in higher education institutions and research facilities. The main idea is to capitalize on resources from academia, expertise, and experience in order to tackle social issues, spur inventiveness, and also offer beneficial outcomes to all parties involved. Paunović et al. [15] are of the view that higher education institutions ought to improve their research, classroom instruction, and participation by taking into account the economic, environmental, and social aspects of their operations, in addition to merely their financial ones. In order to foster a culture of entrepreneurship in remote regions, state and academia collaboration might be considerably more innovative and strategic than focusing only on the regulatory function carried out by the former. Fox [16] argues that the main goals of academic intrapreneurship are the development, advancement, and promotion of knowledge. It entails converting the intellectual property of others and academic studies into practical applications, merchandise, and amenities that advance revenue generation while enriching communities. Academic intrapreneurship emphasizes the development of knowledge, its propagation, and socioeconomic effects above generic intrapreneurship, which could be centered on generating profits. This aligns with the greater goal of univer-

sities becoming accelerators for the development of information and the advancement of society. There is a vast amount of literature on the entrepreneurial intentions of different groups; however, studies on intrapreneurial intentions are scarce [2]. In particular, the intrapreneurial intentions of academics are rare. In their systematic literature reviews, multiple authors have suggested and argued that it would be valuable to investigate the roots of intrapreneurship amongst academic staff, which they explained were absent in the literature [3,11]. Whilst the purpose of this study is to determine the antecedents of academic intrapreneurship, the fact that it will fill an important gap in the literature reveals the importance of the research and its contribution to the literature.

The theory of planned behavior (TPB) explains that intention is the indicator of how much effort people are willing to spend to realize a planned behavior [17]. Ajzen [18] focuses on the relationships between attitudes towards behavior, social norms, perceived behavioral control, and intention. This study uses the TPB to explain the antecedents of academic intrapreneurial intention and tries to make a contribution to the literature by including self-leadership, psychological capital, and self-efficacy as potential antecedents in a structural equation model. In this context, this study considers that determining the effects of variables used with the TPB on the intrapreneurial intentions of academicians will make a significant contribution to the literature and the higher education sector in general.

## 2. Literature Review

### 2.1. *Intrapreneurship in an Academic Context*

Pinchot argued that intrapreneurship is a composite of the concepts of “intraorganizational” and “entrepreneur”, and that internal entrepreneurs are people who try to realize ideas within organizations [7]. Intrapreneurship is used to describe entrepreneurial behavior within an existing organization [19]. While explaining the difference between entrepreneurs and intrapreneurs, Baurah and Ward stated that corporate entrepreneurship refers to the entrepreneurial activities of corporate organizations [20]. On the other hand, intrapreneurs are defined as individuals operating within an enterprise by using the existing resources of an enterprise with its own structure and policies. According to Rigtering and Weitzel, corporate entrepreneurship is an innovative process that moves from the top to the bottom of an organization; on the other hand, they described intrapreneurship as the entrepreneurial activities of employees from the lower level to the upper level [21]. As stated by Blanka [11], the emergence of new opportunities arises from individuals rather than organizational processes. With this perspective, the individual dimension of a business makes intrapreneurship different from corporate entrepreneurship. Engzell et al. [22] argue that the institutional rationale that intrapreneurs perceive as primarily an impediment is continually reinforced by educational institutions, which forces individuals to hone the skills they have whilst proactively integrating reasoning by fusing various specialized aspects of intrapreneurship, instruction, and development.

It is stated that intrapreneurship is a concept consisting of four dimensions [23,24]: taking risks from the perspective of intrapreneurship, which means not giving up on an initiative despite the losses that may occur as a result of the decisions taken and implemented within an organization [25,26]; innovativeness, which is concerned with the acquisition, development, and application of new ideas and behaviors [27]; proactive behavior, which refers to the behavior of entrepreneurial individuals who can take an active role in searching for opportunities, shaping the competition order and environment, developing strategies and instigating change, as well as taking an active role in decision-making processes [28]; and autonomy, which is the independent behavior of generating a business idea and taking it to fruition [29].

There are many facets of and a complicated link between entrepreneurship and intrapreneurship. Whereas entrepreneurship entails founding a business of one's own initiative, intrapreneurship takes place in an already-existing firm, whereby creative thinkers foster inventiveness and expansion. Similar traits between intrapreneurs and entrepreneurs include inventiveness, creative thought processes, and leadership abilities, as well as an

eagerness to continually discover new things; yet, Bosma et al. [30] discovered that intrapreneurship and independent business ownership have a negative connection at the level of the macroeconomic environment, implying a potential settlement between the two of them. Ionescu and Bolcas [31] went ahead to emphasize the distinctions and points of convergence across both of these ideas, emphasizing that intrapreneurship is increasingly prevalent in larger enterprises while entrepreneurship is particularly common in small-scale enterprises. These studies imply that whereas intrapreneurship might promote the expansion of businesses, it could additionally have an impact on a company's size along with standalone business ownership.

While universities play an important role in economic and regional development [13], they produce solutions by focusing on social problems [32]. They play an important role in solving issues such as a sustainable environment, better health conditions, economic development, and unemployment [33]. Intrapreneurial academic staff and student potential in universities play a mediating role in transferring knowledge and new technologies from the research environment of universities to industry-related sectors [34]. Universities play an important role in the production of quality knowledge and the development of new projects. Creating strong societies will be possible by growing and developing qualified knowledge [35]. In this context, it is evaluated that universities that adopt intrapreneurship will be more likely to generate quality outcomes [36].

## 2.2. Antecedents of Academic Intrapreneurship

The TPB was used for the first time by Ajzen [37] to explain individual intentions with the objective of developing a particular behavior. In the context of the theory, intention is an indicator of how much effort people are willing to spend to realize planned behaviors and to what extent they are willing to reach a goal [38]. In this study, the TPB developed by Ajzen [38] will be used to explain and predict the intrapreneurial intentions of academics. Although it is a socially based theory, the TPB is widely used to explain behaviors in different disciplines [39]. Lin Xu et al. [40] contend that peer pressure has the tendency to enhance the intentions of students for learning, while it subsequently promotes such behaviors by reshaping the relationships between the attitudinal dimensions in the TPB model.

In studies conducted within the scope of planned behavior theory, the relationships between attitudes towards entrepreneurship, social norms, and perceived behavior control as well as intention and behavior were empirically proven [41]. In the context of the TPB, attitudes refer to the attitudes of an individual towards performing a behavior. Fundamentally, they are the perceptions of personal desires that serve to perform a behavior. Perceived behavioral control, on the other hand, refers to the perceived ability to execute and maintain a target behavior [37]. Neessen et al. [3] and Blanka [11], in their respective research studies, stated that the theory of planned behavior is the best-constructed theory in the analysis of entrepreneurial intention in the literature.

The TPB is a widely used theoretical framework in social psychology that aims to predict and understand human behavior [11]. These three components (perceived behavioral control, specific norms, and personal attitudes) contribute to the formation of an individual's behavioral intention, which in turn is assumed to be most immediate determinant of behavior [18]. When the studies on intrapreneurial intention are examined, it is found that perceived behavior control, which is one of the important dimensions of the theory of planned behavior, is an important determinant of intrapreneurship; for example, this phenomenon was discussed in the studies of [42–44]. As can be understood from the research model and the studies in the literature mentioned above, perceived behavioral control, specific norms, and personal attitudes are thought to be related to academic intrapreneurial intention. In this context, it was decided to propose the following hypotheses in this study:

**H1.** *Attitudes towards intrapreneurship positively affect academic intrapreneurial intention.*

**H2.** *Subjective norms positively affect academic intrapreneurial intention.*

**H3.** *Perceived behavioral control positively affects academic intrapreneurial intention.*

Neessen et al. [3] and Blanka [11] defined intrapreneurship as individual intrapreneurship as well as organizational intrapreneurship and conducted their research within these parameters. Individuals' skills, personal information, past experiences, organizational relations, motivations, job satisfaction, and behavioral intentions all inform their behavior [11]. When the antecedents of academic intrapreneurship are evaluated in an organizational context, according to the authors of [45–48], managerial practices, managerial support, and the training of staff through new methods are explained in the context of organizational intrapreneurship. Moriano et al. [24], Yulia et al. [49], and Farrukh et al. [50] revealed that leadership styles comprise one of the antecedents of intrapreneurial behavior within an organization.

### *2.3. Self-Leadership, Self-Efficacy, and Positive Psychological Capital as Antecedents*

Self-leadership is the process of influencing oneself by providing the self-management and motivation that individuals need to perform their duties and jobs [51]. The primary objective for highlighting the concept of self-leadership in the realm of academic intrapreneurship remains the fact that academic intrapreneurs have to demonstrate responsibility, originality, and proactive behavior. Self-leadership enables people to accept responsibility for the decisions that they make while stimulating creativity and subsequently negotiate challenging academic circumstances in a successful manner. It gives individuals the ability to do three things that happen to be crucial for intrapreneurial behavior; this encompasses setting properly identified goals while evaluating their progress over time, along with adjusting to altered conditions. According to the self-leadership theory, people may shape themselves through inspiration, conduct, and thought processes to accomplish goals. It includes techniques for self-regulation that help people overcome obstacles while following their objectives on their own. Daud [52], in his research study, has highlighted that self-leadership has the tendency to enhance the self-confidence of an individual as well as contribute to the process of good governance. Theoretically, self-leadership increases people's feeling of independence, effectiveness, and adaptability, which subsequently in return gives people more confidence in being able to take responsibility, be creative, and actively participate in intrapreneurial activities within professional environments. Self-leadership sees individuals manage themselves more effectively to improve their lives and jobs by learning and applying certain behavioral and cognitive strategies [53]. In discussions on the concept of leadership, it is emphasized that the basis of leadership is self-leadership [54]. D'Intino et al. [53] associated self-leadership with entrepreneurship. Rakib et al. [55] are of the view that when individuals employ technological resources to manage their web-based enterprises, their inventiveness as entrepreneurs is greatly influenced by both self-efficacy and self-leadership at the same time.

There is not any previous research on the relationship between self-leadership and intrapreneurial intention; however, Moriano et al. stated that transformational leadership practices have a positive relationship with the intrapreneurial behavior of employees [24]. They also explained that organizational identity plays a mediating role between transformational leadership and the intrapreneurial behaviors of employees. Farrukh et al. [50] explained that a transformational leadership approach of managers in universities positively affects intrapreneurial behaviors. Yulia et al. [49] claimed that university rectors, academicians, and other employees who adopt a transformational leadership approach are effective in exhibiting intrapreneurial behavior. In another study on leadership styles, Edú Valsania et al. [56] stated that there is a positive relationship between an authentic leadership approach and the intrapreneurial behavior of employees. They also emphasized that organizational identity plays a mediating role in the authentic leadership and intrapreneurial behavior of employees. This literature has provided much support on the

subject, since diverse authors have written on the concept of self-leadership through varied prisms. Although the concept of academic intrapreneurship is relatively new and refined, this research study has established its relevancy through the already-available perspectives on the subject. On the other hand, the concept of general intrapreneurship relates to the creation of novel and innovative ventures. This might entail creating novel approaches to current difficulties or issues, raising a business's profile, and subsequently boosting the significance of services [57]. The context and emphasis of academic and general intrapreneurship vary greatly from one another. Academic intrapreneurship corresponds to an educational context, whereby its primary goals are to foster creative thinking, the transfer of technology, as well as business engagement. Nonetheless, generic intrapreneurship seems broader in its application to just about any kind of business environment and concentrates on the development of new businesses, projects, and solutions, as well as technology, with the ultimate objective of enhancing the worth of a business. Furthermore, due to its provision permitting higher education institutions, along with other organizations, to maintain control of innovations generated with government assistance, the Bayh–Dole Act is believed to have a major influence on academic intrapreneurship. Engzell et al. [22] are of the view that, in light of this Act, researchers in academia now have a motivation to pursue entrepreneurship, as the business aspect of their discoveries may prove advantageous. Additionally, as a result of the Act, colleges now have transferring technology centers that assist academics with the tedious task of marketing their groundbreaking discoveries.

Self-efficacy is described as beliefs about performance levels and abilities that make an impact on events that affect an individual's life [58]. The concept of self-efficacy is relevant due to the fact that academic intrapreneurs have a number of difficulties, such as negotiating with government agencies, getting past opposition to transformation, and finding finance for creative ventures. Morelli et al. [59] believe that people with an elevated sense of self-efficacy possess the capacity to view these difficulties as hurdles that can be overcome instead of unpassable hurdles. They tend to be more inclined to attempt measured chances, keep going after innovative concepts with assurance, and remain persistent in the midst of failures. Therefore, self-efficacy acts as a stimulant for intrapreneurial intentions by encouraging confidence in a person's ability to plan and carry out business operations in an academic setting. When the literature on intrapreneurship and self-efficacy is examined, authors in their respective research studies stated that employees with high self-efficacy exhibit innovative behavior and demonstrate intrapreneurial intentions [43,60,61]. Gonzales-Serrano et al. [44] revealed in their study that self-efficacy is an important determinant of entrepreneurial intent and the association between self-efficacy and exhibiting entrepreneurial behavior. Armitage and Conner [62] found that self-efficacy has a strong relationship with the intention to exhibit internal entrepreneurial behavior. Nicholson et al. [63] stated that students' self-efficacy positively affects their intrapreneurial intentions. Chouchane et al. [64] explained that self-efficacy plays an indirect mediating role in organizational support, intrapreneurial behavior, and intrapreneurial intention.

Intrapreneurial behavior consists of providing all key resources to employees, through which they can bring motivation and creativity to an organization. The demands and uncertainty of academic intrapreneurship need people to learn to deal with uncertainty, disappointments, and adversities. Ghodbane and Alwehabie [65] argue that positive PsyCap gives people the psychological fortitude, confidence, and flexibility required to overcome the obstacles that come with pursuing an entrepreneurial career. It makes it possible for people to stay upbeat, overcome obstacles, and keep trying to come up with creative alternatives in professional settings. Furthermore, those who score better for PsyCap are more inclined to be proactive in searching for possibilities, make the best use of their abilities, and work well with others, all of which contribute to a greater intrapreneurial desire. Generally, intrapreneurs have high dispositional optimism, which means that such people expect positive results, even while having no rational justification for their expectations [66]. Similarly, Turo et al. found that when people have a high tendency towards optimism, they have an increased likelihood of becoming entrepreneurs [67].

Hope is the other important dimension for explaining psychological capital. There are three aspects of hope, namely agency, goals, and pathways. These abilities play a key role for every entrepreneur in terms of ensuring persistency in pursuing goals and improving the confidence as well as the optimism of an intrapreneur [68]. Resilience is another element of psychological capital, which includes adaptation to key risks. Intrapreneurship is a process that mainly includes a person's ability to take risks and face threats [6]. In another study, Peterson et al. found that leaders with high psychological resilience encourage themselves and their employees in terms of taking risks and exhibiting innovative behaviors [69].

Therefore, it is decided to also propose the following hypotheses:

- H4.** *Self-leadership has a significant impact on intrapreneurial intention.*
- H5.** *Self-efficacy has a significant impact on intrapreneurial intention.*
- H6.** *Psychological capital has a significant impact on intrapreneurial intention.*

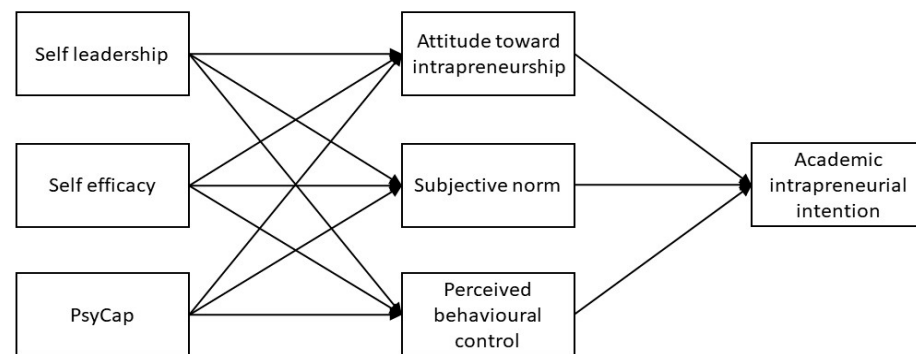
Studies examined with a systematic literature review approach include studies on topics related to intrapreneurial behavior and intrapreneurial intention in different fields. Evaluations of the theoretical framework regarding intrapreneurial intention in the literature reveal that the theory of planned behavior is the most comprehensive and valid theory in explaining intrapreneurship and intrapreneurial intention [3,11]. Studies in the literature explain that the dimensions of the theory of planned behavior (attitudes, social norms, and perceived behavioral control) play an important role in determining intrapreneurial behavior and intrapreneurial intention. While multiple studies in the literature are evaluated, it is explained that different antecedents have been included in the research in determining the intention and effectiveness of intrapreneurial behavior at the individual level. It is understood that leadership styles, human capital, self-efficacy, and positive psychological capital come to the fore among the antecedents identified in studies examined through a systematic literature review [3,11]. It is also an important factor to highlight how this concept benefits academic institutions and fosters a sustainable environment that relates to intrapreneurial behavior. Academic intrapreneurship is a powerful tool that institutions may use to drive long-term expansion and progress in efficacy. It does this by means of encouraging inventiveness, improving the educational experience for students, promoting research, and fostering teamwork, while creating a superior environment. Aparicio et al. [35] are of the view that through the entrepreneurship and imaginative abilities that characterize their academic communities across the world, universities have a tendency to promote and foster financial development as well as competitiveness, which may favorably impact society in the context of the knowledge economy. Sieg et al. [70] have correlated the concept of academic entrepreneurship with eco-innovation by highlighting the fact that the primary obstacles and challenges to implementing technological advancement across academic institutions arise from the insufficiency of funding for carrying out research projects that are most often neglected and overlooked by the state as well as international donor organizations.

Whilst the antecedents of this study are explained and evaluated, it is explained that self-leadership, self-efficacy, and PsyCap directly or indirectly affect intrapreneurial intention in studies in different periods. At the same time, it is explained that they are related to the intention of intrapreneurial behavior. In summary, while trying to test the antecedents of academic intrapreneurial intention in the relevant study, the dimensions of the relevant theory (attitudes, social norms, and perceived behavior control) in the model fit of this study, which was created on the basis of the theory of planned behavior, were determined to be tested as an explainer of academic intrapreneurial intention. In this context, it was decided to propose the following hypotheses, assuming that they would play a mediating role between the components of the theory and the antecedents of the research (self-leadership, self-efficacy, and PsyCap).

**H7.** *Attitudes towards intrapreneurship play a mediator role between the antecedents (self-leadership, self-efficacy, and psychological capital) and academic intrapreneurial intention.*

**H8.** *Subjective norms play a mediator role between the antecedents (self-leadership, self-efficacy, and psychological capital) and academic intrapreneurial intention.*

**H9.** *Perceived behavioral control plays a mediator role between the antecedents (self-leadership, self-efficacy, and psychological capital) and academic intrapreneurial intention (Figure 1).*



**Figure 1.** Research model.

### 3. Materials and Methods

#### 3.1. Sample

Data were collected via a survey in the spring semester of 2022. The participants in the present study consisted of 236 academicians from five different universities in Northern Cyprus. The academicians were from selected different programs in these universities, including business administration, banking and finance, civil engineering, architecture, and medical departments. The academicians' ages ranged from 23 to 76, with an average age of 40.90 (SD = 10.92) years. The sample included 108 (45.76 percent) male and 128 (54.23 percent) female academicians. The academicians' titles ranged from Professor to Research Assistant. This research method has been particularly chosen because of its generalizability, cost-effectiveness, and practicality. It has since become possible to draw conclusions concerning a broader group of people from a selected portion of the overall population through employing sampling techniques. Considering the fact that it may sometimes be difficult to investigate an entire community, this is significant. It has been made absolutely certain that the study findings reflect a rough representation of the overall population, and may be applied to the targeted group by employing the method of sampling.

#### 3.2. Scales

The research survey consisted of a 52-item questionnaire that included demographic features, self-leadership, self-efficacy, PsyCap, attitudes toward intrapreneurship, subjective norms, perceived behavioral control, and intrapreneurial intention. These factors were specifically chosen because they may be pertinent to intrapreneurship by demonstrating a favorable correlation with occupational results and possess the ability to further knowledge of scholastic intrapreneurship. This research attempts to find the critical elements that might encourage and foster academic intrapreneurship by analyzing the interactions amongst these elements while revealing the fundamental processes affecting scholastic intrapreneurial conduct. All variables were measured via a 5-point Likert-type scale, ranging from 1 = strongly disagree to 5 = strongly agree. These items were designed according to the theoretical construct and measures recommended in the literature.

Self-leadership: Houghton and Yoho [71] further refined the Anderson and Prussia [72] measure. It was originally composed of 35 items and then developed and adopted by Doğan and Şahin [73]. In this study, six items were used for measuring self-leadership, including

“I aspire to excel when working on important issues”. The Cronbach’s alpha coefficient for the scale was 0.79.

**Self-efficacy:** A ten-item scale was used for measuring self-efficacy. The scale was used by Jerusalem [74]. Tang [75] successfully used this scale in his study on self-efficacy. A sample item included “I know what to do when faced with a new situation”. The Cronbach’s alpha coefficient for the scale was calculated as 0.91.

**PsyCap:** The PsyCap assessment measure of Luthans et al. [76] was used. It was originally composed of 24 items, and was then developed as well as adopted by Oruç [77]. Pandey et al. [78] have indicated a favorable correlation between PsyCap and intrapreneurial activity. The association underlying intrapreneurship and professional commitment is mediated by PsyCap, suggesting that PsyCap plays a significant role in encouraging intrapreneurial activity. PsyCap has a favorable correlation with both corporate citizenship conduct and the perceptions of intrapreneurs, indicating that the program might boost the propensity of the employees to participate in intrapreneurial endeavors. In this study, 12 items were used for measuring PsyCap. A sample item is “I feel confident when giving information to my colleagues”. The Cronbach’s alpha coefficient for the scale was determined to be 0.89.

**Attitudes toward intrapreneurship:** The attitudes toward intrapreneurship scale from the EIQ (entrepreneurial intentions questionnaire) of Linan and Chen [79] was used. The ATI scale was adapted and developed by Gonzales-Serrano et al. [44]. It is composed of five items that measure attitudes toward intrapreneurship. For example, “Being an academic intrapreneur is important for my career”. The Cronbach’s alpha coefficient for the scale was 0.87.

**Subjective norms:** The subjective norms scale was extracted from the EIQ of Linan and Chen [79]. It was developed by Gonzales-Serrano et al. [44]. It is composed of five items that measure the approval of decisions made by people in their close environments, such as those of family and colleagues. For example, “my academic intrapreneurial behavior is supported by colleagues”. The Cronbach’s alpha coefficient for the scale was 0.83.

**Perceived behavior control:** The scale from the EIQ of Linan and Chen [79] was used. PBC was adapted and developed by Gonzales-Serrano et al. [44]. In this study, it was composed of five items that measured the level of perceived behavioral control. A sample item is “I am ready to exhibit and practice academic intrapreneurial behaviors”. The Cronbach’s alpha coefficient for the scale was 0.89.

**Intrapreneurial intention:** An adaptation of the intrapreneurial behavior scale of Stull and Singh [80] was created to measure intrapreneurial intention. The scale is composed of four items. A sample item is “my professional goal is to become an academic intrapreneur”. Statements indicate different aspects of intention. The Cronbach’s alpha coefficient for the scale was determined to be 0.92.

## 4. Results

### 4.1. Testing Validity and Reliability

Before testing the hypotheses, we verified the validity and reliability of the measurement model. To test the convergent validity, we calculated the factor loadings and average variance extracted (AVE) scores of the scales. Fornell and Larcker [81] stated that AVE values greater than 0.5 imply the existence of convergent validity. As shown in Table 1, the AVE values of the variables are higher than 0.5, thus indicating convergent validity. Cronbach’s alpha and composite reliability (CR) were used to measure the reliability and internal consistency of the variables, respectively. The Cronbach’s alpha values vary between 0.797 and 0.928, and the CR values are between 0.861 and 0.948 (Table 1). The lower threshold for these values is 0.7; therefore, the variables in the model are reliable and have internal consistency [82].

**Table 1.** Validity and reliability of the scales.

Factor	n	Factor Loading	$\alpha$	CR	AVE
Self-leadership	6	0.665–0.788	0.797	0.861	0.556
Self-efficacy	10	0.715–0.822	0.913	0.928	0.591
PsyCap	12	0.587–0.858	0.895	0.927	0.588
Attitudes toward intrapreneurship	5	0.771–0.849	0.875	0.909	0.667
Subjective norms	5	0.681–0.869	0.837	0.885	0.608
Perceived behavioral control	5	0.789–0.897	0.899	0.926	0.716
Academic intrapreneurial int.	4	0.872–0.925	0.928	0.948	0.822

n: Number of items;  $\alpha$ : Cronbach's alpha; CR: composite reliability; and AVE: average variance extracted.

#### 4.2. Correlations

Table 2 demonstrates the means, standard deviations, Pearson's correlation coefficients, and the skewness as well as kurtosis of the variables included in the research. The skewness and kurtosis values were estimated in order to determine the distribution of the data. The values are in the reference range (−1.5, +1.5) and reveal the normality of the data [82]. The correlations between the variables vary between  $r = 0.28$  and  $r = 0.76$ . The correlation results show a significant relationship between intrapreneurial intention and all of the antecedent factors.

**Table 2.** Descriptive statistics and correlations.

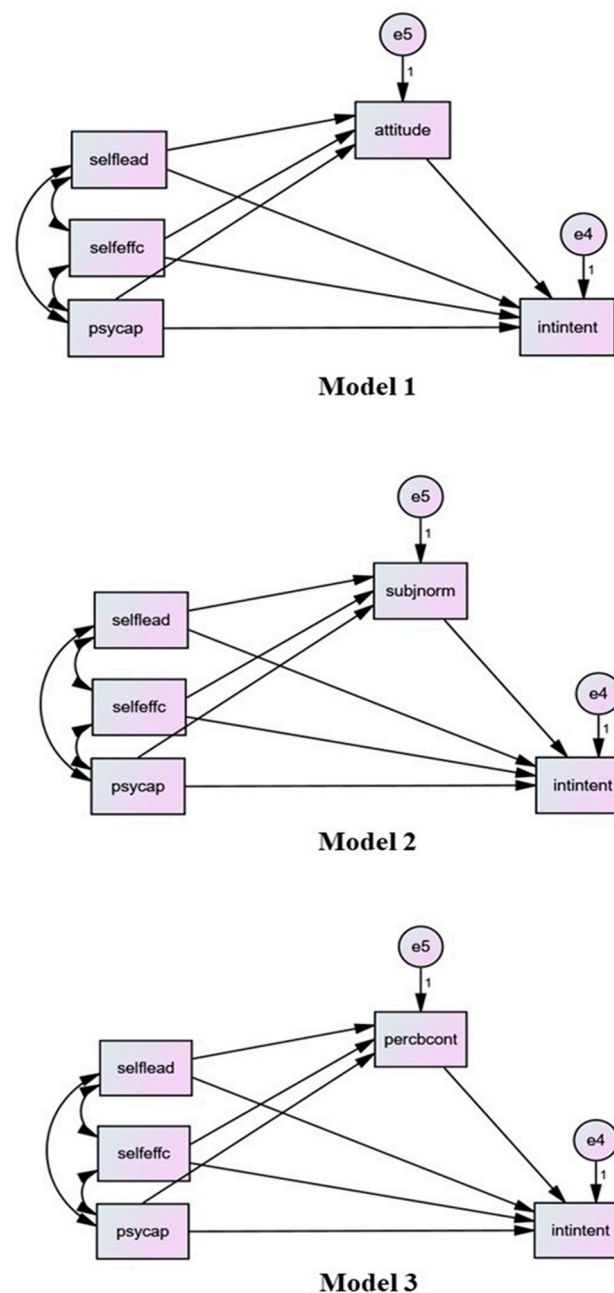
Variable	M	SD	1	2	3	4	5	6	7
1. Self-leadership	4.06	0.68	1						
2. Self-efficacy	4.02	0.64	0.54 **	1					
3. PsyCap	4.07	0.55	0.46 **	0.76 **	1				
4. Attitudes toward intrapreneurship	3.92	0.77	0.44 **	0.34 **	0.34 **	1			
5. Subjective norms	3.77	0.77	0.33 **	0.31 **	0.29 **	0.49 **	1		
6. Perceived behavioral control	3.91	0.78	0.45 **	0.55 **	0.46 **	0.60 **	0.42 **	1	
7. Academic intrapreneurial intention	3.59	0.89	0.31 **	0.34 **	0.28 **	0.44 **	0.36 **	0.60 **	1
Skewness	-	-	−0.584	−0.537	−0.752	−1.09	−0.436	−0.990	−0.456
Kurtosis	-	-	0.311	0.758	1.33	1.21	.006	1.39	−0.063

\*\*  $p < 0.05$ .

#### 4.3. Hypotheses Testing

To test the research hypotheses, we established three different structural equation models using IBM AMOS 21.0 software. In the models, we treated academic intrapreneurial intention as the dependent variable; self-leadership, self-efficacy, and PsyCap as independent variables; and attitudes toward intrapreneurship, subjective norms, and perceived behavioral control individually as mediating variables. The AMOS models can be seen in Figure 2.

The results of the models are presented in Table 3. The first model tests the mediating role of attitudes toward intrapreneurship on the relationship between the antecedents and academic intrapreneurial intention. The results of the first model show that self-efficacy ( $B = 0.313$ ,  $SE = 0.145$ , 95%  $CI = [0.053, 0.525]$ ,  $p < 0.05$ ) has a significant direct impact on intrapreneurial intention, while self-leadership ( $B = 0.168$ ,  $SE = 0.064$ , 95%  $CI = [0.078, 0.296]$ ,  $p < 0.05$ ) and PsyCap ( $B = 0.085$ ,  $SE = 0.053$ , 95%  $CI = [0.016, 0.199]$ ,  $p < 0.05$ ) have significant indirect effects. Thus, the results confirm that attitudes toward intrapreneurship mediate the effects of self-leadership and PsyCap on academic intrapreneurship, while it does not mediate the impact of self-efficacy.



**Figure 2.** AMOS models.

The second model tests the mediating role of subjective norms in the relationship between the antecedents and academic intrapreneurial intention. The results of the second model show that self-efficacy ( $B = 0.291$ ,  $SE = 0.144$ ,  $95\% \text{ CI} = [0.028, 0.500]$ ,  $p < 0.05$ ) has a significant direct impact on intrapreneurial intention, while self-leadership ( $B = 0.075$ ,  $SE = 0.039$ ,  $95\% \text{ CI} = [0.026, 0.158]$ ,  $p < 0.05$ ) has a significant indirect effect. Thus, the results confirm that subjective norms mediate the effect of self-leadership on academic intrapreneurship, while it does not mediate the impact of self-efficacy and PsyCap.

The third model tests the mediating role of perceived behavioral control in the relationship between the antecedents and academic intrapreneurial intention. The results of the last model show that none of the antecedents has a significant direct impact on intrapreneurial intention, while self-leadership ( $B = 0.162$ ,  $SE = 0.065$ ,  $95\% \text{ CI} = [0.065, 0.279]$ ,  $p < 0.05$ ) and self-efficacy ( $B = 0.311$ ,  $SE = 0.078$ ,  $95\% \text{ CI} = [0.192, 0.455]$ ,  $p < 0.05$ ) have significant indirect effects; thus, the results confirm that perceived behavioral control mediates the effects of

self-leadership and self-efficacy on academic intrapreneurship, while it does not mediate the impact of PsyCap.

**Table 3.** Hypothesis testing (mediating).

Path	Coeff	SE	<i>p</i>	LLCI	ULCI
<b>Model 1: Attitudes Toward Intrapreneurship</b>					
<i>Direct Impacts</i>					
SL → INT	0.060	0.109	0.572	−0.114	0.241
SE → INT	0.313	0.145	0.050	0.053	0.525
PSYCAP → INT	−0.055	0.147	0.747	−0.284	0.212
ATTs → INT	0.410	0.107	0.003	0.211	0.565
SL → ATT	0.410	0.094	0.001	0.248	0.563
SE → ATT	0.037	0.119	0.736	−0.167	0.233
PSYCAP → ATT	0.206	0.118	0.093	0.005	0.392
<i>Indirect Impacts</i>					
SL → ATTs → INT	0.168	0.064	0.002	0.078	0.296
SE → ATTs → INT	0.015	0.050	0.697	−0.073	0.090
PSYCAP → ATTs → INT	0.085	0.053	0.049	0.016	0.199
<b>Model 2: Subjective Norms</b>					
<i>Direct Impacts</i>					
SL → INT	0.153	0.106	0.136	−0.015	0.324
SE → INT	0.291	0.144	0.066	0.028	0.500
PSYCAP → INT	−0.017	0.147	0.944	−0.244	0.253
SNs → INT	0.302	0.088	0.002	0.157	0.452
SL → SNs	0.248	0.099	0.013	0.082	0.408
SE → SNs	0.126	0.133	0.263	−0.085	0.349
PSYCAP → SNs	0.154	0.138	0.320	−0.074	0.375
<i>Indirect Impacts</i>					
SL → SNs → INT	0.075	0.039	0.008	0.026	0.158
SE → SNs → INT	0.038	0.045	0.269	−0.021	0.126
PSYCAP → SNs → INT	0.046	0.044	0.206	−0.018	0.125
<b>Model 3: Perceived Behavioral Control</b>					
<i>Direct Impacts</i>					
SL → INT	0.066	0.085	0.424	−0.071	0.215
SE → INT	0.018	0.137	0.973	−0.224	0.223
PSYCAP → INT	−0.044	0.126	0.757	−0.244	0.177
PBC → INT	0.671	0.080	0.001	0.532	0.799
SL → PBC	0.242	0.092	0.007	0.095	0.402
SE → PBC	0.464	0.109	0.001	0.281	0.638
PSYCAP → PBC	0.109	0.122	0.345	−0.084	0.318
<i>Indirect Impacts</i>					
SL → PBC → INT	0.162	0.065	0.007	0.065	0.279
SE → PBC → INT	0.311	0.078	0.001	0.192	0.455
PSYCAP → PBC → INT	0.073	0.084	0.330	−0.053	0.224

## 5. Discussion

Upon examining the outcomes, it is evident that a robust and affirmative relationship exists between the antecedent factors, namely self-leadership, self-efficacy, PsyCap (psychological capital), and the dimensions of the theory of planned behavior (TPB), i.e., attitudes (ATTs), subjective norms (SNs), and perceived behavioral control (PBC).

In the context of self-leadership, it emerges that it exerts a direct influence on the dimensions of ATTs and SNs of the TPB while exhibiting an indirect impact on the PBC dimension. The analysis reveals that all TPB dimensions serve as mediators in the relationship between self-leadership and academic intrapreneurial intention. Previous literature by Moriano et al. [24], Yulia et al. [49], and Farrukh et al. [50] converges on the affirmative relationship between transformational leadership and intrapreneurial behavior, with organizational identity mediating this association. Additionally, Edu Valsania et al. [56] repeat

these findings, emphasizing the fundamental role of self-leadership as an antecedent to academic intrapreneurial intention. This underscores the crucial role of self-concept and motivation in fostering intrapreneurship among academics, who, delegated to manifest responsibility, originality, and proactive behavior, benefit from self-leadership in navigating academic challenges; thus, the findings emphasize self-leadership's mediation between TPB dimensions and intrapreneurship, presenting a more nuanced perspective that enriches the existing literature on academic intrapreneurship.

Regarding self-efficacy, it is observed that it directly impacts only the PBC dimension of the TPB, with an indirect effect on other dimensions. The mediation analysis reveals that solely the PBC dimension acts as a mediator between self-efficacy and academic intrapreneurial intention. Previous research by Douglas and Fitzsimmons [43], Globocnik and Solomo [60], Wakkee et al. [61], and Chouchane et al. [64] validate these findings, emphasizing the positive influence of high self-efficacy levels on intrapreneurial intention and behavior, with self-efficacy also mediating the relationship between organizational support and intrapreneurial behavior as well as intention. Thus, the present study not only reinforces existing knowledge but also contributes to a more comprehensive understanding of the interaction between self-efficacy and academic intrapreneurship.

Regarding PsyCap, it is found to have a significant indirect effect on ATTs but not on the dimensions of SNs and PBC. The mediation analysis indicates that only ATTs mediate the relationship between PsyCap and academic intrapreneurial intention, with the dimensions of SNs and PBC playing no mediating role. Previous research by Rego et al. [83], Avey et al. [84], Peterson et al. [69], Loghman et al. [85], Baluku et al. [86], and Tosun and Özkan [87] supports these findings, highlighting a positive relationship between PsyCap and intrapreneurship, with PsyCap fostering creativity, resilience, and proactive behavior among individuals; thus, this study not only validates existing findings but also offers insights into the specific pathways through which PsyCap influences academic intrapreneurship, contributing to a deeper understanding of this relationship.

The significance of the self-leadership approach in academic intrapreneurship behavior is underscored, indicating a noteworthy contribution to the literature by addressing a gap in leadership theories. Furthermore, the utilization of comprehensive structural equation modeling and the inclusion of individual-level variables (self-efficacy and PsyCap) enrich the research, particularly in the domain of academic intrapreneurship. This study suggests avenues for future research, emphasizing the need for in-depth examinations of the processes through which self-leadership, self-efficacy, and PsyCap influence intrapreneurial motivation within educational contexts [88]. Future studies across diverse settings are recommended to validate the identified relationships, alongside targeted interventions aimed at enhancing PsyCap, self-efficacy, and self-leadership among students and staff to foster intrapreneurial behaviors; thus, the present study contributes to a more nuanced interpretation of existing findings while providing novel insights into the dynamics of academic intrapreneurship.

The main theoretical contribution of the present research to the literature is the application of self-leadership, self-efficacy, and PsyCap collectively as independent variables within a comprehensive model, suitable for the study of intrapreneurship. This novel approach, tested through structural equation modeling within the framework of the theory of planned behavior (TPB), examines academic intrapreneurial intention as the dependent variable. Additionally, attitudes toward intrapreneurship, subjective norms, and perceived behavioral control are investigated individually as mediating variables. This methodological rigor addresses a major gap identified in previous literature, wherein studies predominantly focused on organizational-level analyses, thus neglecting an individual-level perspective. Specifically, Dilorshan et al. [89] underscored this deficiency in their systematic literature review; therefore, by elucidating the antecedents of academic intrapreneurial intention, particularly at the individual level, this study significantly enhances the scholarly discourse. Furthermore, the simultaneous examination of self-leadership, self-efficacy, and PsyCap as independent variables, which have not been previously explored collectively and are rarely

investigated within the context of intrapreneurship, imbues this investigation with substantive significance. This methodological innovation offers a fresh perspective, addressing a notable weakness in the existing literature. Consequently, it is anticipated that this study will make a substantial contribution to the field, advancing scholarly understanding of intrapreneurship dynamics.

## 6. Limitations and Future Study Recommendations

Though this study's significant findings will contribute to the literature, there are certain limitations. First, data were collected from a limited number of academic staff in specific departments (business administration, banking and finance, civil engineering, architecture, and medical departments) from five universities of Northern Cyprus. Future research should have an expanded focus that includes a greater number of academic staff in a greater number of departments and universities. A possible future study might also focus on what steps could be taken within university management to support the intrapreneurial intentions of academicians.

Yet another restriction is the inclusion of a limited number of variables within the research models referred to in the literature. Therefore, the variables neglected in the literature, such as organization culture, may be integrated into the model in future studies [11]. The results might have been different if this study was conducted longitudinally. Since academic intrapreneurial intentions may change over time, a longitudinal study might provide different outcomes in terms of the academic intrapreneurship antecedents over time; therefore, a longitudinal study on this topic is recommended for future research. A viable method for examining the relationships of causality between the preceding elements and scholastic intrapreneurial ambition as time passes is to conduct longitudinal research. Through the continuous observation of people in the realm of intrapreneurial activities and intents, academics can reveal the constantly shifting interactions between distinctive characteristics, norms of society, and environmental elements in an educational context. This could assist with building stronger conceptual structures, theological bases within societal hierarchies, and offering insightful information on the cyclical nature associated with academic intrapreneurship. Another productive line of inquiry is cross-cultural investigation, especially when examining the impact of culture on scholastic intrapreneurial objectives. Through the examination of perspectives, guidelines, and behaviors in a variety of cultural situations, researchers may clarify the socioeconomic factors influencing people's inclination for intrapreneurship in higher education environments. In addition to improving the research's generalizability, this comparison technique could promote better understanding concerning the subtle variations in the culture underlying academics' entrepreneurship.

## 7. Conclusions

This study intends to provide conceptual understanding and useful recommendations for educational institutions by means of the rigorous testing of an exhaustive framework on the antecedents of academic intrapreneurial intention amongst academic staff members. The results of the present investigation show that psychological capital, self-efficacy, and self-leadership influence academic intrapreneurial intention through both direct and indirect means. Furthermore, it is shown that the primary objective of academic intrapreneurial is significantly mediated by attitudes toward intrapreneurship, subjective norms, as well as perceived control over behaviors. These findings offer insightful information on the fundamental processes guiding academic intrapreneurial ambition in higher education environments.

This study further emphasizes the value of supporting individual characteristics and financial assets amongst faculty members with the objective of creating intrapreneurial mindsets and intents. Examples of these assets include psychological capital, self-leadership, and self-efficacy; moreover, the manner by which antecedent variables impact academic intrapreneurial intention are clarified by the intermediary functions of attitudes toward intrapreneurship, subjective norms, and impressions of behavioral management. The cre-

ation of focused initiatives and guidelines meant to encourage an atmosphere of creativity and entrepreneurship in higher education can be influenced by this extensive knowledge of the intrapreneurial procedure throughout academia. This study sheds light on the intricate interactions of personal characteristics, societal standards, and cognitive procedures that influence academic intrapreneurial motives, which advances both conceptual understanding along with practical applications. Higher education institutions can more effectively enable and assist their faculty and students to participate in intrapreneurial activities and promote positive transformation within their educational atmospheres by resolving such factors.

**Author Contributions:** Conceptualization, K.K., H.Ş. and M.A.E.; methodology, K.K., H.Ş. and M.A.E.; software, K.K. and M.A.E.; validation, H.Ş. and M.A.E.; formal analysis, H.Ş. and M.A.E.; investigation, K.K.; resources, K.K. and M.A.E.; data curation, H.Ş. and M.A.E.; writing—original draft preparation, K.K.; writing—review and editing, M.A.E.; visualization, K.K. and M.A.E.; supervision, H.Ş. and M.A.E.; project administration, H.Ş. and M.A.E. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** The study was conducted in accordance with the Declaration of Helsinki, and approved by the Scientific Research and Publication Ethics Committee of European University of Lefke, protocol code: BAYEK003.10, date of approval: 14 January 2022.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** Data will be provided on request.

**Acknowledgments:** We thank all authors for their contributions and the anonymous reviewers for their helpful comments and suggestions.

**Conflicts of Interest:** The authors declare no conflicts of interest.

## References

1. Foss, N.J.; Lyngsie, J.; Zahra, S.A. Organizational design correlates of entrepreneurship: The roles of decentralization and formalization for opportunity discovery and realization. *Strateg. Organ.* **2015**, *13*, 32–60. [\[CrossRef\]](#)
2. Valka, K.; Roseira, C.; Campos, P. Determinants of university employee intrapreneurial behavior: The case of Latvian universities. *Ind. High. Educ.* **2020**, *34*, 190–202. [\[CrossRef\]](#)
3. Neessen, P.C.M.; Caniëls, M.C.J.; Vos, B.; de Jong, J.P. The intrapreneurial employee: Toward an integrated model of intrapreneurship and research agenda. *Int. Entrep. Manag. J.* **2019**, *15*, 545–571. [\[CrossRef\]](#)
4. Bowen, D.E. The changing role of employees in service theory and practice: An interdisciplinary view. *Hum. Resour. Manag. Rev.* **2016**, *26*, 4–13. [\[CrossRef\]](#)
5. Giunipero, L.C.; Denslow, D.; Eltantawy, R. Purchasing/supply chain management flexibility: Moving to an entrepreneurial skill set. *Ind. Mark. Manag.* **2005**, *34*, 602–613. [\[CrossRef\]](#)
6. Usman, M.; Ali, M.; Ogbonnaya, C.; Babalola, M.T. Fueling the intrapreneurial spirit: A closer look at how spiritual leadership motivates employee intrapreneurial behaviors. *Tour. Manag.* **2021**, *83*, 104227. [\[CrossRef\]](#)
7. Pinchot, G., III. *Intrapreneuring: Why You Don't Have to Leave the Corporation to Become an Entrepreneur*; University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship; Harper & Row: New York, NY, USA, 1985.
8. Ilonen, S.; Hytönen, K. Why should I become an intrapreneur? Introducing the concept of intrapreneurial outcome expectations. *Entrep. Educ. Pedagogy* **2023**, *6*, 251–275. [\[CrossRef\]](#)
9. Soleimanof, L.; Neufeld, D. Community Empowerment in Decentralized Autonomous Organizations: A Configurational Approach to Decentralization. In Proceedings of the 57th Hawaii International Conference on System Sciences, Waikiki, HI, USA, 3–6 January 2024; pp. 5928–5939.
10. Ogbumgbada, O.V.; Nwachukwu, I. Intrapreneurship Autonomy and Organizational Adaptability. *GPH-Int. J. Bus. Manag.* **2024**, *7*, 11–28.
11. Blanka, C. An individual-level perspective on intrapreneurship: A review and ways forward. *Rev. Manag. Sci.* **2019**, *13*, 919–961. [\[CrossRef\]](#)
12. Wood, M.S. A process model of academic entrepreneurship. *Bus. Horiz.* **2011**, *54*, 153–161. [\[CrossRef\]](#)
13. Kirby, D.A.; Guerrero, M.; Urbano, D. Making universities more entrepreneurial: Development of a model. *Can. J. Adm. Sci./Rev. Can. Sci. Adm.* **2011**, *28*, 302–316. [\[CrossRef\]](#)
14. Audretsch, D.B. From the entrepreneurial university to the university for the entrepreneurial society. *J. Technol. Transf.* **2014**, *39*, 313–321. [\[CrossRef\]](#)

15. Paunović, I.; Müller, C.; Deimel, K. Building a Culture of Entrepreneurial Initiative in Rural Regions Based on Sustainable Development Goals: A Case Study of University of Applied Sciences–Municipality Innovation Partnership. *Sustainability* **2022**, *14*, 12108. [\[CrossRef\]](#)
16. Fox, B. Educational Intrapreneurship in Universities: An Evidence-Based Agent-Centric Framework. Ph.D. Thesis, The University of Auckland, Auckland, New Zealand, 2023.
17. Bicknell, A.; Francis-Smythe, J.; Arthur, J. Knowledge transfer: De-constructing the entrepreneurial academic. *Int. J. Entrep. Behav. Res.* **2010**, *16*, 485–501. [\[CrossRef\]](#)
18. Ajzen, I. The theory of planned behavior. *Organ. Behav. Hum. Decis. Process.* **1991**, *50*, 179–211. [\[CrossRef\]](#)
19. Antoncic, B.; Hisrich, R.D. Intrapreneurship: Construct refinement and cross-cultural validation. *J. Bus. Ventur.* **2001**, *16*, 495–527. [\[CrossRef\]](#)
20. Baruah, B.; Ward, A. Metamorphosis of intrapreneurship as an effective organizational strategy. *Int. Entrep. Manag. J.* **2015**, *11*, 811–822. [\[CrossRef\]](#)
21. Rigtering, J.C.; Weitzel, U. Work context and employee behaviour as antecedents for intrapreneurship. *Int. Entrep. Manag. J.* **2013**, *9*, 337–360. [\[CrossRef\]](#)
22. Engzell, J.; Karabag, S.F.; Yström, A. Academic intrapreneurs navigating multiple institutional logics: An integrative framework for understanding and supporting intrapreneurship in universities. *Technovation* **2024**, *129*, 102892. [\[CrossRef\]](#)
23. Lumpkin, G.T.; Dess, G.G. Clarifying the entrepreneurial orientation construct and linking it to performance. *Acad. Manag. Rev.* **1996**, *21*, 135–172. [\[CrossRef\]](#)
24. Moriano, J.A.; Molero, F.; Topa, G.; Mangin, J.-P.L. The influence of transformational leadership and organizational identification on intrapreneurship. *Int. Entrep. Manag. J.* **2014**, *10*, 103–119. [\[CrossRef\]](#)
25. Sitkin, S.B.; Pablo, A.L. Reconceptualizing the determinants of risk behavior. *Acad. Manag. Rev.* **1992**, *17*, 9–38. [\[CrossRef\]](#)
26. Keh, H.T.; Der Foo, M.; Lim, B.C. Opportunity evaluation under risky conditions: The cognitive processes of entrepreneurs. *Entrep. Theory Pract.* **2002**, *27*, 125–148. [\[CrossRef\]](#)
27. Dess, G.G.; Lumpkin, G.T. The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *Acad. Manag. Perspect.* **2005**, *19*, 147–156. [\[CrossRef\]](#)
28. Lumpkin, G.T.; Dess, G.G. Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *J. Bus. Ventur.* **2001**, *16*, 429–451. [\[CrossRef\]](#)
29. Fiş, A.M.; Wasti, S.A. Örgüt kültürü ve girişimcilik yönelimi ilişkisi. *METU Stud. Dev.* **2009**, *35*, 127–164. (In Turkish)
30. Bosma, N.; Stam, F.C.; Wennekers, A. Intrapreneurship: An international study. *Scales Res. Rep.* **2010**, H201005S.
31. Ionescu, V.-C.; Bolcas, C. Entrepreneurship and intrapreneurship. Entrepreneurs and intrapreneurs. *Manager* **2019**, *30*, 155–162.
32. Audretsch, D.B.; Lehmann, E.E.; Paleari, S. Academic policy and entrepreneurship: A European perspective. *J. Technol. Transf.* **2015**, *40*, 363–368. [\[CrossRef\]](#)
33. Davey, T.; Hannon, P.; Penaluna, A. Entrepreneurship education and the role of universities in entrepreneurship: Introduction to the special issue. *Ind. High. Educ.* **2016**, *30*, 171–182. [\[CrossRef\]](#)
34. Boh, W.F.; De-Haan, U.; Strom, R. University technology transfer through entrepreneurship: Faculty and students in spinoffs. *J. Technol. Transf.* **2016**, *41*, 661–669. [\[CrossRef\]](#)
35. Aparicio, S.; Turro, A.; Noguera, M. Entrepreneurship and intrapreneurship in social, sustainable, and economic development: Opportunities and challenges for future research. *Sustainability* **2020**, *12*, 8958. [\[CrossRef\]](#)
36. Safari, S.; Azizi, S.M.; Ziapour, A. Investigation of relationship between learning university dimensions and intrapreneurship. *Mediterr. J. Soc. Sci.* **2016**, *7* (Suppl. S2), 27–31. [\[CrossRef\]](#)
37. Ajzen, I. From Intentions to Actions: A Theory of Planned Behavior. In *Action Control*; SSSP Springer Series in Social Psychology; Springer: Berlin/Heidelberg, Germany, 1985; Chapter 2; pp. 11–39.
38. Ajzen, I.; Driver, B.L. Application of the theory of planned behavior to leisure choice. *J. Leis. Res.* **1992**, *24*, 207–224. [\[CrossRef\]](#)
39. Cohen, J.; Hanno, D.M. An Analysis of Underlying Constructs Affecting the Choice of Accounting as a Major. *Issues Account. Educ.* **1993**, *8*, 219.
40. Xu, L.; Zhang, J.; Ding, Y.; Zheng, J.; Sun, G.; Zhang, W.; Philbin, S.P. Understanding the role of peer pressure on engineering students' learning behavior: A TPB perspective. *Front. Public Health* **2023**, *10*, 1069384. [\[CrossRef\]](#) [\[PubMed\]](#)
41. Kılıç, H.A.; Oktar, Ö.; Özkan, A.M. The Mediator Role of Knowledge Sharing Intention Between Planned Behavior Theory and Knowledge Sharing Behavior. *Int. J. Manag. Adm.* **2021**, *5*, 132–142. (In Turkish)
42. Tietz, M.A.; Parker, S.C. How do intrapreneurs and entrepreneurs differ in their motivation to start a new venture? *Front. Entrep. Res.* **2012**, *32*, 67752174. [\[CrossRef\]](#)
43. Douglas, E.J.; Fitzsimmons, J.R. Intrapreneurial intentions versus entrepreneurial intentions: Distinct constructs with different antecedents. *Small Bus. Econ.* **2013**, *41*, 115–132. [\[CrossRef\]](#)
44. Gonzalez-Serrano, M.H.; González García, R.J.; Pérez Campos, C. Entrepreneurial and intrapreneurial intentions of sports science students: What are their determinant variables? *J. Phys. Educ. Sport* **2018**, *18* (Suppl. 3), 1363–1372.
45. Menzel, H.C.; Aaltio, I.; Ulijn, J.M. On the way to creativity: Engineers as intrapreneurs in organizations. *Technovation* **2007**, *27*, 732–743. [\[CrossRef\]](#)
46. Alireza Feyzbakhsh, S.; Sadeghi, R.; Shoraka, S. A case study of intrapreneurship obstacles: The RAJA passenger train company. *J. Small Bus. Entrep.* **2008**, *21*, 171–180. [\[CrossRef\]](#)

47. Kirby, D.A. Creating entrepreneurial universities in the UK: Applying entrepreneurship theory to practice. *J. Technol. Transf.* **2006**, *31*, 599–603. [\[CrossRef\]](#)
48. Park, S.H.; Kim, J.-N.; Krishna, A. Bottom-up building of an innovative organization: Motivating employee intrapreneurship and scouting and their strategic value. *Manag. Commun. Q.* **2014**, *28*, 531–560. [\[CrossRef\]](#)
49. Yulia, N.R.; Iriani, S.S.; Witjaksono, A.D.; Wulandari, S.S. Improvement of Intrapreneurship Behavior in Higher Education. *J. Pendidik. Edutama* **2022**, *9*, 193–212.
50. Farrukh, M.; Lee, J.W.C.; Shahzad, I.A. Intrapreneurial behavior in higher education institutes of Pakistan: The role of leadership styles and psychological empowerment. *J. Appl. Res. High. Educ.* **2019**, *11*, 273–294. [\[CrossRef\]](#)
51. Manz, C.C. Self-leadership: Toward an expanded theory of self-influence processes in organizations. *Acad. Manag. Rev.* **1986**, *11*, 585–600. [\[CrossRef\]](#)
52. Daud, Y. Self-leadership and its application to today's leader-A review of literature. *Strateg. J. Bus. Change Manag.* **2020**, *8*, 1–11. [\[CrossRef\]](#)
53. D'intino, R.S.; Goldsby, M.G.; Houghton, J.D.; Neck, C.P. Self-leadership: A process for entrepreneurial success. *J. Leadersh. Organ. Stud.* **2007**, *13*, 105–120. [\[CrossRef\]](#)
54. Yukl, G. *Leadership in Organizations*, 7th ed.; Pearson: Upper Saddle River, NJ, USA, 2010.
55. Rakib, M.; Azis, M.; Azis, F.; Sanusi, D.A. The Effect of Self-Leadership and Self-Efficacy on Entrepreneurship Creativity: An Empirical Study on Online Business Students. *Pegem J. Educ. Instr.* **2023**, *13*, 209–214.
56. Edú Valsania, S.; Moriano, J.A.; Molero, F. Authentic leadership and intrapreneurial behavior: Cross-level analysis of the mediator effect of organizational identification and empowerment. *Int. Entrep. Manag. J.* **2016**, *12*, 131–152. [\[CrossRef\]](#)
57. Ackermann, A.; Winston, F. Intrapreneurship: Strategic Approaches for Managing Disruptive Innovation in Clinical and Research Projects; Academic Entrepreneurship for Medical and Health Scientists, Academic Entrepreneurship for Medical and Health Sciences. 2019. Available online: <https://repository.upenn.edu/server/api/core/bitstreams/03e5b637-35b3-4b4b-b26e-9fda6d7f57a9/content> (accessed on 9 March 2024).
58. Bandura, A. (Ed.) *Exercise of Personal and Collective Efficacy in Changing Societies*; Self-Efficacy in Changing Societies; Cambridge University: New York, NY, USA, 1995.
59. Morelli, M.; Baiocco, R.; Cacciamani, S.; Chirumbolo, A.; Perrucci, V.; Cattelino, E. Self-efficacy, motivation and academic satisfaction: The moderating role of the number of friends at university. *Psicothema* **2023**, *35*, 238–247. [\[PubMed\]](#)
60. Globocnik, D.; Salomo, S. Do formal management practices impact the emergence of bootlegging behavior? *J. Prod. Innov. Manag.* **2015**, *32*, 505–521. [\[CrossRef\]](#)
61. Wakkee, I.; Elfring, T.; Monaghan, S. Creating entrepreneurial employees in traditional service sectors: The role of coaching and self-efficacy. *Int. Entrep. Manag. J.* **2010**, *6*, 1–21. [\[CrossRef\]](#)
62. Armitage, C.J.; Conner, M. Efficacy of the theory of planned behaviour: A meta-analytic review. *Br. J. Soc. Psychol.* **2001**, *40*, 471–499. [\[CrossRef\]](#)
63. Nicholson, J.; Shen, Y.; Nicholson, D. Increasing intrapreneurial intentions among business students: Using a Net-Enabled Business Innovation Cycle (NEBIC) theory team project. *J. High. Educ. Theory Pract.* **2016**, *16*, 84–93.
64. Chouchane, R.; Fernet, C.; Austin, S.; Zouaoui, S.K. Organizational support and intrapreneurial behavior: On the role of employees' intrapreneurial intention and self-efficacy. *J. Manag. Organ.* **2023**, *29*, 366–382. [\[CrossRef\]](#)
65. Ghodbane, A.; Alwehabie, A. Academic Entrepreneurial Support, Social Capital, and Green Entrepreneurial Intention: Does Psychological Capital Matter for Young Saudi Graduates? *Sustainability* **2023**, *15*, 11827. [\[CrossRef\]](#)
66. Okun, O.; Arun, K.; Begec, S. Intrapreneurship and expectations restrictions. *Dimens. Empres.* **2020**, *18*, 140–151. [\[CrossRef\]](#)
67. Turro, A.; Alvarez, C.; Urbano, D. Intrapreneurship in the Spanish context: A regional analysis. *Entrep. Reg. Dev.* **2016**, *28*, 380–402. [\[CrossRef\]](#)
68. Kim, J.; Noh, Y. The effects of psychological capital and risk tolerance on service workers' internal motivation for firm performance and entrepreneurship. *Int. Entrep. Manag. J.* **2016**, *12*, 681–696. [\[CrossRef\]](#)
69. Peterson, S.J.; Walumbwa, F.O.; Byron, K.; Myrowitz, J. CEO positive psychological traits, transformational leadership, and firm performance in high-technology start-up and established firms. *J. Manag.* **2009**, *35*, 348–368. [\[CrossRef\]](#)
70. Sieg, P.; Posadzińska, I.; Jóźwiak, M. Academic entrepreneurship as a source of innovation for sustainable development. *Technol. Forecast. Soc. Change* **2023**, *194*, 122695. [\[CrossRef\]](#)
71. Houghton, J.D.; Yoho, S.K. Toward a contingency model of leadership and psychological empowerment: When should self-leadership be encouraged? *J. Leadersh. Organ. Stud.* **2005**, *11*, 65–83. [\[CrossRef\]](#)
72. Anderson, J.S.; Prussia, G.E. The self-leadership questionnaire: Preliminary assessment of construct validity. *J. Leadersh. Stud.* **1997**, *4*, 119–143. [\[CrossRef\]](#)
73. Doğan, S.; Şahin, F. Kendi Kendine Liderlik Ölçeğinin Türkçe Uyarlaması, Geçerlilik ve Güvenirlilik Çalışması. *Hacet. Üniversitesi İktisadi Ve İdari Bilim. Fakültesi Derg.* **2008**, *26*, 139–164. (In Turkish)
74. Jerusalem, M.; Schwarzer, R. Self-Efficacy Measurement: Generalized Self-Efficacy Scale (GSES); Revised-English Version. 1995. Available online: [https://www.researchgate.net/profile/Ralf-Schwarzer/publication/298348466\\_The\\_General\\_Self-Efficacy\\_Scale\\_GSE/links/5ff0ab6692851c13fee2ddce/The-General-Self-Efficacy-Scale-GSE.pdf](https://www.researchgate.net/profile/Ralf-Schwarzer/publication/298348466_The_General_Self-Efficacy_Scale_GSE/links/5ff0ab6692851c13fee2ddce/The-General-Self-Efficacy-Scale-GSE.pdf) (accessed on 7 May 2024).
75. Tang, N. Cognitive abilities, self-efficacy, and financial behavior. *J. Econ. Psychol.* **2021**, *87*, 102447. [\[CrossRef\]](#)

76. Luthans, F.; Youssef, C.M.; Avolio, B.J. *Psychological Capital: Developing the Human Competitive Edge*; Oxford University Press: Oxford, UK, 2006.
77. Oruç, E. Psikolojik Sermaye Ölçeği Kısa Formunun Türkçe Uyarlaması: Geçerlik ve Güvenirlik Çalışması. *Electron. Turk. Stud.* **2018**, *13*, 141–151. [[CrossRef](#)]
78. Pandey, J.; Gupta, M.; Hassan, Y. Intrapreneurship to engage employees: Role of psychological capital. *Manag. Decis.* **2021**, *59*, 1525–1545. [[CrossRef](#)]
79. Liñán, F.; Chen, Y.W. Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrep. Theory Pract.* **2009**, *33*, 593–617. [[CrossRef](#)]
80. Stull, M.; Singh, J. Intrapreneurship in Nonprofit Organizations: Examining the Factors That Facilitate Entrepreneurial Behavior among Employees. Available online: <https://www.researchgate.net/publication/259674504> (accessed on 7 May 2024).
81. Fornell, C.; Larcker, D.F. Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* **1981**, *18*, 39–50. [[CrossRef](#)]
82. Hair, J.F. *Multivariate Data Analysis*, 7th ed.; Springer: Berlin/Heidelberg, Germany, 2009.
83. Rego, A.; Machado, F.; Leal, S.; Cunha, M.P.E. Are hopeful employees more creative? An empirical study. *Creat. Res. J.* **2009**, *21*, 223–231. [[CrossRef](#)]
84. Avey, J.B.; Reichard, R.J.; Luthans, F.; Mhatre, K.H. Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Hum. Resour. Dev. Q.* **2011**, *22*, 127–152. [[CrossRef](#)]
85. Loghman, S.; Quinn, M.; Dawkins, S.; Woods, M.; Om Sharma, S.; Scott, J. A comprehensive meta-analysis of the nomological network of psychological capital (PsyCap). *J. Leadersh. Organ. Stud.* **2023**, *30*, 108–128. [[CrossRef](#)]
86. Baluku, M.M.; Kikooma, J.F.; Kibanja, G.M. Psychological capital and the startup capital–entrepreneurial success relationship. *J. Small Bus. Entrep.* **2016**, *28*, 27–54. [[CrossRef](#)]
87. Özkan, O.S.; Tosun, B. The Mediating Role of Person-Organization Fit in the Relationship Between Psychological Capital and Intrapreneurship. *Int. J. Manag. Econ. Bus.* **2020**, *16*, 326–345. (In Turkish) [[CrossRef](#)]
88. Merta, I.K.; Wibawa, I.M.A.; Surya, I.B.K. Does intrapreneurship increase work spirit and performance of village credit institutions? *Probl. Perspect. Manag.* **2021**, *19*, 107.
89. Dilroshan, C.; Herath, H.; Madurapperuma, W. Determinants of Intrapreneurial Behaviour of Employees: A Review of Recent Literature. In Proceedings of the 10th ICME, Online, 4–6 February 2021; p. 163.

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