GREEN DIGITAL ENTREPRENEUR INTENTION MODEL: INTEGRATION OF THE SELF-DETERMINATION AND SPIRITUAL PERSPECTIVE

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ABSTRACT

This study aims to test and analyze the effect of psychological workload and government role on green digital entrepreneur intention (GDEI) of Micro, Small, and Medium Enterprises (MSMEs) in Yogyakarta with the intervening variable of satisfaction of basic psychological needs (SBPN) and moderating variables of spiritual entrepreneurship and green digital. The sample of this study was micro enterprises owned by millennial generations in Yogyakarta. Data collection used a survey method involving 118 respondents. Data were processed using the Structural Equation Modeling (SEM) analysis tool. The analysis showed that psychological workload and government role did not affect GDEI, but they were fully mediated by SBPN. Psychological workload negatively affected SBPN. Government roles had a positive effect on SBPN and SBPN had a positive influence on GDEI. Spiritual entrepreneurship moderated the relationship between psychological workload and GDEI. Green Digital did not moderate the relationship between government roles and GDEI.

In addition, GDEI was in a high category, while the psychological workload was low. The government role, SBPN, spiritual entrepreneurship, and GDEI were slightly high. Although the green digital is considered high, the number of green digital entrepreneurs in this province is low. MSMEs in Yogyakarta are in the extrinsic motivation position of identified regulation, a profitable position, where MSMEs feel that green digital entrepreneurs are useful and play an important role in both personal and social life. Therefore, the government needs to maintain and increase MSME motivation into integrated regulation and intrinsic motivation through Islamic Spiritual Green Digital Entrepreneurship (ISGDE) with the support of basic psychological needs in each dimension of ISGDE.

This study is expected to be a reference for the government to improve MSME performance and reduce poverty. Besides, ISGDE contributes to reducing psychological workload and increasing SBPN, GDEI, and the number of green digital entrepreneurs.

Keywords: Islamic Spiritual Green Digital Entrepreneurship, Green Digital Entrepreneur Intention.

INTRODUCTION

Environmental pollution, including water, land, and air becomes our main concern. This drives the issuance of Law Number 3 of 2014 concerning industry which regulates green industry and Regulation of the Minister of Industry Number 1 of 2022 concerning the Organization and Work Procedures of the Technical Implementation Units of Industrial Services Standardization and Policy Agency (Peraturan Menteri Perindustrian Nomor 1, Tahun 2022). This is reinforced by the Sustainable Development Goals (SDGs) consisting of 17 sustainable development programs proposed by UN member countries in 2015 and expected to be achieved in 2030 (Lestari, 2023).

At the provincial level, Yogyakarta implements environmentally friendly development policies covering the importance of maintaining nature and the balance of living things (Hakim, 2024). Thus, green entrepreneurs are needed to positively contribute to the economy, society, and environment (Alwakid et al., 2021; Rahman et al., 2023; Feng, 2023; Jafarov et al. 2026; Ying Chang et al., 2026). This province's economy is rapidly developing driven by the energy and creativity of Micro, Small, and Medium Enterprises (MSMEs) (Sujatmiko, 2023). Berdasarkan data awal tahun 2025, tercatat 269.000 UMKM di Yogyakarta bermigrasi ke ekosistem digital melalui berbagai platform e-commerce (Humas Pemda DIY, 2026).

The environmental behavior index in Yogyakarta in 2019/2020 reached a value of 44.51. This indicates that the people in this province are quite concerned about the environment (Book 06, 2020). Meanwhile, Alpan (2018) stated that the level of compliance of MSME actors in implementing environmental management is low. The intention to become a green entrepreneur in this province is also low [Sulastiningsih et al., 2023; Sulastiningsih, 2023 et al.; Asikin, 2023; Wikaningtyas et al., 2018). The awareness of MSME actors to care about the environment is low (Pentiana & Wijaya, 2018; Adibatunabillah, 2022; Rahman et al., 2023; Ayuningtyas, et al. 2025). 87% of MSMEs have not adopted green business (Shofihawa, 2025).

A preliminary survey in June 2024 revealed that 30 MSMEs owned by millennials in Yogyakarta had a quite high level of environmental awareness with an average scale of 4.98 out of 6. This is supported by previous studies that the millennials care about the environment and intend to become entrepreneurs (Dewi, 2023; Genoveva & Tanardi, 2022; Budiman et al., 2025). This indicates the inconsistencies in the results of the studies.

The millennial generation cannot be separated from digital technology as they at least spend 3 hours per day accessing gadgets (Kementerian Komunikasi dan Informatika Republik Indonesia, 2016). The millennial generation contributes to the digital economy or even the economy in general in Indonesia (Santosa, 2024). Therefore, identifying factors influencing green digital entrepreneur intention (GDEI) is necessary.

This study investigates the influence of external factors and internal factors such as government roles and mental workload on the green digital entrepreneur intention of MSME actors. The Yogyakarta Government has implemented various programs to build digital-based MSMEs through the Department of Industry, Cooperatives, and MSMEs to maximize the role of social media in the digitalization of MSMEs (Junianto, 2024; Beritayogya, 2024). On the other hand, the millennial generation tends to be prone to stress (Lukiyanto, 2024; Johnson & Dienst, 2020).

Government role positively affect GDEI (Rent, 2021; Wang et al., 2022). Psychological workloads tend to have a negative effect on GDEI. Besides, psychological workloads can cause negative attitudes and behaviors (Zabelina et al., 2023). Dual role conflicts are one of the causes of psychological workload which can influence the performance of MSME actors (Andella et al., 2023). However, dual role conflicts sebagai salah satu indikator psychological workload have a

weak influence on the performance of business actors in Madura (Anshori, 2010). This also indicates inconsistencies in the results of the study.

The Self-Determination Theory (SDT) talk about the importance of positive health (well-being) and negative health (ill-being) which have a strong influence on positive behavior and negative behavior. Therefore, this study integrates the GDEI category and factors influencing green digital entrepreneur intention (GDEI) based on some theories such as the Self-Determination Theory (SDT). Particularly, it focuses on Satisfaction of Basic Psychological Needs Satisfaction (SBPN) as the core point of SDT, as an intervening variable. Meanwhile, the moderating variables are spiritual entrepreneurship and green digital for the influence of psychological workload and government role on green digital entrepreneur intention of MSME actors in Yogyakarta.

The integration of these four theories forms the antecedent of GDEI as an endogenous variable, the role of government and psychological workload as exogenous variables, and SBPN as an intervening variable. The moderating variables are spiritual entrepreneurship and green digital.

SDT contains six mini theories and this study focuses on satisfaction of basic psychological needs (SBPN) and organismic integration theory (OIT). SBPN covers three dimensions, namely satisfaction of needs for autonomy, satisfaction of needs for competence, and satisfaction of needs for relatedness (Vansteenkiste et al., 2020; Vale et al., 2020; Conesa & Dunabitia, 2021). Organismic integration theory (OIT) is to specify the stages or types of motivation possessed by MSME actors as OIT talks about motivation in detail. OIT does not just split motivation into extrinsic and intrinsic but it also proposes a sequence for the degree of autonomy with which extrinsic motivation is regulated. The sequence contains amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, and intrinsic motivation.

This study introduces a new concept of Islamic Spiritual Green Digital Entrepreneurship (ISGDE), a development of Spiritual Entrepreneurship (SE), where SE talks about the values of business people. SE only focus attention on the horizontal aspect, while ISGDE consists of two aspects, namely the vertical and horizontal aspects. The existence of these two aspects can make less the level of negative health (ill-being) meaning that it is likely to make less negative individual behavior (Nasr, 2008).

This study provide benefits to Human Capital Management both theoretically and practically, namely (1) Developing entrepreneur intention theory by integrating SDT, green digital theory, and spiritual entrepreneurship theory to identify the factors influencing GDEI of MSME actors, (2) Determining the motivational stages/ types of MSME actors based on OIT as a basic reasons for MSME actors behavior and as a basis for improving MSME actors' behavior, and (3) Introducing the new concept of ISGDE. This concept can be a solution to the low number of green entrepreneurs. Moreover, ISGDE can also be applied to non-Muslim MSME actors as individuals are spiritual beings.

LITERATURE REVIEW

MOTIVATION THEORY

Motivation is the power that exist in an individual that directs the individual to do something. White (1959) split motivation into intrinsic and extrinsic (Reis, 2012). Intrinsic motivation is non-instrumental, such as perseverance, tenacity, enjoyment, happiness, and various other aspects of positive health. On the other hand, extrinsic motivation is instrumental, where an individual's behavior is caused by factors outside of themselves, such as individuals willing to do something because of appreciation, recognition, afraid of being punished, and others (Morris, et

al., 2022; Cherry, 2023). In its development, various research findings show that intrinsic motivation has a strong correlation on individual positive behavior. However, Deci (1971) proposes a controversial finding where rewards decrease intrinsic motivation which is called cognitive evaluation theory. This controversial finding has driven investigations of factors influencing intrinsic motivation, especially in self-determination theory (Nickerson, 2023).

In the development of the theory, cognitive theories arised which are divided into two types, namely expectancy-valence theories and social cognitive theories. The expectancy-valence theories talk about various motivational factors toward attitudes and behavior, while social cognitive theories talk about about motivation through the strength of belief to achieve pouposes (Vroom, 1995; Zboja, et al., 2020; Fang, 2023). Further developments in expectancy-valence theories bring up intention theory (Fang, 2023; Hall, 2016), and entrepreneurial intention (Chhabra et al., 2019; Anal, et al., 2023). Meanwhile, social cognitive theories produce self-efficacy theory and theory of planned behavior (Ajzen et al., 2012; Simamora, 2022; Garrido, 2023). This study concentrate on developing intention theory, especially the intention to become green entrepreneur.

SELF-DETERMINATION THEORY

The self-determination theory (SDT) is one of the motivation theory. SDT divides motivations into extrinsic and intrinsic motivation and focuses discussion on factors influencing individual health and behavior. SDT has six mini theories consist of cognitive evaluation theory, organismic integration theory (OIT), causality orientation theory, basic psychological needs theory (BPN), goal content theory, and relationship motivation theory (Martela, et al., 2020; Gagne et al., 2022). The basic psychological need theory is the core of SDT where the fulfillment of satisfaction of BPN bring up intrinsic motivation (Gagne et al., 2022; Morales & Valle, 2021; Wikaningtyas, et al., 2023).

This study focuses on OIT and BPN. OIT divides 4 types of extrinsic motivation based on internalization through satisfaction of basic psychological need, namely external regulation (individuals willing to do something because of want to get a gift, afraid of being scolded, worried about being punished, etc.), introjected regulation (individuals willing to do something because they are embarrassed, feel bad, pride, etc.), identified regulation (individuals willing to do something because they are feel there are benefits, feel like they can play a bigger role, etc.), and integrated regulation (individuals willing to do something because of the conformity of values). Then added amotivation (individuals have no motivation), and intrinsic motivation (individuals willing to do something because they love, enjoy, etc.). Amotivation and controlled motivation (external regulation and introjected regulation) affect negative health (ill-being) and negative behavior. Autonomous motivation (identified regulation, integrated regulation, and intrinsic motivation) affects positive health (well-being) and positive behavior (Gagne et al., 2022; Wikaningtyas et al., 2023).

PSYCHOLOGICAL WORKLOAD (PW)

Psychological workload is built upon discrepancy of individual abilities and the number of task demands (Ahmadi et al., 2022). Psychological workload consists of level of work fatigue, level of work concentration, and level of work psychological pressure (Wikaningtyas, et al., 2023). The workload should not be exaggerate, where the demands of the task and the individual's ability must be balanced to achieve the highest individual performance (Ahmadi et al., 2022). Stress dan well-being have strong correlation on entrepreneur attitude and This is supported by previous studies that entrepreneurial stress is formed from overload resulting in ill-being, low intention, and

not generating behavior (White & Vishal, 2020). Psychological stress influence entrepreneurial intention (Abdelwahed, 2024). Based on the description above, the researcher proposes the following hypothesis:

H_1: Psychological workload has a negative effect on green digital entrepreneur intention.

GOVERNMENT ROLE (GR)

Concerning government role, the government needs to make acceptable decisions for society when they tend to have low attention (Hughes, 1998). The government contributes to the availability of regulations and guidelines so the community can implement them. The form of government role related to environmental care in Indonesia includes waste disposal regulations, waste management, (reduce, reuse, and recycle), and reforestation programs.

Previous studies showed that incentives are positively correlated with green entrepreneur intention (Mia et al, 2022). Fulfillment of competency needs is positively correlated with green entrepreneur intention (Ismail et al., 2023). Government has a strong influence on green entrepreneurship (Rahman et al., 2023). Based on the description above, the researcher proposes the following hypothesis:

H_2: Government Role has a negative effect on green digital.

SATISFACTION OF BASIC PSYCHOLOGICAL NEEDS (SBPN)

The three dimensions of basic psychological needs are unity. If one dimension is not fulfilled, it will automatically influence health or behavior (Deeder et al., 2020; Abidin, et al., 2021; Szulawski et al., 2021). Besides that, BPN is divided into two constructs, namely satisfaction and frustration of basic psychological needs (SBPN and FBPN) (Deeder et al., 2020; Abidin, et al., 2021; Szulawski et al., 2021). The fulfillment of SBPN bring up positive health (well-being) and positive behavior (optimal functioning). On the other hand, FBPN in line to increase in negative health (ill-being) and negative behavior (malfunctioning). This implys that frustration is not part of satisfaction (Deeder et al., 2020; Abidin, et al., 2021; Szulawski et al., 2021; Wikaningtyas et al., 2023).

Moreover, overload can result frustration because of the feeling of less freedom, feeling of less capability to finish tasks according to the rules, and feeling of less capability to comfort in socializing. This is supported by the prior research that low psychological workload has positive correlation toward low frustration, low worry, and low anxiety (Ahmadi et al., 2022; Moghadam et al., 2019), and even causes low frustration of basic psychological needs and vice versa (Basson & Rothmann, 2018; Ahmadi et al., 2022). Meanwhile, incentives, training, and other government programs tend to create a sense of happiness and self-confidence (well-being). Based on the description above, the researcher proposes the following hypotheses:

H_3: Psychological workload has a negative effect on satisfaction of basic psychological needs.

H_4: Government role has a positive effect on satisfaction of basic psychological needs.

Besides that, satisfaction of basic psychological needs tends to increase positive health (well-being), positive attitudes, positive intention, and ultimately positive behavior (Ahmadi et al., 2022[52]; Moghadam et al., 2019). This is supported by findings that the fulfillment of competency needs is positively correlated with green entrepreneur intention (Chhabra et al., 2019; Anal, et al., 2023); Competence supporting as like education development supporting, conceptual development supporting, and country support influence the ability of entrepenur to implement as

environmentally friendly entrepreneur (green entrepreneur) (Risco et al., 2021). Based on this description, the researcher proposes the following hypothesis:

H_5: Satisfaction of basic psychological needs has a positive effect on green digital entrepreneur intention.

SPIRITUAL ENTREPRENEURSHIP

Spiritual entrepreneurship merupakan pengintegrasian antara workplace spirituality theory (Milliman et al., 2003) dengan teori spiritual entrepreneurship (Alnashr et al., 2019). Characteristics of spiritual entrepreneurship are vision, faith/hope, altruistic love, meaning/calling, and membership.

Previous studies revealed that spiritual entrepreneurship tends to be positively correlated with green entrepreneur intention (Sirine & Kurniawati, 2018; Raco, 2018); Green mindfulness and spiritual intelligence have strong correlation on green entrepreneur intention (Alshebami, et al., 2023). Based on this description, the researcher proposes the following hypothesis:

H_6: Spiritual Entrepreneurship has a positive effect on green digital entrepreneur intention.

GREEN DIGITAL

Green digital is the application of digital technology and innovation to achieve sustainable goals and reduce negative impacts on the environment. Green digital in business is a business approach that uses digital technology as the main foundation, covering all aspects from creating, managing, to developing a business by utilizing digital solutions (BPPTIK Ministry of Communication and Informatics of the Republic of Indonesia, 2023; Sharma & Yadav, 2020).

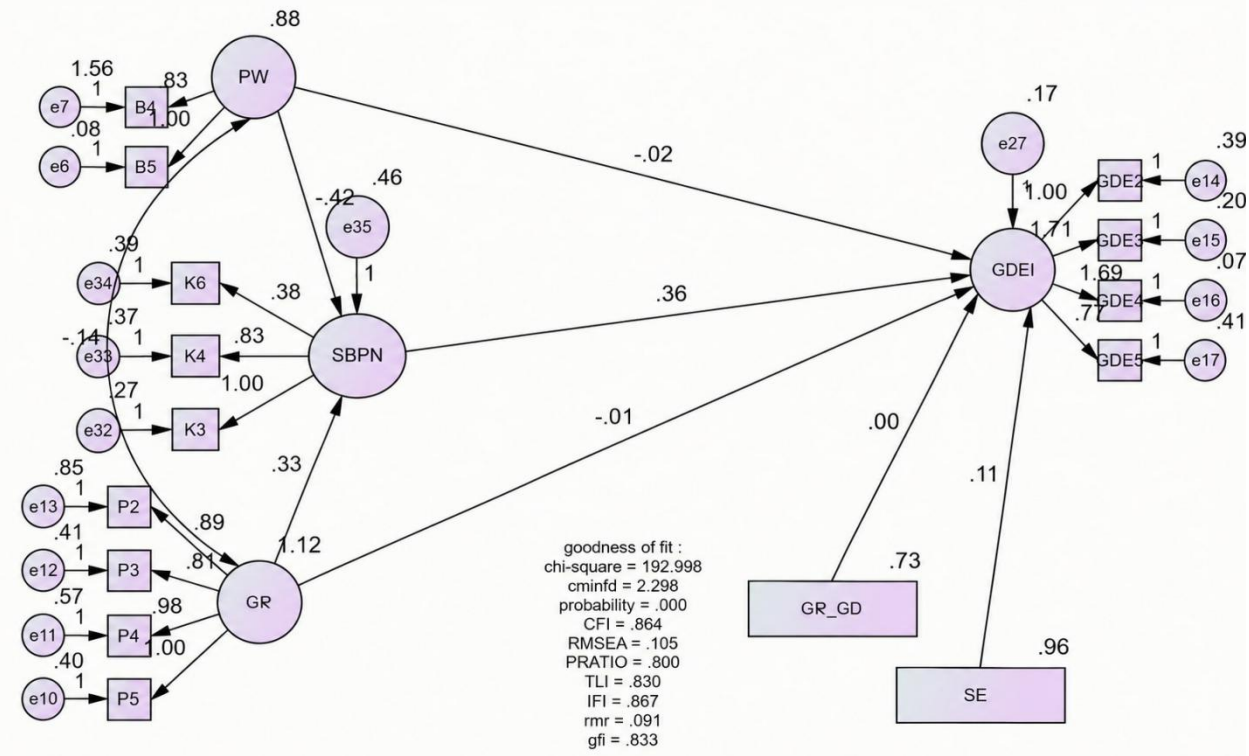
RESEARCH METHOD

Data Collection and Analysis

The population in this study was MSMEs owned by the millennial generation in Yogyakarta. This study involved 118 MSME actors selected purposively with criteria of easy to find and willing to participate in the study. Data analysis used Structural Equation Modeling (SEM) as this tool can predict the strength of the hypothetical relationship between variables in a theoretical model, both directly and indirectly (Goodboy & Kline, 2017).

Goodness of Fit

Structural Model Analysis



Hypothesis testing for direct effects

Regression Weights: (Group number 1 – Default model)

	Estimate	S.E.	C.R.	P	Label
GDEI ←- PW	-.023	.061	-.381	.703	par_8
GDEI ←- GR	-.009	.051	-.185	.853	par_9
SBPN ←- PW	-.422	.148	-2.848	.004	par_15
SBPN ←- GR	.330	.086	3.827	***	par_16
GDEI ←- SBPN	.355	.095	3.743	***	par_12
GDEI ←- PW_SE	.106	.046	2.335	.020	par_13
GDEI ←- GR_GD	.004	.050	.090	.928	par_14

Hypothesis testing for indirect effects

Standardized Indirect Effects (Group number 1 – Default model)

	GR	PW
SBPN	.000	.000
GDEI	.234	-.265

PW – SBPN – GDEI

Input:			Test statistic:	Std. Error:	*p*-value:
a	-0.422	Sobel test:	-2.26681672	0.06608827	0.02340142
b	0.355	Aroian test:	-2.21719599	0.06756732	0.0266097
s_a	0.148	Goodman test:	-2.31992541	0.06457535	0.02034491
s_b	0.095	Reset all	Calculate		

GR – SBPN – GDEI

Input:			Test statistic:	Std. Error:	*p*-value:
a	0.330	Sobel test:	2.67712628	0.04375961	0.00742566
b	0.355	Aroian test:	2.63165264	0.04451575	0.00849707
s_a	0.086	Goodman test:	2.72504172	0.04299017	0.00642934
s_b	0.095	Reset all	Calculate		

Hypothesis testing

Based on the regression weight evaluation, the results of the hypothesis are presented in Table 2 below.

Table 2. Results of Hypothesis Testing

Hypothesis	Effect direcrion	Estimate	CR	Significance	Description
H_1: Psychological workload does not affect green digital entrepreneur intention.	-	-	-0.381	0.703	Not accepted
H_2: Government role does not affect green digital entrepreneur intention (GDEI).	-	-	-0.185	0.853	Not accepted
H_3: Psychological workload has a negative effect on satisfaction of basic psychological needs (SBPN).	+	-0.422	2.848	0.004	Accepted
H_4: Government role has a positive effect on satisfaction of basic psychological needs (SBPN).	+	0.330	3.287	***	Accepted
H_5: SBPN has a positive effect on green digital entrepreneur intention (GDEI).	+	0.355	3.743	***	Accepted
H_6: SBPN mediates the effect of mental workload on GDEI.	-	-0.265	-0.265	0.023	Accepted
H_7: SBPN mediates the effect of the government role on GDEI.	+	0.234	0.234	0.007	Accepted
H_8: Spiritual entrepreneurship moderates the effect of psychological workload on GDEI.	+	0.106	2.335	0.020	Accepted
H_9: Green digital does not moderate the effect of government role on GDEI	+	-	0.090	0.928	Not accepted

Based on Table 2, there are some interesting findings as follows:

1) Psychological workload and government role do not affect GDEI.

2) Psychological workload has a negative effect on SBPN.
3) Government roles have a positive effect on SBPN.
4) SBPN mediates the influence of psychological workload and government's role on GDEI.
5) Spiritual entrepreneurship moderates the influence of psychological workload on GDEI.
6) Green Digital does not moderate the influence of government's role on GDEI.

Thus, it can be said that SBPN fully mediates the influence of psychological workload and government role on GDEI.

DISCUSSION

The discussion in this study covers three stages, namely (1) identifying the role of each dimension in BPN based on the Self-Determination Theory, (2) identifying the category of each research variable based on the Likert scale and Sturgess method, and explaining the results of in-depth interviews with respondents, (3) identifying individual motivation stages/ types based on OIT, and (4) identifying possible factors influencing the relationship between research variables based on OIT and the results of in-depth interviews, and (5) determining the model for building Islamic Spiritual Green Digital Entrepreneurship (ISGDE) to increase GDEI.

1. The Role of Dimensions in Basic Psychological Needs

This study shows that satisfaction of needs for autonomy and satisfaction of needs for relatedness are in the high category with a value of 5.14 and 5.17 respectively, while the satisfaction of need for competence is in a quite high category with a value of 4.51. This means that prospective green entrepreneurs feel they have the freedom and comfort to socialize. However, the fulfillment of the need for competence to become a green digital entrepreneur (GDE) still needs to be improved.

2. Categories of Each Research Variable and Stages of Prospective Green Entrepreneurs

The analysis of the Likert scale (6 scales) and the Sturgess Method showed that:

First, the green digital entrepreneur intention (GDEI) category is quite high with a value of 4.98. This is supported by findings stating that the millennial generation has a strong intention to become green entrepreneurs (Dewi, 2023; Genoveva & Tanardi, 2022). The results of interviews with 20 respondents on 21 August 2024 showed that all respondents (100%) had a strong desire to become GDE, because of the waste emergency problems in Yogyakarta, the benefits for themselves and society, the increasing air pollution, and the need of technology in every aspect of life and others.

Second, psychological workload is considered low (2.97). This is different from previous findings which stated that generation often says that anxious generation (Nicholas, 2024); more worry, less happiness, high level of stress (Commisso, 2024); high stress (Aldino & Franksiska, 2021). However, this finding is supported by the results of interviews with 20 respondents show that they faced a time load, but it decreased with the help of their life partners (low level of work fatigue). They do not need work effort load (low level of work concentration), and tend to be optimistic even though they are worried about facing business uncertainty (low level of work psychological pressure).

Third, government roles, SBPN and spiritual entrepreneurship are quite high with values of 4.6, 4.94, and 4.94 respectively. The results of interviews with the respondents show that prospective green digital entrepreneurs (GDE) do not need incentives, but rather prioritize

socialization, direction, and clear guidance towards GDE. Prospective GDEs feel that their basic psychological needs are met.

Based on the Organismic Integration Theory (OIT), if individuals feel that their satisfaction of basic psychological needs (SBPN) are met, then they feel that they have positive health (well-being) which ultimately leads to positive behavior (Deci et al., 2017; Legault, 2017). SBPN is in a quite high category, indicating that prospective GDEs are in the extrinsic motivation of identified regulation, namely being a GDE is beneficial for themselves, their families, and society. In addition, prospective green digital entrepreneurs highly value honesty, empathy, and other ethical behavior.

Fourth, green digital has a high category with a value of 5.13. The millennial generation has a deep understanding of social media, digital technology, and online communication skills (BRIN, 2023; Arif, 2021). This is supported by the results of interviews with the respondents that doing business online is more efficient and convenient in various aspects.

3. Discussion on the Influence between Variables

Previous studies show that psychological workload tends to have a negative effect on GDEI. Job stress and role conflict are negatively correlated with entrepreneurial performance (Shahbandi, 2022; Saragih, et al., 2022). However, this study shows that psychological workload does not affect GDEI as prospective GDEs have low psychological workload (scale value 2.97). The results of interviews with the respondents show that they are willing to become GDEs, face challenges, and take on existing opportunities.

Previous studies reveal that government role tend to have a positive effect on green entrepreneur intention (Alwakid, 2021; Mia et al, 2022; Ismail et al.; 2023; Rahman et al.; 2023). However, this study shows that the government role does not affect GDEI. Government role is considered quite high, but they do not affect GDEI, indicating that prospective GDEs care less about the role of the government, instead, they prioritize fulfilling their own needs, desires, and hopes. This is supported by the results of interviews that incentives, training, and clear guidance from the government are needed but are not the main factors. Individuals want to become GDEs because the environment is getting worse due to waste problems and others.

Moreover, the result of the study also shows that psychological workload and government role do not affect GDEI, but are fully mediated by SBPN. In other words, individuals feel they have the freedom to determine activities towards GDE (satisfaction of need for autonomy), have the ability towards GDE (satisfaction of need for competence), and have time and comfort to socialize (satisfaction of need for relatedness). They are a strong driver of increasing GDEI.

Furthermore, spiritual entrepreneurship moderates GDEI. It can be said that increasing honesty, empathy, and other ethical behavior can increase GDEI, and vice versa. This is supported by the statement that humans are spiritual beings and without spirituality, humans do not feel complete (Andrabi, 2025). Organizations will last longer if they prioritize spiritual values (Nursiani et al., 2019; Raco et al., 2018).

This study also reveals that green digital does not moderate GDEI. This indicates that green digital is a necessity for millennial green entrepreneurs. Green digital is a must. Based on the description above, SBPN and Spiritual Entrepreneurship play an important role in increasing GDEI.

Mengingat rata-rata SBPN pada kategori tinggi (5,097), maka based on the Organismic Integration Theory (OIT), prospective GDEs are in the extrinsic motivation stage of integrated

regulation. This is an advantageous position as they are ready to face opportunities and challenges towards GDE. Maka dari itu, pemerintah sebaiknya membawa calon GDE menuju motivasi intrinsik, karena this condition supports the realization of well-being, then the increase in GDEI, and eventually the development of Green Digital Entrepreneurs (GDE) behavior.

Pemerintah sebaiknya menyarankan kepada calon GE untuk menerapkan *Spiritual Green Digital Entrepreneurship (SGDE)* dengan pendekatan *top down*. SGDE merupakan penggabungan dari teori *Spiritual Entrepreneurship (SE)(Milliman et al., 2003;* Alnashr et al., 2019*) dan green (triple bottom line/ 3P/ profit, people, planet*) (Elkington, 1997; Stephanus & Stephanus, 2023; Akkermans, 2023). Sedangkan *green digital* adalah suatu keharusan bagi milenial. SE merupakan pengintegrasian *workplace spirituality theory* dengan teori kewirausahaan.

Terdapat perbedaan antara SE dengan workplace spirituality Milliman, yaitu Milliman cenderung menerapkan pendekatan bottom up, dengan urutan tingkat individu, tingkat kelompok, dan tingkat organisasi. Sedangkan urutan dalam SE adalah tingkat organisasi, tingkat kelompok, kemudian tingkat individu. Tingkat orgnasiasi disebut *alignment with values*, tingkat kelompok disebut *sense of togetherness*, sedangkan tingkat individu disebut *job meaning*)

Pendekatan top down merupakan pendekatan paling efektif, karena calon GE memiliki kendali penuh, mampu membangun budaya organisasi yang didesain bukan karena kebetulan, dan transformasi anggota organisasi terjadi secara alami, dan terbangun keberlanjutan green (3P) bersifat institusional.

However, considering that the majority of the population in Yogyakarta is Muslim, namely 93.04 percent (Wikipedia, 2025), the government needs recommend to implement Islamic Spiritual Green Digital Entrepreneurship (ISGDE) for MSME actors. Islamic Spiritual Green Digital Entrepreneurship (ISGDE) is a development of SGDE, dengan mengintegrasikan SGDE dengan teori spiritual islam. This is supported by the findings that Islamic Spirituality has a positive effect on entrepreneur intention (Majid et al., 2019; Widana, et al., 2024).

SGDE does not relate to the transcendent aspect because spirituality emphasizes the implementation of values/morals (alignment with values, a sense of togetherness, and job meaning) with no relationship with other religions and beliefs (Milliman et al., 2003). This indicates that SGDE only considers the horizontal aspect.

Meanwhile, ISGDE emphasizes the importance of Islamic Spirituality. Islamic Spirituality covers two aspects, namely vertical (individual connection with God/*hablumminallah*) and horizontal (individual connection with himself, fellowman, and nature/*hablumminannas*) (Kurniasari et al., 2020; Warsah, 2020). The goals of Islamic Spirituality are to intensify the quality of creed, and morals, observance, and safety in the world and the hereafter (Agustiawan, 2013). This is reinforced by the statement that in Islam, management as a science and its implementation must in accordance with teachings, to provide goodness for all mankind and the universe (rahmatan lil'alamin) (Basri et al., 2020).

The Qur'an is the holy book of Muslims which functions as a guide for humans (Tim hikmah detikcom, 2021). Hadith are the utterance, action or deeds, and behavior of the Prophet Muhammad (Kristina, 2021). A person is not free to carry out activities according to his wishes, but is limited by religious rules. The hadith is explanantion of the content of the Qur'an, so that individuals can understand and carry out activites according to Allah provisions. Obeying the Prophet Muhammad means obeying Allah. One of the verses of the Qur'an and Hadith that supports this statement is: "Whatever the Messenger brings to you, accept it. Whatever the Messenger forbade you, leave it." (QS: Al-Hasyr: 59)(Indonesia, 2019)[94]; "Noneof you will

believe until he makes me more beloved than his parents, his children, and all mankind." (HR Al-Bukhari) (Kaffah, 2024).

Some verses of the Qur'an and Hadith that support the importance of implementing Islamic Spirituality are: (1)" Each individual is responsible for what he does." (QS: AL-Mudatsir:38) (Indonesia, 2019); "If matters ar not handed over to experts, then wait for destruction," (HR. Al-Bukhari) (Febriani, 2023).

The fundamental differences between the two theories can be seen in the following table.

Table 3. Differences between Spiritual Entrepreneurship and Islamic Spiritual Green Digital Entrepreneurship (ISGDE)

No.	SGDE Dimensions	ISGDE Dimensions
1.	*Aligment with Values* Dimensi Horisontal: - Fokus pada profit, people, dan planet - *Green digital entrepreneur (GDE)* menanamkan pada karyawan kesadaran pentingnya lingkungan hijau baik internal dan eksternal sebagai budaya kerja utama	*Islamic Alignment with GDE Values* Individuals as entrepreneurs (green digital entrepreneurs/ GDE) move by considering the applicable values. The alignment of individual values with organizational values is increasingly meaningful as it is connected to God, oneself, fellow human beings, and nature. Dimensi Vertikal: In working, individuals aim for Islamic Spirituality, namely enhancing the quality of creed, godliness, observance, morals, peace of mind, and safety in the world and the afterlife. Dimensi Horisontal: - Fokus pada profit, people, dan planet - *GDE* menanamkan pada karyawan kesadaran pentingnya lingkungan hijau baik internal dan eksternal sebagai budaya kerja utama
2.	*Sense of Togetherness* Dimensi Horisontal: - Fokus pada profit dan people - *Green digital entrepreneur (GDE)*, karyawan dan mitra (*stakeholders*) menjadi bagian dalam pengembangan ekonomi dan bisnis hijau.	*Islamic Sense of Togetherness of GDE* Society feels meaningful as individuals are connected to God, themselves, fellow human beings, and nature. Dimensi Vertikal: In working, individuals aim for Islamic Spirituality, namely enhancing the quality of creed, godliness, observance, morals, peace of mind, and safety in the world and the afterlife.

		Dimensi Horisontal: - Fokus pada profit dan people - *GDE*, karyawan dan mitra (*stakeholders*) menjadi bagian dalam pengembangan ekonomi dan bisnis hijau.
3.	*Job Meaning* Dimensi Horisontal: - Fokus pada profit, people, dan planet - *Green digital entrepreneur* (GDE) memberikan solusi masalah lingkungan dan dampak social terukur.	*Islamic Job Meaning of GDE* Work feels meaningful as individuals are connected to God, themselves, fellow human beings, and nature. Dimensi Vertical: In working, individuals aim for Islamic Spirituality, namely enhancing the quality of creed, godliness, observance, morals, peace of mind, and safety in the world and the afterlife. Dimensi Horisontal: - Fokus pada profit, people, dan planet - GDE memberikan solusi masalah lingkungan dan dampak social terukur.

Each dimension in ISGDE contains Islamic Spirituality, namely Islamic Alignment with GDE Values, Islamic Sense of Togetherness of GDE, and Islamic Job Meaning of GDE. To achieve the goals of Islamic spirituality, entrepreneurs do not only pay attention to their rights and obligations, but also need to think about the rights of related parties, such as the rights of Allah, organizational members, customers, society, environment, and others. Implementing ISGDE can maintain a low psychological workload or even reduce it. It also can maintain the sense of well-being and increase green digital entrepreneur intention (GDEI) and eventually build green digital entrepreneurs (GDE).

The government should support implementing ISGDE for prospective GDE. The government prioritize the application of autonomy supporting, competence supporting, and relatedness supporting in each of its dimensions.

1.Islamic Alignment with Values of GDE (IAV of GDE)

BPN supporting covers:

1.a. Autonomy supporting, for example: GDE mempunyai kebebasan dalam menentukan tata nilai organisasi, seperti sholat, puasa, haji, zakat, tidak riba, dan lain-lain.

1.b. Competence supporting, misalnya: GDE mendapatkan pelatihan dan pendampingan dari pemerintah, seperti pelatihan ISGDE, dan lain-lain.

1.c. Relatedness supporting, misalnya: GDE mendapatkan dukungan social, baik dari pemerintah, keluarga, dan lain-lain.

Some verses of the Qur'an and Hadith that support the implementation of Islamic Alignment with GDE values are (1) "O you who have believed, do not consume each other's wealth unjustly but only [in lawful] business by mutual consent" (QS. An-Nisa: 29) (Indonesia, 2019); (2) "Indeed, Allah loves the believers who work (HR. Al-Baihaqi) (tangguhkuat.blogspot.com); and (3) "Indeed, the life of this world leads you to the life of the hereafter. Do not be a burden to others (HR. Ad Dailamy; HR.Ibnu Sakir)."(tangguhkuat.blogspot.com).

2. Islamic Sense of Togetherness of GDE (IST of GDE)

BPN supporting covers:

2.a. Autonomy supporting, misalnya: GDE merasa memiliki kebebasan memilih mitra kerja, dan lain-lain.

2.b. Competence supporting, misalnya: GDE mempunyai waktu diskusi dengan mitra, dan lain-lain.

2.c. Relatedness supporting, misalnya: GDE mendapatkan dukungan dari karyawan, mitra keluarga, dan lain-lain.

Some verses of the Qur'an and Hadith that support the implementation of IST of GDE are: "The seller and buyer have the right to khiyar as long as they are in one assembly and have not separated. If both are honest and transparent, the sale and purchase transaction will be blessed. However, if both lie and are not transparent, the blessing of the transaction will be revoked." (HR Bukhari; HR Muslim)." (tangguhkuat.blogspot.com).

3. Islamic Job Meaning of GDE (IJM of GDE).

BPN supporting covers:

3.a. Autonomy supporting, misalnya GDE merasa memiliki kebebasan dalam menentukan dari input-proses-output secara halal dan thoyyib, dan lain-lain.

3.b. Competence supporting, misalnya GDE dapat meningkatkan kompetensi secara terus menerus, dan lain-lain.

3.c. Relatedness supporting, misalnya GDE merasa mendapat dukungan dari ebrbagai pihak terkait, dan lain-lain.

Some verses of the Qur'an and Hadith that support the implementation of the Job Meaning of GDE are (1) "Do [as you will], for Allah will see your deeds, and [so, will] His Messenger and the believers. And you will be returned to the Knower of the unseen and the witnessed, and He will inform you of what you used to do." (QS. At-Taubah: 105) (Indonesia, 2019); (2) "Indeed, the best livelihood is a trader (entrepreneur) (HR. Baihaqi) (Linge & Ahmad, 2016).

Considering the satisfaction of basic psychological needs (SBPN) as a full mediator between psychological workload and the government role towards GDEI, the government needs to fulfill these basic psychological needs. Spiritual entrepreneurship plays an important role (moderator) in increasing GDEI, so the government needs to pay strong attention to this aspect too.

LIMITATION AND RECOMMENDATION

This study integrates the Entrepreneur Intention Theory with Spiritual Entrepreneurship, the green digital theory, the Self-Determination Theory (SDT), and the Islamic Spiritual Theory.

Future studies can integrate other theories such as the theory of planned behavior which emphasizes factors influencing intention in the marketing field. This study focuses on factors influencing satisfaction of basic psychological needs as an intervening variable. Thus, future studies need to investigate frustration of basic psychological needs as an intervening variable or exogenous variable.

The scope of this study is prospective GDE, namely millennial generations in Yogyakarta. Thus, future studies can investigate the population in other areas. This study also uses psychological workload and government role as exogenous variables. Therefore, further studies can examine other factors. The determination of individual conditions and reasons for the relationship between variables is based on the Organismic Integration Theory so future studies have to examine other mini theories of SDT such as goal content theory and causality orientation theory. Besides, Islamic Spiritual Green Digital Entrepreneurship (ISGDE) in this study is still at the concept stage, so it is necessary to investigate the role of ISGDE further both as exogenous and intervening variables.

PRACTICAL IMPLICATIONS

THEORETICAL IMPLICATIONS

This study provides new insights into the development of Entrepreneur Intention Theory, particularly the Green Digital Entrepreneur Intention model (GDEI Model) based on the integration of the Satisfaction of Basic Psychological Needs (SBPN), and Islamic Spiritual Theory. The results of this study are different from previous studies which are explained based on the Organismic Integration Theory and the results of in-depth interviews with the respondents.

This study also introduces new insights into Islamic Spiritual Green Digital Entrepreneurship (ISGDE), yang merupakan pengembangan dari Workplace Spirituality (Milliman et al., 2003) dengan Spiritual Entrepreneurship (Alnashr et al., 2019). Selanjutnya didukung implementasi BPN supporting, maka akan terbangun positive health (well-being), muaranya GDEI menjadi green digital entrepreneurs (GDE). ISGDE is still in the concept stage so further examination is necessary.

EMPIRICAL IMPLICATIONS

Considering the high level of green entrepreneur intention, the government needs to improve the performance of MSMEs by developing ISGDE. Improving the performance of MSMEs is important as MSMEs play a strong role in economic development at the regional and national levels.

This study introduces ISGDE as a value system supporting the establishment of SBPN. SBPN is the basis for internalization in individuals enabling them to change the extrinsic motivation of integrated regulation to intrinsic motivation, maintain and improve positive health (well-being), and increase GDEI which eventually improves GDE. The presence of vertical and horizontal aspects in ISGDE can be the basis for the prediction that this concept is effectively applied in areas with Muslim and non-Muslim majority populations.

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