



# Article The Antecedents of the Technology Acceptance Model in Microentrepreneurs' Intention to Use Social Networking Sites

Rubinia Celeste Bonfanti <sup>1</sup>, Francesco Tommasi <sup>2</sup>, Andrea Ceschi <sup>2</sup>, Riccardo Sartori <sup>2</sup> and Stefano Ruggieri <sup>1,\*</sup>

- <sup>1</sup> Faculty of Human and Social Sciences, Kore University of Enna, 94100 Enna, Italy; rubiniaceleste.bonfanti@unikore.it
- <sup>2</sup> Department of Human Sciences, University of Verona, 37129 Verona, Italy; francesco.tommasi@univr.it (F.T.); andrea.ceschi@univr.it (A.C.); riccardo.sartori@univr.it (R.S.)
- Correspondence: stefano.ruggieri@unikore.it

Abstract: Social media platforms offer significant growth opportunities for enterprises, particularly microenterprises, due to the chance to establish direct contact with customers. Drawing on the Technology-Acceptance Model (TAM), in the present study, we investigate the psychological reasons that lead microentrepreneurs to use Social Networking Sites (SNSs) for their business. In doing so, we also extend TAM by taking into account entrepreneurs' personalities (e.g., extraversion and openness to experience) and their perceived risk. We collected data by examining 247 microentrepreneurs engaged in the production of handmade objects. Our results confirm that of all the TAM behavioral antecedents tested, perceived usefulness and attitude toward SNSs' usage for business proved to be the best predictors of the intention to use SNSs for business activity. The results also indicate that extraversion, openness to experience, and perceived risk, as external factors, significantly affect the TAM constructs. We discuss implications and suggestions for future research.

**Keywords:** entrepreneurship; social networking sites; technology-acceptance model; perceived usefulness; attitude; perceived risk; personality

# 1. Introduction

Due to the widespread use of Information and Communication Technology (ICT) to organize our lives and society, entrepreneurs have extensively embraced new technologies in recent years [1]. ICT has now become a vital element of entrepreneurial strategies since it can offer opportunities for firms to achieve their objectives and generate innovative ideas. Notably, ICT is typically linked to various aspects of a business plan, e.g., marketing and management strategies, the kinds of goods and services provided, and the company's technological infrastructure [2–5].

In this context, the literature has focused on specific ICT, namely Social Networking Sites (SNSs), which are virtual platforms that can provide benefits to entrepreneurs. For example, SNSs enable improved internal organization, enhanced economic performance, and improved customer engagement [6–8]. SNSs are especially helpful to microentrepreneurs (microenterprises are defined as enterprises that employ fewer than 10 persons and whose annual balance sheet total does not exceed EUR 2 million [9]) because they enable them to make new connections [10,11], build a business relationship with their clients [12,13], enhance decision-making procedures, and enhance communication with their clients, leading to customer loyalty.

Even with these advantages, many microentrepreneurs choose in-store shops and other conventional sales methods to expand their number of consumers and their business. Such a preference could be due to the fact that entrepreneurial innovation opportunities can be influenced by various environmental, behavioral, and cognitive factors, which should



Citation: Bonfanti, R.C.; Tommasi, F.; Ceschi, A.; Sartori, R.; Ruggieri, S. The Antecedents of the Technology Acceptance Model in Microentrepreneurs' Intention to Use Social Networking Sites. *Eur. J. Investig. Health Psychol. Educ.* 2023, 13, 1306–1317. https://doi.org/ 10.3390/ejihpe13070096

Academic Editors: María del Mar Molero Jurado, África Martos Martínez, María del Mar Simón Márquez, Ana Belén Barragán Martín and Samuel Fernández-Salinero

Received: 15 June 2023 Revised: 12 July 2023 Accepted: 13 July 2023 Published: 17 July 2023



**Copyright:** © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). be examined individually [14]. Despite these initial thoughts, it is still unclear which psychological reasons could influence this choice.

The overarching aim of the present study is to describe the effects of potential psychological variables that may influence microentrepreneurs' behavioral intention to use SNSs (BIuSNS) in their business activity. To pursue our aim, we developed an empirical study following theoretical insights of an extended version of the Technology-Acceptance Model (TAM) [14]. Our objective was to identify the predictive variables for microentrepreneurs' BIuSNS for their businesses. In this way, the present study offers two main contributions to the literature. First, the study contributes by providing an empirical test of the viability of a model predicting SNSs use in entrepreneurs. Second, the study also supports the development of a theoretical framework for applying the TAM to the entrepreneurial context of social media.

#### 1.1. Entrepreneurs' Psychological Aspects and Social Networking Site Usage

As noted, SNSs enable interaction and information sharing between users and groups. Recruiting customers and receiving feedback from them through comments and likes make SNSs extremely important for microentrepreneurs [15–18]. These tools enable entrepreneurs to develop their brand and business through interactions and contacts with investors, workers, consumers, and suppliers with a low-cost approach [19–21]. Despite these financial advantages, many microentrepreneurs prefer a business strategy based on in-store shops (i.e., stores situated inside the town, in suburban areas, or inside retail centers) [22,23].

The decision to employ in-store shops rather than using new technologies appears to be driven more often by individual preferences than by a smart business strategy. Indeed, a number of studies have shown that when an entrepreneur launches a business activity, s/he brings his/her human capital to the company, making it a reflection of their way of life [24–26]. All of these characteristics emphasize the value of psychological approaches in research on how entrepreneurs use SNSs for their business.

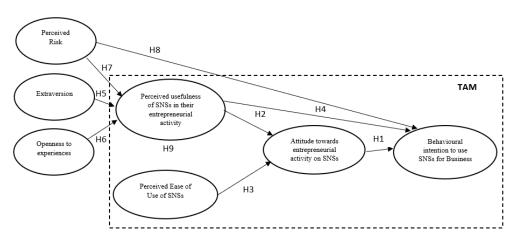
According to the literature, entrepreneurs' acceptance and perception of the usefulness of technology (see the TAM), personality characteristics (extraversion and openness), and perceived risk are crucial elements of how they employ technologies in doing business [27]. First, the TAM has emerged as the most successful among various theories examining entrepreneurs' behavior [28,29]. Originating from behavioral psychology, TAM was developed to model users' acceptance of ICT and to identify the causal relationships between users' internal attitudes, behavioral intentions, and beliefs about technology. The TAM suggests that the acceptance of new technology is connected with two particular beliefs: (a) perceived usefulness and (b) perceived ease of use. The former is a person's subjectively determined likelihood that utilizing a technology system will result in performance improvement. Perceived ease of use is the extent to which a user of a certain application system believes that using it would be effortless on both a physical and mental level [15]. Taken together, perceived usefulness and perceived ease of use affect an individual's attitude toward using a technological system [15]. The TAM has been used in a large number of studies to examine people's acceptance of a variety of technologies, including word processors, the World Wide Web, e-mail, e-learning environments, and online commerce [30–34].

Second, an entrepreneur's personality also appears to be an important aspect of entrepreneurial behavior and SNS usage. Because the Big Five personality theory has been shown to explain the variability in overall internet use more effectively, we have employed external variables belonging to this theory to extend TAM [35]. Particularly, we considered extraversion and openness to experience traits from the Big Five personality theory. The personality trait that has been found to have the greatest impact on the tendency for creativity is openness to new experiences [36,37]. High levels of openness to new experiences are characterized by curiosity, innovation, and freedom from convention [37,38]. Numerous studies have demonstrated the direct relationship between openness to experience and innovative behaviors, including general internet use [35], the desire to employ virtual reality teams [39], and individual innovativeness in information systems [39,40]. For example, Amichai–Hamburger and Vinitzky [41] showed that individuals who are open to new experiences are more likely to use various SNS features, probably because they are naturally intrigued and eager to try new things. Another essential quality for entrepreneurs, according to the Big Five personality theory, is extraversion. This trait determines the ease of developing social networks, acquiring outside resources, and establishing strong networks. Additionally, it has been observed that those with high degrees of extroversion are more likely to find online social services (such as talking and meeting new people) on the internet to be valuable and useful [42]. According to Zhao and Seibert [43], extraversion is a fundamental feature that affects the decision to use various social connection channels, such as SNSs [44,45], and it influences the propensity for sociability.

Last, perceived risk is a predictor of technology acceptance [46–49]. Perceived risk is defined as a subjective impression of an objective risk based on information, prior experiences, and/or intuitive assessment [50]. Understanding risk perception might be useful in predicting how entrepreneurs react to difficulty and novelty in the management of their business (this is still a major emphasis of current perceived-risk research) [51,52]. The risk dimension within the TAM appears as a negative precursor for choices involving technology, namely in the general adoption of technology [53–55], in adopting mobile banking [56], in predicting online shopping intention [57], and for other choices involving technology [58,59]. Specifically, it has often been shown as a predictor of perceived usefulness [48,60], but it is also a direct determinant of behavioral intention [61]. However, it is still unknown how and to what extent risk perception has a significant impact on entrepreneurial behavior and SNS usage. Given its unquestionable influence on enterprises' strategic and operational decisions, it is important to consider risk in investigating entrepreneurs' decision-making dynamics [62].

#### 1.2. The Study

Following our argument, the present study aims to provide empirical evidence on the viability of a TAM model integrated with the dimensions of perceived risk, openness to experience, and extraversion as external factors driving microentrepreneurs' BIuSNS. Understanding the role of psychological variables as predictors of microentrepreneurs' BIuSNS can help us to understand the entrepreneurial behavior relating to the use of SNSs and enable the adoption of more expansive interpretative models. Figure 1 elaborates on the extended model on which we based our hypotheses.



**Figure 1.** Graphical depiction of the extended model of the TAM for predicting behavioral intention to use SNSs.

Narrowly, we expect an effect of the variables belonging to the TAM in the context of microentrepreneurs' BIuSNS for their business. To test the psychological processes underlying the entrepreneurs' choices, based on the TAM [15,63], we propose the following hypotheses:

**Hypothesis 1**: Attitude toward entrepreneurial activity on SNSs positively influences a microentrepreneur's BIuSNS for business.

**Hypothesis 1a**: *Attitude toward entrepreneurial activity on SNSs has a mediating role between perceived usefulness and BIuSNS for business.* 

**Hypothesis 1b**: *Attitude toward entrepreneurial activity on SNSs has a mediating role between perceived ease of use and BIuSNS for business.* 

According to the TAM [15,63], behavioral intention to use SNSs for one's business is a result of attitude toward entrepreneurial activity on SNSs, which is in turn influenced by the perceived usefulness of SNSs (PU-SNS) and the perceived ease of use of SNSs (PEU-SNS). Finally, PU-SNS is a direct influencer of BIuSNS for business. Therefore, we expect that:

**Hypothesis 2**: *PU-SNS for entrepreneurial activity significantly influences attitude toward entrepreneurial activity on SNSs.* 

**Hypothesis 3**: *PEU-SNS significantly influences attitude toward entrepreneurial activity on SNSs.* 

**Hypothesis 4**: PU-SNS for entrepreneurial activity positively affects BluSNS for business.

Coupling H1–4 with current research on the relationship among personality factors, perceived risk, and entrepreneurs' perception of technologies, we further hypothesize that:

**Hypothesis 5**: *Extraversion has a positive relationship with PU-SNS*.

**Hypothesis 6**: *Openness to experience has a positive relationship with PU-SNS.* 

**Hypothesis** 7: *Perceived risk has a negative relationship with PU-SNS.* 

**Hypothesis 8**: Perceived risk negatively affects BIuSNS for business.

Lastly, the literature on the TAM informs that perceived usefulness is an intervening dimension that acts between external factors and individuals' intentions [64]. Özbek et al. [42] reported the mediating role of perceived usefulness in the relationship between personality and behavioral intention to use smartphones. Similarly, Im et al. [48] reported that perceived usefulness plays a mediating function in the relationship between perceived risk and the behavioral intention to adopt technologies. Based on these pieces of evidence, we proposed the following hypothesis:

**Hypothesis 9**: *PU-SNS has a mediating role between attitude and the following external variables: perceived risk (H9a), extraversion (H9b), and openness to experience (H9c).* 

## 2. Materials and Methods

#### 2.1. Participants and Procedure

A total of 247 microentrepreneurs (men = 138, women = 109) between 22 and 68 years old (M = 40.36, SD = 10.51) who do not use SNSs for business participated in the study. We randomly selected participants from the local Chamber of Commerce listings in three medium-sized southern Italian cities who were directly informed about the research by an active association of microentrepreneurs in southern Italy. All the business owners involved were engaged in the production of handmade objects. They created and traded

jewelry, clothing, accessories for the home and body, presents, souvenirs, etc. We asked 300 participants to complete an anonymous online survey, and the response rate was 82.3%.

#### 2.2. Measures

**Sociodemographic Data**. For sociodemographic data, we asked participants to report their age and gender (1 = male, 2 = female, 3 = other).

Attitude toward Entrepreneurial Activity on SNSs. We assessed participants' attitudes toward entrepreneurial activity on SNSs with the semantic differential measurement technique [65]. Utilizing a 7-item scale (e.g., bad/good, ugly/beautiful, weak/strong), respondents assessed the target phrase, "For you, a business activity carried out exclusively through social networking sites is ... ". Each item was displayed on a 5-point scale ( $\alpha = 0.92$ ), with the left side representing a negative term and the right side representing a positive one.

**PU-SNS in Entrepreneurial Activity**. We measured PU-SNS by adapting three items from Davis [15] (e.g., "Using social networking sites is useful in my job"). Each item was displayed on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree;  $\alpha$  = 0.85).

**PEU-SNS in Entrepreneurial Activity**. We measured PEU-SNS by adapting six items from Davis [15] (e.g., "Learning to use social networking sites would be easy for me"). Each item was displayed on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree;  $\alpha = 0.88$ ).

**Extraversion and Openness to Experience**. We measured microentrepreneurs' extraversion and openness to experience using the Big Five questionnaire [66,67]. The participants answered 48 questions on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree;  $\alpha$  extraversion = 0.83,  $\alpha$  openness = 0.84).

**BIuSNS for Business**. We measured microentrepreneurs' BIuSNS for business with a single item. The statement was, "I intend to start using SNSs for my business activity". The item was presented on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).

**Perceived Risk to Use SNSs for Business**. We measured microentrepreneurs' perceived likelihood of using SNSs for business with three commonly used perceived risk categories in marketing literature [68]: financial, performance, and psychological. Items included, "It is probable that using social networking sites for my business activity would not be worth its cost". The items were presented on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree;  $\alpha = 0.78$ ).

We refined the instruments through a pilot session after ten university students filled out the questionnaire during statistics lessons, looking for any unclear or inaccurate questions.

We assessed the survey's reliability using Cronbach's alpha and the average variance extracted (AVE) test [69]. Results from Cronbach's alpha are comparable to those from other studies, and the values range from 0.78 to 0.92, demonstrating a high level of reliability (exceeding the minimum recommended level of 0.6). The AVE results also show a high degree of reliability (exceeding the minimum recommended level of 0.5) [70].

#### 2.3. Data Analytic Plan

We tested our hypotheses using structural equation modeling (SEM). Figure 1 shows the theoretical model tested in this study. We conducted model testing using Mplus software, v. 7.0. To measure the SEM and test our hypotheses, we used the bootstrapping technique with 5000 resamples [71] and assessed the overall goodness-of-model fit using the  $\chi$ 2 statistics ( $\chi$ 2/df ratios < 3 indicate reasonable fitting models), the comparative fit index (CFI, with values > 0.90 indicating better fitting models) [72], and the root-mean-square error of approximation (RMSEA; values < 0.08 indicate good fit) [72].

# 3. Results

Table 1 reports descriptive statistics of the study variables. We conducted preliminary analyses to verify the normality of the data distribution [73]. All the variables of the study indicated no significant deviation from normality in the data distribution (|Skewness| < 1).

Variables	Mean	SD	Skewness	Kurtosis
Age	40.36	10.51	0.962	0.797
Attitude toward SNSs	3.88	1.99	0.563	-0.135
Perceived usefulness of SNSs	3.92	1.68	0.453	-1.376
Perceived ease of use	3.33	1.52	0.353	0.376
Extraversion	37.47	4.90	0.954	0.122
Openness to experiences	39.42	3.23	0.834	0.143
Perceived risk	3.66	1.63	0.372	0.436
Behavioral intention to use SNSs	3.97	1.58	0.440	-1.233

Note: SNSs = Social Network Sites.

## Mediation Analysis

Our SEM model showed a good fit ( $\chi 2 = 42.724$ , df = 24,  $\chi 2/df = 1.8$ , CFI = 0.979, RMSEA = 0.051, 95% RMSEA = 0.026–0.079), accounting for 21% (R2 = 0.196) of the variance in behavioral intention.

Overall, our data supported all the hypotheses regarding the extended TAM model except H3. As Table 2 shows, the relationship between attitude and BIuSNS is significant ( $\beta = 0.387$ , p < 0.05), supporting H1. This is the same for H2, with the association between PU-SNS and attitude being significant ( $\beta = 0.371$ , p < 0.05). Unexpectedly, the relationship between PEU-SNS and attitude is not significant ( $\beta = 0.067$ , p = 0.217), which led us to reject H3. Conversely, the relationship between PU-SNS and BIuSNS is significant ( $\beta = 0.438$ , p < 0.05); as well as the relationship between extraversion and PU-SNS is significant ( $\beta = 0.438$ , p < 0.05), and the relationship between openness and experience and PU-SNS is significant ( $\beta = 0.391$ , p < 0.05), supporting H4–6. Finally, the relationships of perceived risk with PU-SNS and BIuSNS are significant ( $\beta = -0.452$ , p < 0.05;  $\beta = -0.399$ , p < 0.05, H7–8).

Table 2. Structural model and effect size.

Variables	β-Value	SE	<i>p</i> -Value
Direct paths			
Attitude $\rightarrow$ behavioral intention	0.387	0.018	0.000
Perceived usefulness $\rightarrow$ attitude	0.371	0.021	0.000
Perceived ease of use $\rightarrow$ attitude	0.067	0.045	0.217
Perceived usefulness $\rightarrow$ behavioral intention	0.438	0.047	0.035
Extraversion $\rightarrow$ perceived usefulness	0.401	0.096	0.000
Openness to experience $\rightarrow$ perceived usefulness	0.391	0.085	0.000
Perceived risk $\rightarrow$ perceived usefulness	-0.452	0.075	0.000
Perceived risk $\rightarrow$ behavioral intention	-0.399	0.093	0.002
Indirect paths			
Extraversion $\rightarrow$ perceived usefulness $\rightarrow$ attitude	0.139	0.007	0.002
Openness to experience $\rightarrow$ perceived usefulness $\rightarrow$ attitude	0.128	0.011	0.012
Perceived risk $\rightarrow$ perceived usefulness $\rightarrow$ attitude	-0.117	0.021	0.007
Perceived usefulness $\rightarrow$ attitude $\rightarrow$ behavioral intention	0.318	0.507	0.000
Perceived ease of use $\rightarrow$ attitude $\rightarrow$ behavioral intention	0.024	0.041	0.327

In addition, Table 2 reports the indirect/mediating role of PU-SNS and attitude in the assumed external variable (extraversion and openness to experience). In this regard, the relationship among extraversion, PU-SNS, and attitude ( $\beta = 0.139$ , p < 0.05) and the relationship among openness to experience, PU-SNS, and attitude ( $\beta = 0.128$ , p < 0.05) are positive and significant; finally, the relationship among perceived risk, PU-SNS, and

attitude ( $\beta = -0.117$ , p < 0.05) are negative and significant. Therefore, H9a, H9b, and H9c are supported.

The relationship among PU-SNS, attitude, and BIuSNS ( $\beta = 0.318$ , p < 0.05) is positive and significant. This supports H1a, and PU-SNS has a mediating role between extraversion and attitude. Conversely, the association among PEU-SNS, attitude, and BIuSNS ( $\beta = 0.024$ , p < 0.327) is not significant, leading to the rejection of H1b.

Our results partially showed a significant association with all of the TAM model's variables. Specifically, attitude and PU-SNS proved to be the best predictors of the microentrepreneurs' BIuSNS business activity of all the TAM behavioral antecedents tested.

#### 4. Discussion

In this study, we aimed to shed light on the relationship between entrepreneurship and SNS use for businesses, highlighting the role of the psychological antecedents of this phenomenon in the theoretical framework of the TAM. To better understand the relationships between BIuSNS for business, attitude toward entrepreneurial activity on SNSs, PEU-SNS, PU-SNS in entrepreneurial activity, and three external variables (extraversion, openness to experiences, and perceived risk), we tested a mediation model. Regarding the TAM indicators, our results demonstrated a substantial correlation with all of the model's variables only partially. Specifically, attitude and PU-SNS in entrepreneurial activity influenced microentrepreneurs' BIuSNS business as expected.

Our results show that PU-SNS has a direct relationship with entrepreneurs' BIuSNS for business and an indirect relationship through attitudes. Surprisingly, the indirect relationship among PEU-SNS, attitude, and BIuSNS for business is not significant, indicating that PEU-SNS does not play a fundamental role in microentrepreneurs' BIuSNS. This finding contradicts previous investigations [74] and could be explained because after the pandemic, using technological devices has become easier for all people [75–78]; therefore, the decision to use them for business activity might be prescinded from PEU-SNS.

Regarding the direct and indirect relationship between PU-SNS and microentrepreneurs' BluSNS for business, our findings imply that PU-SNS plays a crucial role in the understanding of this relationship, exerting a direct influence on the BIuSNS and an attitude-mediated effect. Therefore, this variable plays a crucial role in the intention to use or continue to use SNSs for business. The perceived usefulness is likely related to opportunity capability or capacity to identify market opportunities using a variety of methods [79–81]. Opportunity competency is one of the essential traits of entrepreneurs and one of the more crucial and distinctive skills for knowledgeable entrepreneurs [82]; it stands for the capacity to look for, identify, develop, and assess any opportunity in a specific market [83]. Entrepreneurs may only succeed in their businesses and minimize risks by identifying opportunities [84,85]. Specifically, those who perceived the usefulness of SNSs changed their previous attitudes toward the use of SNSs in their business activities. This indirect path shows greater awareness and probably stems from the entrepreneur's conviction regarding SNSs' usefulness for their business. Therefore, this is a process that goes beyond mere economic utility and leads to a behavioral intention to use SNSs for business. Additionally, even when attitudes remained the same, the PU-SNS continued to have a significant impact on microentrepreneurs' BIuSNS for business, probably because, in this case, the BIuSNS is driven by purely economic motivation.

In our extended TAM, we hypothesized that openness to experience would have a relationship with PU-SNS, and our study's results confirmed this hypothesis. This implies that individuals' characteristics, such as curiosity, imagination, willingness to entertain new ideas, and open-mindedness [67], are strictly linked to the PU-SNS for their own business. Several studies have shown that openness turns out to be closely related to behaviors involving innovation, such as general internet use [35], the intention to use virtual reality teams [86], and personal innovativeness in information systems [39]. Regarding the specific case of social media, one study showed that people who are more innovative, curious,

and creative than others are more likely to find utility in all SNSs [40,87]. Our study also confirmed these results.

Moreover, we hypothesized that extraversion would have a relationship with PU-SNS, and our results confirmed this hypothesis. Studies have suggested that extroverted entrepreneurs normally show dominant traits in making decisions that also influence their propensity for innovation [88]. It has been seen that individuals with high levels of extroversion have a higher propensity to believe that online social services are useful [42]. In this regard, several studies have shown that extraversion is closely related to behaviors involving innovation, such as the use of either information or leisure services on the internet [89], online information sharing [90], and smartphone usage [64]. Regarding the specific case of social media, one study showed that people who are more optimistic and enthusiastic than others use Facebook [87] and find all the SNSs attractive [44]. Indeed, SNSs would be another way for extrovert entrepreneurs to be more assertive and, therefore, could be seen as very helpful for business owners, pushing them toward the BIuSNS.

Finally, we hypothesized that perceived risk would have a relationship with PU-SNS and BIuSNS for business. Our study's results confirmed this hypothesis. The study's results suggest a negative effect of perceived risk on PU-SNS for entrepreneurial activity. Moreover, participants with lower scores on PU-SNS are less inclined to use SNSs for their business. Studies have also shown that perceived risk is a key element of human decision-making processes [91,92] because people evaluate all of an activity's advantages (positive outcomes) and hazards (negative outcomes) before deciding whether to do it. For example, according to Pavlou [58], risk is seen as an indirect precursor of the behavioral intention of e-commerce practices, and it has a negative impact on the behavior because of the online environment's virtual nature and implicit uncertainty. Furthermore, Nam and Lee [59] investigated variables affecting consumers' adoption of Internet banking. According to their findings, risks have a negative impact on one's desire to use new technology, whereas perceived usefulness and attitude have a positive impact. Other authors achieved similar outcomes when they discussed the potential risks and acceptability of new technologies [58,93]. Our results confirm that perceived risk is a negative predictor of BIuSNS for business. In conclusion, the acceptance of new technologies is expected to be constrained by rising risk perception.

Ultimately, the present study enriches the application of the TAM by combining it with the Big Five personality theory and a perceived risk construct to the field of entrepreneurship and identifying individuals' psychological antecedents in the cognitive evaluation process of the BIuSNS for business. These empirical results also allow for the identification of a psychological profile of microentrepreneurs who are more inclined to utilize SNSs for business purposes, which is helpful for market planning in the business innovation sector.

#### Limitations and Future Research

Despite our theoretical implications, our study presents certain limitations. First, the participants self-reported the psychosocial variables, and they might have been influenced by response biases, such as social desirability. To mitigate potential biases, it is recommended that researchers make every attempt to use behavioral measures. Second, although we obtained a randomized sample from a specific group, we only included a few people from a particular geographic region, which might not be a representative sample of the entire community. A comparison of various territorial realities, particularly from a perspective of economic development, may offer further information about the relationships examined in this study. Another limitation is given by common method bias, which implies that a portion of the variance in our study may have been due to the methods used. Future research needs to identify more valid instruments and procedural strategies to minimize common method bias. Finally, we limited our research to microentrepreneurs in the handmade product sector. In further analysis, researchers should investigate the approach suggested here in small and medium business owners, as well as in different categories of products.

## 5. Conclusions

Overall, the study clarified the multifaceted and underexamined relationship between microentrepreneurs and SNSs. What stands out in particular is the crucial influence that the TAM factors (PEU-SNS and PU-SNS), personality, and perceived risk in explaining this relationship. Based on this study, important roles are given to attitude, PU-SNS, openness to experience, extraversion, and perceived risk. Contrary to expectation, the BIuSNS for one's business is unaffected by PEU-SNS.

These results also have practical implications. E-commerce conducted on SNSs is assuming a crucial role in bridging infrastructure gaps and granting opportunities for everyone, especially microentrepreneurs, to access global markets effortlessly. In this sense, we have shown that perceiving new technology as a risk is the first obstacle entrepreneurs must overcome. Moreover, perceiving SNSs' usefulness as a tool for improving one's business is the first of the helpful components for changing personal behavior, which increases the desire to use SNSs for business.

**Author Contributions:** Conceptualization, R.C.B. and S.R.; methodology, S.R.; formal analysis, R.C.B.; writing—original draft preparation, F.T. and R.C.B.; writing—review and editing, A.C., F.T., R.S. and S.R. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

**Institutional Review Board Statement:** This study was conducted in accordance with the Declaration of Helsinki and approved by the Ethics Committee of Psychological Research of the Faculty of Human and Social Sciences, University of Enna (approval code: UKE-IRBPSY-07.20.1).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data presented in this study are available upon request from the corresponding author.

Acknowledgments: We thank the microentrepreneurs who agreed to participate in this study.

Conflicts of Interest: The authors declare no conflict of interest.

## References

- Eurostat. Impact of COVID-19 on the Use of ICT in Enterprises. Available online: https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=Impact\_of\_COVID-19\_on\_the\_use\_of\_ICT\_in\_enterprises (accessed on 25 May 2023).
- Corte, V.D.; Iavazzi, A.; D'Andrea, C. Customer Involvement through Social Media: The Cases of Some Telecommunication Firms. J. Open Innov. Technol. Mark. Complex. 2015, 1, 1–10. [CrossRef]
- 3. Felix, R.; Rauschnabel, P.A.; Hinsch, C. Elements of Strategic Social Media Marketing: A Holistic Framework. J. Bus. Res. 2017, 70, 118–126. [CrossRef]
- Tommasi, F.; Perini, M.; Sartori, R. Multilevel Comprehension for Labor Market Inclusion: A Qualitative Study on Experts' Perspectives on Industry 4.0 Competences. *Educ. Train.* 2022, 64, 177–189. [CrossRef]
- Yu, S.; Abbas, J.; Draghici, A.; Negulescu, O.H.; Ain, N.U. Social Media Application as a New Paradigm for Business Communication: The Role of COVID-19 Knowledge, Social Distancing, and Preventive Attitudes. *Front. Psychol.* 2022, 13, 903082. [CrossRef]
- An, J.; Di, H.; Liu, G. The Influence of Entrepreneurs' Online Popularity and Interaction Behaviors on Individual Investors' Psychological Perception: Evidence From the Peer-To-Peer Lending Market. *Front. Psychol.* 2022, 13, 825478. [CrossRef]
- Neghină, R.-A.; Mănescu, V.-A.; Ganciu, M.-R.; Ilie, D.-G.; Militaru, G. Online Business Networking Experience Research on Ecommerce Entrepreneurs. Proc. Int. Conf. Bus. Excell. 2019, 13, 385–398. [CrossRef]
- 8. Ruehl, C.H.; Ingenhoff, D. Communication Management 2.0. J. Commun. Manag. 2017, 21, 170–185. [CrossRef]
- 9. European Commission. User Guide to the SME Definition; Publications Office of the European Union: Luxembourg, 2020.
- 10. Aronica, M.; Bonfanti, R.C.; Piacentino, D. Social Media Adoption in Italian Firms. Opportunities and Challenges for Lagging Regions. *Pap. Reg. Sci.* 2021, 100, 959–978. [CrossRef]
- Park, C.-H.; Shin, J.-K. An Exploratory Study on the Determinants of Performance in Regional Industry Technology Development Programs. Asia Pac. J. Innov. Entrep. 2017, 11, 125–143. [CrossRef]
- 12. Kahar, R.; Yamimi, F.; Bunari, G.; Habil, H. Trusting the Social Media in Small Business. *Procedia Soc. Behav. Sci.* 2012, *66*, 564–570. [CrossRef]
- Soto-Acosta, P.; Popa, S.; Palacios-Marqués, D. Social Web Knowledge Sharing and Innovation Performance in Knowledge-Intensive Manufacturing SMEs. J. Technol. Transf. 2017, 42, 425–440. [CrossRef]

- 14. Valliere, D. Towards a Schematic Theory of Entrepreneurial Alertness. J. Bus. Ventur. 2013, 28, 430–442. [CrossRef]
- 15. Davis, F.D. Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Q.* **1989**, *13*, 319. [CrossRef]
- 16. Ceptureanu, S.I.; Ceptureanu, E.G.; Cristescu, M.P.; Dhesi, G. Analysis of Social Media Impact on Opportunity Recognition. A Social Networks and Entrepreneurial Alertness Mixed Approach. *Entropy* **2020**, *22*, 343. [CrossRef]
- Li, F.; Larimo, J.; Leonidou, L.C. Social Media in Marketing Research: Theoretical Bases, Methodological Aspects, and Thematic Focus. *Psychol. Mark.* 2023, 40, 124–145. [CrossRef]
- Olanrewaju, A.-S.T.; Hossain, M.A.; Whiteside, N.; Mercieca, P. Social Media and Entrepreneurship Research: A Literature Review. Int. J. Inf. Manag. 2020, 50, 90–110. [CrossRef]
- Luo, X.; Zhang, J. How Do Consumer Buzz and Traffic in Social Media Marketing Predict the Value of the Firm? SSRN Electron. J. 2013, 30, 213–238. [CrossRef]
- Trainor, K.J. Relating Social Media Technologies to Performance: A Capabilities-Based Perspective. J. Pers. Sell. Sales. Manag. 2012, 32, 317–331. [CrossRef]
- 21. Ben-Shalom, U.; Hajaj, C.; Davidovitch, N.; Berger, C. Online Temporary Learning Groups in Higher Education—Interactions, Compensation, and Maximisation of Achievements in an Israeli Case Study. J. Educ. Cult. Soc. 2023, 14, 619–633. [CrossRef]
- 22. Anwar, M.N.; Daniel, E.M. Ethnic Entrepreneurs and Online Home-Based Businesses: An Exploratory Study. J. Glob. Entrep. Res. 2017, 7, 6. [CrossRef]
- Nakara, W.A.; Benmoussa, F.Z.; Jaouen, A. Entrepreneurship and Social Media Marketing: Evidence from French Small Business. Int. J. Entrep. Small Bus. 2012, 16, 386. [CrossRef]
- 24. Kumari, M. Social Media And Women Empowerment. Int. J. Sci. Technol. Res. 2020, 9, 626–629.
- Sartori, R.; Costantini, A.; Ceschi, A. Psychological Assessment in Human Resource Management: Discrepancies between Theory and Practice and Two Examples of Integration. *Pers. Rev.* 2022, *51*, 284–298. [CrossRef]
- Di Zhang, D.; Bruning, E. Personal Characteristics and Strategic Orientation: Entrepreneurs in Canadian Manufacturing Companies. Int. J. Entrep. Behav. Res. 2011, 17, 82–103. [CrossRef]
- 27. Rashid, L.; Alzafari, K.; Kratzer, J. Founder Personalities, Behaviors and New Venture Success in Sub-Saharan Africa. *Technol. Forecast. Soc. Change* **2020**, 151, 119766. [CrossRef]
- Crittenden, V.L.; Crittenden, W.F.; Ajjan, H. Empowering Women Micro-Entrepreneurs in Emerging Economies: The Role of Information Communications Technology. J. Bus. Res. 2019, 98, 191–203. [CrossRef]
- 29. Su, Y.; Li, M. Applying Technology Acceptance Model in Online Entrepreneurship Education for New Entrepreneurs. *Front. Psychol.* **2021**, *12*, 713239. [CrossRef]
- Amoako-Gyampah, K.; Salam, A.F. An Extension of the Technology Acceptance Model in an ERP Implementation Environment. *Inf. Manag.* 2004, 41, 731–745. [CrossRef]
- Doll, W.J.; Hendrickson, A.; Deng, X. Using Davis's Perceived Usefulness and Ease-of-Use Instruments for Decision Making: A Confirmatory and Multigroup Invariance Analysis. *Decis. Sci.* 1998, 29, 839–869. [CrossRef]
- Esteban-Millat, I.; Martínez-López, F.J.; Pujol-Jover, M.; Gázquez-Abad, J.C.; Alegret, A. An Extension of the Technology Acceptance Model for Online Learning Environments. *Interact. Learn. Environ.* 2018, 26, 895–910. [CrossRef]
- 33. Pavlou, P.A.; Gefen, D. Building Effective Online Marketplaces with Institution-Based Trust. *Inf. Syst. Res.* 2004, 15, 37–59. [CrossRef]
- Ruggieri, S.; Bonfanti, R.C.; Passanisi, A.; Pace, U.; Schimmenti, A. Electronic Surveillance in the Couple: The Role of Self-Efficacy and Commitment. *Comput. Hum. Behav.* 2021, 114, 106577. [CrossRef]
- 35. McElroy, J.C.; Hendrickson, A.; Townsend, A.M.; DeMarie, S.M. Dispositional Factors in Internet Use: Personality versus Cognitive Style. *MIS Q.* **2007**, *31*, 809. [CrossRef]
- Correa, T.; Hinsley, A.W.; de Zúñiga, H.G. Who Interacts on the Web?: The Intersection of Users' Personality and Social Media Use. Comput. Hum. Behav. 2010, 26, 247–253. [CrossRef]
- 37. Özgüven, N.; Mucan, B. The Relationship between Personality Traits and Social Media Use. *Soc. Behav. Pers. Int. J.* 2013, 41, 517–528. [CrossRef]
- 38. Butt, S.; Phillips, J.G. Personality and Self Reported Mobile Phone Use. Comput. Hum. Behav. 2008, 24, 346–360. [CrossRef]
- 39. Nov, O.; Ye, C. Users' Personality and Perceived Ease of Use of Digital Libraries: The Case for Resistance to Change. *J. Am. Soc. Inf. Sci. Technol.* **2008**, *59*, 845–851. [CrossRef]
- 40. Yu, T.-K.; Lee, N.-H.; Chao, C.-M. The Moderating Effects of Young Adults' Personality Traits on Social Media Immersion. *Front. Psychol.* **2020**, *11*, 554106. [CrossRef]
- 41. Amichai-Hamburger, Y.; Vinitzky, G. Social Network Use and Personality. Comput. Hum. Behav. 2010, 26, 1289–1295. [CrossRef]
- 42. Özbek, V.; Alnıaçık, Ü.; Koc, F.; Akkılıç, M.E.; Kaş, E. The Impact of Personality on Technology Acceptance: A Study on Smart Phone Users. *Procedia Soc. Behav. Sci.* **2014**, *150*, 541–551. [CrossRef]
- 43. Zhao, H.; Seibert, S.E. The Big Five Personality Dimensions and Entrepreneurial Status: A Meta-Analytical Review. *J. Appl. Psychol.* **2006**, *91*, 259–271. [CrossRef] [PubMed]
- Bowden-Green, T.; Hinds, J.; Joinson, A. How Is Extraversion Related to Social Media Use? A Literature Review. Pers. Individ. Dif. 2020, 164, 110040. [CrossRef]

- 45. Cantner, U.; Silbereisen, R.K.; Wilfling, S. Which Big-Five Personality Traits Drive Entrepreneurial Failure in Highly Innovative Industries? In Proceedings of the DIME Final Conference, Maastricht, The Netherlands, 6–8 April 2011.
- Cocosila, M.; Archer, N.; Brian Haynes, R.; Yuan, Y. Can Wireless Text Messaging Improve Adherence to Preventive Activities? Results of a Randomised Controlled Trial. *Int. J. Med. Inf.* 2009, 78, 230–238. [CrossRef] [PubMed]
- 47. Horst, M.; Kuttschreuter, M.; Gutteling, J.M. Perceived Usefulness, Personal Experiences, Risk Perception and Trust as Determinants of Adoption of e-Government Services in The Netherlands. *Comput. Hum. Behav.* 2007, 23, 1838–1852. [CrossRef]
- Im, I.; Kim, Y.; Han, H.-J. The Effects of Perceived Risk and Technology Type on Users' Acceptance of Technologies. *Inf. Manag.* 2008, 45, 1–9. [CrossRef]
- 49. Martins, C.; Oliveira, T.; Popovič, A. Understanding the Internet Banking Adoption: A Unified Theory of Acceptance and Use of Technology and Perceived Risk Application. *Int. J. Inf. Manag.* 2014, 34, 1–13. [CrossRef]
- 50. Lu, X.; Xie, X.; Xiong, J. Social Trust and Risk Perception of Genetically Modified Food in Urban Areas of China: The Role of Salient Value Similarity. *J. Risk Res.* 2015, *18*, 199–214. [CrossRef]
- Gratell, P.; Dahlin, C.-J. How Does Social Media Affect Entrepreneurial Leadership: A Qualitative Study on Entrepreneur's Perceptions Regarding Social Media as a Tool for Entrepreneurial Leadership. Master's Thesis, Uppsala University, Uppsala, Sweden, 2018.
- 52. Lin, L.; Lin, Y.; Lin, S. The Journey of Business Opportunity Evaluation: When and Why Does Opportunity Novelty Promote Vs. Inhibit Opportunity Adoption? *Front. Psychol.* **2021**, *12*, 732565. [CrossRef]
- 53. Chen, L. Research on the Influence of Perceived Value on Mobile Shopping Behavior Intention. Ph.D. Thesis, South China University of Technology, Guangzhou, China, 2013.
- 54. Laforet, S.; Li, X. Consumers' Attitudes towards Online and Mobile Banking in China. *Int. J. Bank. Mark.* 2005, 23, 362–380. [CrossRef]
- 55. Yang, C.-H.; Motohashi, K.; Chen, J.-R. Are New Technology-Based Firms Located on Science Parks Really More Innovative? *Res. Policy* **2009**, *38*, 77–85. [CrossRef]
- Zhou, T. Examining Mobile Banking User Adoption from the Perspectives of Trust and Flow Experience. *Inf. Technol. Manag.* 2012, 13, 27–37. [CrossRef]
- 57. Suroso, I.; Afandi, M.; Galushasti, A. Does Perceived Risk? A Study of Technology Acceptance Model on Online Shopping Intention. *Acad. Strateg. Manag. J.* 2022, 21, 1–12.
- 58. Pavlou, P.A. Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model. *Int. J. Electron. Commer.* **2003**, *7*, 101–134. [CrossRef]
- 59. Nam, E.-H.; Lee, J.-H. The Effects of Perceived Risks on Purchase Decision Behavior among Internet Fashion Consumers. *J. Korean* Soc. Cloth. Text. 2009, 33, 1707–1718. [CrossRef]
- 60. Isaac, O.; Mutahar, A.M.; Daud, N.M.; Ramayah, T.; Aldholay, A.H. The Effect of Awareness and Perceived Risk on the Technology Acceptance Model (TAM): Mobile Banking in Yemen. *Int. J. Serv. Stand.* **2018**, *12*, 180. [CrossRef]
- Ferri, L.; Spanò, R.; Maffei, M.; Fiondella, C. How Risk Perception Influences CEOs' Technological Decisions: Extending the Technology Acceptance Model to Small and Medium-Sized Enterprises' Technology Decision Makers. *Eur. J. Innov. Manag.* 2021, 24, 777–798. [CrossRef]
- 62. Caldarelli, A.; Ferri, L.; Maffei, M. Expected Benefits and Perceived Risks of Cloud Computing: An Investigation within an Italian Setting. *Technol. Anal. Strat. Manag.* 2017, 29, 167–180. [CrossRef]
- 63. Röcker, C. Why Traditional Technology Acceptance Models Won't Work With Future Information Technologies. In *World Academy* of *Science, Engineering and Technology*; 2010; Volume 65.
- 64. Marangunić, N.; Granić, A. Technology Acceptance Model: A Literature Review from 1986 to 2013. *Univers. Access Inf. Soc.* 2015, 14, 81–95. [CrossRef]
- 65. Osgood, C.E.; Suci, G.J.; Tannenbaum, P.H. The Measurement of Meaning; University of Illinois Press: Urbana, IL, USA, 1957.
- 66. Caprara, G.V.; Barbaranelli, C.; Borgogni, L. Il Big Five Questionnaire (BFQ): Caratteristiche Psicometriche e Validità Transculturale. *Arch. Psicol. Neurol. Psichiatr.* **1997**, 5–6, 486–504.
- 67. Costa, P.T.; McCrae, R.R. The Five-Factor Model of Personality and Its Relevance to Personality Disorders. *J. Pers. Disord.* **1992**, *6*, 343–359. [CrossRef]
- 68. Jacoby, J.; Kaplan, L. The Components Of Perceived Risk. Adv. Consum. Res. 1972, 3, 382–393.
- 69. Diamantopoulos, A.; Siguaw, J. Introducing LISREL; SAGE Publications, Ltd: London, UK, 2000. [CrossRef]
- 70. Hair, J.; Black, W.; Babin, B.; Anderson, R. *Multivariate Data Analysis: A Global Perspective*; Pearson Education: Upper Saddle River, NJ, USA, 2010.
- Henseler, J.; Ringle, C.M.; Sarstedt, M. A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modeling. J. Acad. Mark. Sci. 2015, 43, 115–135. [CrossRef]
- 72. Hu, L.; Bentler, P.M. Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria versus New Alternatives. *Struct. Equ. Model.* **1999**, *6*, 1–55. [CrossRef]
- 73. Tabachnick, B.G.; Fidell, L.S. Using Multivariate Statistics, 5th ed.; Allyn & Bacon/Pearson Education: Boston, MA, USA, 2007.
- Nathania, L.; Indarini; Anandya, D. The Effects of External Factors on Perceived Ease of Use, Perceived Usefulness, Attitude towards Use, and Behavioral Intention of Older Adults in Indonesia. In Proceedings of the 18th International Symposium on Management (INSYMA 2021), Online, 27–28 May 2021. [CrossRef]

- 75. Gega, L.; Aboujaoude, E. How Digital Technology Mediated the Effects of the COVID-19 Pandemic on Mental Health: The Good, the Bad, and the Indifferent. *Front. Digit. Health* **2021**, *3*, 733151. [CrossRef] [PubMed]
- 76. Tkácová, H.; Pavlíková, M.; Stranovská, E.; Králik, R. Individual (Non) Resilience of University Students to Digital Media Manipulation after COVID-19 (Case Study of Slovak Initiatives). *Int. J. Environ. Res. Public. Health* **2023**, 20, 1605. [CrossRef]
- Tkacová, H.; Králik, R.; Tvrdoň, M.; Jenisová, Z.; Martin, J.G. Credibility and Involvement of Social Media in Education— Recommendations for Mitigating the Negative Effects of the Pandemic among High School Students. *Int. J. Environ. Res. Public. Health* 2022, 19, 2767. [CrossRef]
- Sirotkin, A.V.; Pavlíková, M.; Hlad, L'.; Králik, R.; Zarnadze, I.; Zarnadze, S.; Petrikovičová, L. Impact of COVID-19 on University Activities: Comparison of Experiences from Slovakia and Georgia. Sustainability 2023, 15, 1897. [CrossRef]
- 79. Man, T.W.Y.; Lau, T. Entrepreneurial Competencies of Sme Owner/Managers in the Hong Kong Services Sector: A Qualitative Analysis. *J. Enterprising Cult.* 2000, *8*, 235–254. [CrossRef]
- 80. Abbate, C.S.; Ruggieri, S. A Beggar, Self-Awareness And Willingness to Help. Curr. Psychol. Lett. 2008, 24, 2008. [CrossRef]
- Tehseen, S.; Qureshi, Z.; Johara, F.; Ramayah, T. Assessing Dimensions of Entrepreneurial Competencies: A Type ii (Reflective-Formative) Measurement Approach Using Pls-Sem; Universiti Malaysia Terengganu: Kuala Terengganu, Malaysia, 2020; Volume 15, pp. 108–145.
- 82. Li, X. Entrepreneurial Competencies as an Entrepreneurial Distinctive: An Examination of the Competency Approach in Defining Entrepreneurs. Ph.D. Thesis, Singapore Management University, Singapore, 2009.
- 83. Man, W.T. Entrepreneurial Competencies and the Performance of Small and Medium Enterprises in the Hong Kong Services Sector; The Hong Kong Polytechnic University: Hong Kong, China, 2001.
- 84. Bergevoet, R.H.M.; Van Woerkum, C. Improving the Entrepreneurial Competencies of Dutch Dairy Farmers through the Use of Study Groups. *J. Agric. Educ. Ext.* **2006**, *12*, 25–39. [CrossRef]
- Rahman, S.A.; Ahmad, N.; Taghizadeh, N. Entrepreneurial Competencies of the BoP Entrepreneurs in Achieving Business Success: A Study on the Mom and Pop Shops in Urban Cities of Bangladesh. In Proceedings of the 11th Conference: Asian Academy of Management International Conference (AAMC 2015), Penang, Malaysia, 2–4 October 2015.
- Jacques, P.H.; Garger, J.; Brown, C.A.; Deale, C.S. Personality and Virtual Reality Team Candidates: The Roles of Personality Traits, Technology Anxiety and Trust as Predictors of Perceptions of Virtual Reality Teams. J. Bus. Manag. 2009, 15, 143–157.
- 87. Rosen, P.; Kluemper, D. The Impact of the Big Five Personality Traits on the Acceptance of Social Networking Website. *Peter A. Rosen* **2008**, 2–10.
- Zhao, H.; Seibert, S.E.; Lumpkin, G.T. The Relationship of Personality to Entrepreneurial Intentions and Performance: A Meta-Analytic Review. J. Manag. 2010, 36, 381–404. [CrossRef]
- 89. Amichai-Hamburger, Y.; Ben-Artzi, E. Loneliness and Internet Use. Comput. Hum. Behav. 2003, 19, 71–80. [CrossRef]
- Pei-Lee, T.; Chen, C.; Chin, W.C.; Siew, Y.Y. Do the Big Five Personality Factors Affect Knowledge Sharing Behaviour? A Study of Malaysian Universities. *Malays. J. Libr. Inf. Sci.* 2011, 16, 47–62.
- 91. Slovic, P. The Perception of Risk. In *Scientists Making a Difference*; Cambridge University Press: Cambridge, UK, 2016; pp. 179–182. [CrossRef]
- 92. Yuan, F.; Woodman, R.W. Innovative Behavior in the Workplace: The Role of Performance and Image Outcome Expectations. *Acad. Manag. J.* **2010**, *53*, 323–342. [CrossRef]
- 93. Forsythe, S.M.; Shi, B. Consumer Patronage and Risk Perceptions in Internet Shopping. J. Bus. Res. 2003, 56, 867–875. [CrossRef]

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.