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The Role of Environmental Attitude as Mediator Between Perceived Sustainability Policy and Spiritual Well-Being Toward Pro-Environmental Behavior

[Peran *Environmental Attitude* Sebagai Mediator *Perceived Sustainability Policy* dan *Spiritual Well-Being* Atas *Pro-Environmental Behavior*]

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This study aims to ascertain the role of the environmental attitude (EA) variable as a moderator in the relationship between perceived sustainability policy (PSP) and spiritual well-being (SpWB) on pro-environmental behavior (PEB). The sampling technique utilized was convenience sampling, and 127 respondents were selected, consisting of lecturers and education staffs at several universities in DKI Jakarta. The measuring instruments utilized are the Pro-Environmental Behavior (PEB) Scale, Environmental Attitude (EA) Scale, Perceived Sustainability Policy (PSP) Scale, and Spiritual Well-Being (SpWB) Scale; with Structural Equation Model (SEM) as the data analysis. The conclusion is that the relationship model consisting of the variables pro-environmental behavior (PEB), environmental attitude (EA), spiritual well-being (SpWB), and perceived sustainability policy (PSP) "fits" and/or significant with the study data, although the relationship between several variables is not significant. Environmental attitude (EA) in this study was not proven to be a mediator between spiritual well-being (SpWB) and perceived sustainability policy (PSP) on pro-environmental behavior (PEB). Insignificant results may be caused by the small size of the samples. University management is suggested to implement pro-environmental policies to create a green and sustainable campus environment.

Keywords: pro-environmental behavior, environmental attitude, spiritual well-being, perceived sustainability policy, structural equation modeling

Studi ini bertujuan untuk mengkaji peran variabel *environmental attitude (EA)* sebagai moderator pada hubungan antara *perceived sustainability policy (PSP)* dan *spiritual well-being (SpWB)* terhadap *pro-environmental behavior (PEB)*. Teknik sampling yang digunakan adalah convenience sampling, dan dipilih 127 responden yang terdiri dari dosen dan tenaga kependidikan di sejumlah universitas di DKI Jakarta. Alat ukur yang digunakan adalah *Pro-Environmental Behavior (PEB) Scale*, *Environmental Attitude (EA) Scale*, *Perceived Sustainability Policy (PSP) Scale*, dan *Spiritual Well-Being (SpWB) Scale*; dengan *Structural Equation Model (SEM)* sebagai analisis data. Hasil studi menyimpulkan bahwa model hubungan struktural yang terdiri dari variabel *pro-environmental behavior (PEB)*, *environmental attitude (EA)*, *spiritual well-being (SpWB)*, dan *perceived sustainability policy (PSP)* "fit" dan/atau signifikan dengan data studi, walaupun hubungan beberapa variabel tidak signifikan. *Environmental attitude (EA)* pada studi ini tidak terbukti dapat menjadi mediator antara *spiritual well-being (SpWB)* maupun *perceived sustainability policy (PSP)* terhadap *pro-environmental behavior (PEB)*. Hasil yang tidak signifikan dapat disebabkan oleh ukuran sampel yang kecil. Manajemen perguruan tinggi disarankan untuk memberlakukan kebijakan pro-lingkungan tersebut, dalam rangka menciptakan lingkungan kampus hijau dan berkelanjutan.

Kata kunci: pro-environmental behavior, environmental attitude, spiritual well-being, perceived sustainability policy, structural equation modeling

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The Intergovernmental Panel on Climate Change (IPCC; 2021) states that global warming has been a worldwide problem since 2003. The Earth's temperature had the highest increase in temperature in the last period, from 2011 to 2020. According to climate change experts, this was accelerated by human activity, especially the industrial revolution in 1913 (Ruiz et al., 2020; Wibowo, 2010; Waugh, 2009, as cited in Nurani et al., 2020). In addition to industrial activities, global warming occurs due to greenhouse gases (GHG). This statement follows the studies by Magazzino et al. (2021), as well as Akdag and Yıldırım (2020), which state that one of the leading causes of the increase in the Earth's average temperature is greenhouse gases (GHG). Greenhouse gases (GHG) is caused by non-optimal waste management process in society. Non-optimal waste management process generate Carbon Dioxide (CO_2) and Methane (CH_4) gases which play a role in the formation of greenhouse gases (GHG), which trigger global warming.

The Ministry of Environment and Forestry of the Republic of Indonesia's data shows that the amount of waste generated throughout Indonesia reaches 34.5 million tons per year. 56.53% out of the total waste generated is managed, while the remaining 43.47% is unmanaged (Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia (KLHK) [The Ministry of Environment and Forestry of the Republic of Indonesia], 2020). The composition of waste based on the source is dominated by household waste at 38.2%. The source of this waste is activities carried out by humans, who often do not take the proper measures to protect the environment, ultimately contributing significantly to the accumulating waste piles in final disposal sites (Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia (KLHK) [The Ministry of Environment and Forestry of the Republic of Indonesia], 2020).

There is widespread evidence that the global environmental crisis is caused by human behavior, while lack of concern in protecting the environment is the main factor affecting environmental sustainability (Farisy, 2015). According to Wiwanitkit (2010, as cited in Arlinkasari et al., 2017), environmental damage can significantly impact an individual's psychological

Intergovernmental Panel on Climate Change (*IPCC*; 2021) menyatakan bahwa pemanasan global telah menjadi masalah dunia sejak tahun 2003. Suhu Bumi mengalami kenaikan suhu tertinggi pada periode terakhir, dari tahun 2011 hingga 2020. Menurut para ahli perubahan iklim, hal ini dipercepat oleh aktivitas manusia, khususnya revolusi industri pada tahun 1913 (Ruiz et al., 2020; Wibowo, 2010; Waugh, 2009, sitat dalam Nurani et al., 2020). Selain kegiatan industri, pemanasan global terjadi akibat *greenhouse gases* (*GHG* [gas rumah kaca]). Pernyataan ini sesuai dengan studi oleh Magazzino et al. (2021), serta Akdag dan Yıldırım (2020), yang menyatakan bahwa salah satu penyebab utama peningkatan suhu rata-rata bumi adalah *greenhouse gases (GHG)*. *Greenhouse gases (GHG)* disebabkan oleh proses pengelolaan sampah yang tidak optimal di masyarakat. Proses pengelolaan sampah yang tidak optimal menghasilkan gas Karbon Dioksida (CO_2) dan Metana (CH_4) yang berperan dalam pembentukan *greenhouse gases (GHG)* yang memicu pemanasan global.

Data Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia menunjukkan jumlah sampah yang dihasilkan di seluruh Indonesia mencapai 34,5 juta ton per tahun. 56,53% dari total sampah yang dihasilkan dikelola, sedangkan 43,47% sisanya tidak dikelola (Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia (KLHK) [The Ministry of Environment and Forestry of the Republic of Indonesia], 2020). Komposisi sampah berdasarkan sumbernya didominasi oleh sampah rumah tangga sebesar 38,2%. Sumber limbah ini adalah kegiatan yang dilakukan oleh manusia, yang seringkali tidak mengambil tindakan yang tepat untuk melindungi lingkungan, yang pada akhirnya memberikan kontribusi yang signifikan terhadap penumpukan timbunan sampah di tempat pembuangan akhir (Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia (KLHK) [The Ministry of Environment and Forestry of the Republic of Indonesia], 2020).

Terdapat banyak bukti bahwa krisis lingkungan global disebabkan oleh perilaku manusia, sedangkan kurangnya kepedulian dalam menjaga lingkungan merupakan faktor utama yang mempengaruhi kelestarian lingkungan (Farisy, 2015). Menurut Wiwanitkit (2010, sitat dalam Arlinkasari et al., 2017), kerusakan lingkungan secara signifikan dapat mempengaruhi kondisi psikologis

conditions, such as causing anxiety, depression, and psychosis, therefore affecting human life quality. In addition, the psychological impact can also impact an individual's physical health, such as causing diarrhea, dengue fever, and other diseases (Huang et al., 2022; Komori et al., 2021; Verma et al., 2020).

This situation requires a shift in paradigm and habits towards a more sustainable lifestyle (Grilli & Curtis, 2019). Communities must adopt environmentally conscious behavior (also known as pro-environmental behavior [PEB]) and take responsibility for their actions (Grilli & Curtis, 2019; Steg et al., 2014).

Pro-environmental behavior (PEB) is a reflection of community participation and concern for the environment (Choi & Kim, 2021; Cooper et al., 2015; Iyawe, 2019; Parker, 2020; Sewak et al., 2021; Kitamura et al., 2015). An example of pro-environmental behavior (PEB) carried out at the household level is by carpooling (sharing a car for transportation). This activity can save gasoline, buy energy-efficient products, and minimize consumption of products which package are plastic. Carpooling can also produce long-term benefits, which include the reduction of the emissions of greenhouse gases (GHG; Larson et al., 2015). Pro-environmental behavior (PEB) varies substantially in terms of the impact (direct and indirect; Poortinga et al., 2004; Stern, 2003). One of it being the widespread use of fossil fuel transportation (Naeem et al., 2021). Studies conducted by Azuma et al. (2018), Bierwirth (2022), Jacobson et al. (2019), and Khan et al. (2016) stated that the increased levels of Carbon Dioxide (CO_2) in the atmosphere and the decline of human health are related. In order to reduce Carbon Dioxide (CO_2) emissions, pro-environmental behavior (PEB) is required, such as restrictions on the use of fuel, stoves, refrigerators, air conditioners, and other appliances (Wilkinson et al., 2009).

Based on the study by Larson et al. (2015), pro-environmental behavior (PEB) can influence individual and environmental factors. Pro-environmental behavior (PEB) influences an individual's attitudes (individual factors) towards their environment, culminating in what is known as environmental attitude (EA; environmental factors). Liu et al. (2020) use environmental attitude (EA) as a mediator in their study as environmental knowledge indirectly

individu, seperti menyebabkan kecemasan, depresi, dan psikosis, sehingga mempengaruhi kualitas hidup manusia. Selain itu, dampak psikologis juga dapat berdampak pada kesehatan fisik individu, seperti menyebabkan diare, demam berdarah, dan penyakit lainnya (Huang et al., 2022; Komori et al., 2021; Verma et al., 2020).

Situasi ini membutuhkan perubahan paradigma dan kebiasaan menuju gaya hidup yang lebih berkelanjutan (Grilli & Curtis, 2019). Masyarakat harus menerapkan perilaku sadar lingkungan (juga dikenal sebagai *pro-environmental behavior [PEB]*) dan bertanggung jawab atas tindakan mereka (Grilli & Curtis, 2019; Steg et al., 2014).

Pro-environmental behavior (PEB) merupakan cerminan partisipasi dan kepedulian masyarakat terhadap lingkungan (Choi & Kim, 2021; Cooper et al., 2015; Iyawe, 2019; Parker, 2020; Sewak et al., 2021; Kitamura et al., 2015). Contoh *pro-environmental behavior (PEB)* yang dilakukan di tingkat rumah tangga adalah dengan *carpooling* (berbagi mobil untuk transportasi). Kegiatan ini dapat menghemat bensin, membeli produk hemat energi, dan meminimalkan konsumsi produk yang dikemas dalam plastik. *Carpooling* juga dapat menghasilkan manfaat jangka panjang, antara lain pengurangan emisi *greenhouse gases* (*GHG*; Larson et al., 2015). *Pro-environmental behavior (PEB)* bervariasi secara substansial dalam hal dampak (langsung dan tidak langsung; Poortinga et al., 2004; Stern, 2003). Salah satunya adalah meluasnya penggunaan transportasi bahan bakar fosil (Naeem et al., 2021). Studi yang dilakukan oleh Azuma et al. (2018), Bierwirth (2022), Jacobson et al. (2019), dan Khan et al. (2016) menyatakan bahwa peningkatan kadar Karbon Dioksida (CO_2) di atmosfer berhubungan dengan penurunan kesehatan manusia. Untuk mengurangi emisi Karbon Dioksida (CO_2), diperlukan *pro-environmental behavior (PEB)*, seperti pembatasan penggunaan bahan bakar, kompor, lemari es, pendingin udara, dan peralatan lainnya (Wilkinson et al., 2009).

Berdasarkan studi oleh Larson et al. (2015), *pro-environmental behavior (PEB)* dapat mempengaruhi faktor individu dan lingkungan. *Pro-environmental behavior (PEB)* mempengaruhi sikap individu (faktor individu) terhadap lingkungannya, yang berpuncak pada apa yang dikenal sebagai *environmental attitude* (*EA*; faktor lingkungan). Liu et al. (2020) menggunakan *environmental attitude (EA)* sebagai mediator dalam studinya karena pengetahuan lingkungan secara tidak

influences pro-environmental behavior (PEB). There is another potential intermediary in the relationship between two variables, namely environmental attitude (EA) and its role. Studies by Casaló et al. (2019), Lee et al. (2015), as well as Casaló and Escario (2018) all concluded that knowledge could foster environmental attitudes (EA), and environmental attitudes (EA) can encourage pro-environmental behavior (PEB).

The study conducted by Paço and Lavrador (2017) stated that environmental attitude (EA) could predict pro-environmental behavior (PEB). Liu et al. (2020) studied the role of environmental attitude (EA) as a mediator of knowledge between the environment and pro-environmental behavior (PEB), suggesting that individuals who want to change their behavior towards their environment must change their attitude towards it. It is also stated that environmental attitude (EA) significantly impacts individuals' participation in caring for the green background (environment or nature), such as green behavior (behavior that is beneficial to the environment; Chan et al., 2014; Bissing-Olson et al., 2013).

Another individual factor other than attitude is well-being. A number of researchers (Corral-Verdugo et al., 2011; Xiao & Li, 2011) found a complementary relationship between pro-environmental behavior (PEB) and well-being. Several studies verify that pro-environmental behavior (PEB) correlated positively with subjective well-being (SWB; Corral-Verdugo et al., 2011; Tapia-Fonllem et al., 2013). The studies conducted by Kaida and Kaida (2016), as well as Rhodes et al. (2015), show that individuals with pro-environmental behavior (PEB) can be motivated by intrinsic satisfaction, positive feelings, moral satisfaction, and positive influence.

The previous study by Tapia-Fonllem et al. (2013) has reviewed the relationship between well-being (in the form of subjective well-being [SWB] and psychological well-being [PWB]) and pro-environmental behavior (PEB). There is another form of well-being, described as spiritual well-being (SpWB). Spiritual well-being (SpWB), subjective well-being (SWB), and psychological well-being (PWB) are variables with differences. Spiritual well-being (SpWB) is an indication of an individual's quality of life in the spiritual dimension or an indication of their spiritual health. Meanwhile, subjective well-being (SWB) is defined only as the level of individual satisfaction, while psychological well-being (PWB) is commonly

langsung mempengaruhi *pro-environmental behavior (PEB)*. Ada lagi perantara potensial dalam hubungan antara dua variabel, yaitu *environmental attitude (EA)* dan perannya. Studi oleh Casaló et al. (2019), Lee et al. (2015), serta Casaló dan Escario (2018) menyimpulkan bahwa pengetahuan dapat menumbuhkan *environmental attitude (EA)*, dan *environmental attitude (EA)* dapat mendorong *pro-environmental behavior (PEB)*.

Studi yang dilakukan oleh Paço dan Lavrador (2017) menyatakan bahwa *environmental attitude (EA)* dapat memprediksi *pro-environmental behavior (PEB)*. Liu et al. (2020) mempelajari peran *environmental attitude (EA)* sebagai mediator pengetahuan antara lingkungan dan *pro-environmental behavior (PEB)*, menunjukkan bahwa individu yang ingin mengubah perilaku mereka terhadap lingkungan harus mengubah sikap terhadapnya. Selain itu, juga disebutkan bahwa *environmental attitude (EA)* secara signifikan berdampak pada partisipasi individu dalam merawat *green background* (lingkungan atau alam), seperti *green behavior* (perilaku yang bermanfaat bagi lingkungan; Chan et al., 2014; Bissing-Olson et al., 2013).

Faktor individu lain selain sikap adalah kesejahteraan. Sejumlah peneliti (Corral-Verdugo et al., 2011; Xiao & Li, 2011) menemukan hubungan yang saling melengkapi antara *pro-environmental behavior (PEB)* dan kesejahteraan. Beberapa studi memverifikasi bahwa *pro-environmental behavior (PEB)* berkorelasi positif dengan *subjective well-being* (*SWB*; Corral-Verdugo et al., 2011; Tapia-Fonllem et al., 2013). Studi yang dilakukan oleh Kaida dan Kaida (2016), serta Rhodes et al. (2015), menunjukkan bahwa individu dengan *pro-environmental behavior (PEB)* dapat dimotivasi oleh kepuasan intrinsik, perasaan positif, kepuasan moral, dan pengaruh positif.

Studi sebelumnya oleh Tapia-Fonllem et al. (2013) telah meninjau hubungan antara kesejahteraan (dalam bentuk *subjective well-being [SWB]* dan *psychological well-being [PWB]*) dan *pro-environmental behavior (PEB)*. Ada bentuk lain dari kesejahteraan, yang digambarkan sebagai *spiritual well-being (SpWB)*. *Spiritual well-being (SpWB)*, *subjective well-being (SWB)*, dan *psychological well-being (PWB)* adalah variabel yang berbeda. *Spiritual well-being (SpWB)* merupakan indikasi kualitas hidup individu dalam dimensi spiritual atau indikasi kesehatan spiritualnya. Sementara itu, *subjective well-being (SWB)* didefinisikan hanya sebagai tingkat kepuasan individu, sedangkan *psychological well-being (PWB)* umumnya

described as being more profound, including aspects of individual growth and development, optimal potential, and courage to face challenges.

Based on the authors' preliminary findings, there is a lack of studies linking pro-enviromental behavior (PEB) with spiritual well-being (SpWB). Spiritual well-being (SpWB) defines a dynamic individual condition, which indicates the extent to which an individual can live in harmony with their environment to obtain sustainable well-being (Fisher, 2010). National Interfaith Coalition on Aging (NICA, 1975, as cited in Fisher et al., 2002) revealed that spiritual well-being (SpWB) is an affirmation of life in establishing a relationship between one's God, one's self, their fellow community, and the environment by maintaining faith. The selection of spiritual well-being (SpWB) as a variable in this study was with the assumption that Indonesians are known for their religiosity, which is relevant to the transcendental dimension and the environmental dimension. Furthermore, the Indonesian society is also known as a collective (communal) society, and this is very relevant to the dimensions contained in the spiritual well-being (SpWB) construct (Fisher, 2010).

It is expected that individuals with high spiritual well-being (SpWB) will display a more positive attitude towards their environment, and therefore causing pro-environmental behavior (PEB) to appear more often. Additionally, based on studies linking subjective well-being (SWB) and pro-environmental behavior (PEB), although there is a positive relationship, the construct of subjective well-being (SWB) is personal and subjective; not directly related to how individuals feel as a part of the environment (that individuals are integrated and connected to the environment).

In addition to the internal factors represented by attitudes and spiritual well-being (SpWB), external factors also predict pro-environmental behavior (PEB). In this study, the external factors being considered are related to policies, and the implementation of pro-environmental behavior (PEB) can influence policies related to sustainable development (also known as sustainability policy). Based on the study by Wang et al. (2021), the perception of a sustainable policy (also known as perceived sustainability policy [PSP]) is the main factor of situational antecedents that affect the attitude and behavior of individuals in controlling the environment. Previous studies have discussed the impact of perceived sustainability policy (PSP) from an

digambarkan lebih mendalam, mencakup aspek pertumbuhan dan perkembangan individu, potensi optimal, dan keberanian menghadapi tantangan.

Berdasarkan temuan awal penulis, terdapat kekurangan studi yang menghubungkan *pro-environmental behavior (PEB)* dengan *spiritual well-being (SpWB)*. *Spiritual well-being (SpWB)* mendefinisikan kondisi individu yang dinamis, yang menunjukkan sejauh mana individu dapat hidup selaras dengan lingkungannya untuk memperoleh kesejahteraan yang berkelanjutan (Fisher, 2010). *National Interfaith Coalition on Aging* (*NICA*, 1975, sitat dalam Fisher et al., 2002) mengungkapkan bahwa *spiritual well-being (SpWB)* adalah penegasan hidup dalam menjalin hubungan antara Tuhan, diri sendiri, sesama komunitas, dan lingkungan dengan memelihara iman. Pemilihan *spiritual well-being (SpWB)* sebagai variabel dalam studi ini adalah dengan asumsi bahwa masyarakat Indonesia dikenal dengan religiusitas yang relevan dengan dimensi transendental dan dimensi lingkungan. Lebih lanjut, masyarakat Indonesia juga dikenal sebagai masyarakat kolektif (komunal), dan hal ini sangat relevan dengan dimensi yang terkandung dalam konstruk *spiritual well-being* (*SpWB*; Fisher, 2010).

Diharapkan individu dengan *spiritual well-being (SpWB)* yang tinggi akan menampilkan sikap yang lebih positif terhadap lingkungannya, sehingga menyebabkan *pro-environmental behavior (PEB)* lebih sering muncul. Selain itu, berdasarkan studi yang menghubungkan *subjective well-being (SWB)* dan *pro-environmental behavior (PEB)*, walaupun terdapat hubungan positif, konstruk *subjective well-being (SWB)* bersifat pribadi dan subjektif; tidak terkait langsung dengan perasaan individu sebagai bagian dari lingkungan (bahwa individu terintegrasi dan terhubung dengan lingkungan).

Selain faktor internal yang diwakili oleh sikap dan *spiritual well-being (SpWB)*, faktor eksternal juga memprediksi *pro-environmental behavior (PEB)*. Dalam kajian ini, faktor eksternal yang dipertimbangkan terkait dengan kebijakan, dan penerapan *pro-environmental behavior (PEB)* dapat mempengaruhi kebijakan terkait pembangunan berkelanjutan (juga dikenal sebagai kebijakan keberlanjutan). Berdasarkan studi oleh Wang et al. (2021), persepsi tentang kebijakan berkelanjutan (disebut juga dengan *perceived sustainability policy [PSP]*) merupakan faktor utama anteseden situasional yang mempengaruhi sikap dan perilaku individu dalam mengendalikan lingkungan. Studi sebelumnya telah membahas dampak dari *perceived sustainability policy*

organizational perspective (Robertson & Barling, 2013; Leung, 2018). The studies by Robertson and Barling (2013), as well as Norton et al. (2014) have discussed the impeact of perceived sustainability policy (PSP) from an organizational perspective.

Organizations in education are encouraged to contribute by implementing an inclusive sustainability policy involving the entire academic community (Bieler & McKenzie, 2017; Thornton, 2019; Lidstone et al., 2015; Naranjo-Gil, 2016; Ramísio et al., 2019; Wooltorton et al., 2015). Higher education can change individuals' minds about the world, including their environment, and produce knowledge that can ultimately result in awareness and solutions which can help manage environmental problems (Thomashow, 2014). The campus becomes a place to approach specific methods and innovative projects (Leal Filho, 2014). As examples are renewable energy installations, biomass production facilities, solar power generators, energy-efficient designs, and retrofitting conservations (Thomashow, 2014). Educational institutions also have a vital role in developing environmentally friendly economy and society (Brown, 2013, as cited in Leal Filho et al., 2015).

Greening on campus can be a pioneer for the surrounding communities (Anthony Jnr, 2021; Choi et al., 2017; Gholami et al., 2020; Zhu et al., 2020). The experience of a green environment on campus is essential for its residents and visitors, inspiring them to think deeply about environmental sustainability practices (Thomashow, 2014).

Previous studies has suggested that greening on campus plays a significant role so that universities may put the initiative into practice (Shriberg & Harris, 2012; Hansen & Wells, 2012, as cited in Leal Filho et al., 2015). However, not all universities in Indonesia follow the UI GreenMetric ranking. Nevertheless, the internal policies carried out by the higher education management can be a reference in bringing up pro-environmental behavior (PEB). In this study, the participants are the academic community from universities who follow the UI GreenMetric ranking, and also those who do not but have policies related to environmental sustainability. Based on the aforementioned background, the following hypotheses were formulated:

Hypothesis 1: Structural relationship model consisting of variables of spiritual well-being (SpWB), perceived

(PSP) dari perspektif organisasi (Robertson & Barling, 2013; Leung, 2018). Studi oleh Robertson dan Barling (2013), serta Norton et al. (2014) telah membahas dampak *perceived sustainability policy (PSP)* dari perspektif organisasi.

Organisasi di bidang pendidikan didorong untuk berkontribusi dengan menerapkan kebijakan keberlanjutan inklusif yang melibatkan seluruh komunitas akademik (Bieler & McKenzie, 2017; Thornton, 2019; Lidstone et al., 2015; Naranjo-Gil, 2016; Ramísio et al., 2019; Wooltorton et al., 2015). Pendidikan tinggi dapat mengubah pemikiran individu tentang dunia, termasuk lingkungannya, dan menghasilkan pengetahuan yang pada akhirnya dapat menghasilkan kesadaran dan solusi yang dapat membantu mengelola masalah lingkungan (Thomashow, 2014). Kampus menjadi tempat untuk pendekatan metode spesifik dan proyek inovatif (Leal Filho, 2014). Sebagai contoh adalah instalasi energi terbarukan, fasilitas produksi biomassa, pembangkit tenaga surya, desain hemat energi, dan konservasi perkuatan (Thomashow, 2014). Institusi pendidikan juga memiliki peran vital dalam mengembangkan ekonomi dan masyarakat yang ramah lingkungan (Brown, 2013, sitat dalam Leal Filho et al., 2015).

Penghijauan di kampus dapat menjadi pelopor bagi masyarakat sekitar (Anthony Jnr, 2021; Choi et al., 2017; Gholami et al., 2020; Zhu et al., 2020). Pengalaman lingkungan hijau di kampus sangat penting bagi penghuni dan pengunjungnya, menginspirasi mereka untuk berpikir secara mendalam tentang praktik kelestarian lingkungan (Thomashow, 2014).

Studi sebelumnya menunjukkan bahwa penghijauan di kampus memainkan peran penting sehingga universitas dapat menerapkan inisiatif tersebut (Shriberg & Harris, 2012; Hansen & Wells, 2012, sitat dalam Leal Filho et al., 2015). Namun, tidak semua perguruan tinggi di Indonesia mengikuti pemeringkatan *UI GreenMetric*. Walaupun demikian, kebijakan internal yang dilakukan oleh pengelola perguruan tinggi dapat menjadi acuan dalam memunculkan *pro-environmental behavior (PEB)*. Dalam studi ini, partisipan adalah *civitas akademika* dari perguruan tinggi yang mengikuti pemeringkatan *UI GreenMetric*, dan juga mereka yang tidak tetapi memiliki kebijakan terkait kelestarian lingkungan. Berdasarkan latar belakang tersebut, hipotesis studi dirumuskan sebagai berikut:

Hipotesis 1: Model hubungan struktural yang terdiri dari variabel *spiritual well-being (SpWB), perceived*

sustainability policy (PSP), environmental attitude (EA), and pro-environmental behavior (PEB) is "fit" and significant to the study data.

Hypothesis 2: Environmental attitude (EA) significantly predicts pro-environmental behavior (PEB).

Hypothesis 3: Perceived sustainability policy (PSP) significantly predicts pro-environmental behavior (PEB).

Hypothesis 4: Spiritual well-being (SpWB) significantly predicts environmental attitude (EA).

Hypothesis 5: Environmental attitude (EA) plays a significant role as a mediator of the relationship between spiritual well-being (SpWB) and pro-environmental behavior (PEB).

Hypothesis 6: Environmental attitude (EA) is a significant mediator in the relationship between perceived sustainability policy (PSP) and pro-environmental behavior (PEB).

sustainability policy (PSP), environmental attitude (EA), dan *pro-environmental behavior (PEB)* "sesuai" dan signifikan terhadap data studi.

Hipotesis 2: Environmental attitude (EA) secara signifikan memprediksi *pro-environmental behavior (PEB).*

Hipotesis 3: Perceived sustainability policy (PSP) secara signifikan memprediksi *pro-environmental behavior (PEB).*

Hipotesis 4: Spiritual well-being (SpWB) secara signifikan memprediksi *environmental attitude (EA).*

Hipotesis 5: Environmental attitude (EA) memiliki peran penting sebagai mediator dari hubungan antara *spiritual well-being (SpWB)* dan *pro-environmental behavior (PEB).*

Hipotesis 6: Environmental attitude (EA) merupakan mediator penting dalam hubungan antara *perceived sustainability policy (PSP)* dan *pro-environmental behavior (PEB).*

Method

Research Methods

This study is a quantitative research utilizing the survey method. The survey method utilizes the collected data and variables which automatically emerge from the participants' assessments from completing the study instruments (Fraenkel et al., 2012). This study has received ethical clearance by the *Komisi Etik Penelitian Terkait Manusia (KEPTM), Fakultas Psikologi, Universitas Tarumanagara*, in the ethics review meeting on November 3, 2021, with the clearance number of: 197-TIM/KEPTM/3083/FPsi-UNTAR/XI/2021.

Participants

The population in this study were all lecturers and education staff in area of *DKI Jakarta*. The sampling technique utilized is convenience sampling, with 131 samples. From the 131 samples, four outlier samples were discarded. The remaining 127 samples were lecturers and education staff working at *Universitas Indonesia, Universitas Pancasila, Universitas Katolik Indonesia Atma Jaya*, and several other universities in

Metode

Metode Riset

Studi ini merupakan riset kuantitatif dengan menggunakan metode survei. Metode survei memanfaatkan data dan variabel yang terkumpul yang secara otomatis muncul dari penilaian partisipan setelah melengkapi instrumen studi (Fraenkel et al., 2012). Studi ini telah mendapatkan legalitas etik oleh Komisi Etik Penelitian Terkait Manusia (KEPTM), Fakultas Psikologi, Universitas Tarumanagara, dalam rapat tinjauan etika pada tanggal 3 November 2021 dengan nomor izin: 197-TIM/KEPTM/3083/FPsi - UNTAR/XI/2021.

Partisipan

Populasi dalam studi ini adalah seluruh dosen dan tenaga kependidikan di wilayah DKI Jakarta. Teknik pengambilan sampel yang digunakan adalah *convenience sampling*, dengan jumlah sampel sebanyak 131 individu. Dari 131 sampel, empat sampel *outlier* tidak dicantumkan. Sejumlah 127 sampel yang tersisa adalah dosen dan tenaga kependidikan yang bekerja di Universitas Indonesia, Universitas Pancasila, Universitas Katolik Indonesia Atma

Table 1
Demographic Data of Participants

No.	Demographic Profile	Category	*Frequency*	*Percentage (%)*
1	Gender	Male	64	50.4%
		Female	63	49.6%
2	Work Position	Lecturer	76	59.8%
		Educator Staff	51	40.2%
3	University of Origin	*Universitas Pancasila*	43	33.9%
		Universitas Indonesia	7	5.5%
		Universitas Katolik Indonesia Atma Jaya	7	5.5%
		Universitas Tarumanagara	0	0%
		Other(s)	70	55.1%
		Mean	*Std. Deviation*	*Variance*
4	Age	45.69	11.22	125.88
5	Length of Work	13.74	9.82	96.48

Tabel 1
Data Demografis Partisipan

No.	Profil Demografis	Kategori	*Frekuensi*	*Persentase (%)*
1	Jenis Kelamin	Laki-Laki	64	50,4%
		Perempuan	63	49,6%
2	Posisi Dalam Pekerjaan	Dosen	76	59,8%
		Staff Pengajar	51	40,2%
3	Asal Universitas	Universitas Pancasila	43	33,9%
		Universitas Indonesia	7	5,5%
		Universitas Katolik Indonesia Atma Jaya	7	5,5%
		Universitas Tarumanagara	0	0%
		Lainnya	70	55,1%
		Mean	*Std. Deviation*	*Variance*
4	Umur	45,69	11,22	125,88
5	Lama Bekerja	13,74	9,82	96,48

Jakarta. According to Jannoo et al. (2014), Structural Equation Modeling (SEM) produces more accurate estimates with sample size over 50. Table 1 provides the description of the study data in regards to the participants.

Instruments

Pro-Environmental Behavior Scale

The Pro-Environmental Behavior Scale by Larson et al. (2015) consists 17 items based on four dimensions: (1) conservation lifestyle; (2) land stewardship; (3) social environmentalism; and (4) environmental citizenship. In answering the statements, the participants utilized a Likert scale, in which each statement provide five answer options, namely: "5 (*Always*)", "4 (*Often*)", "3 (*Sometimes*)", "2 (*Rarely*)", and "1 (*Never*)".

Jaya, dan beberapa universitas lain di wilayah DKI Jakarta. Menurut Jannoo et al. (2014), *Structural Equation Modeling (SEM)* menghasilkan estimasi yang lebih akurat dengan ukuran sampel lebih dari 50. Tabel 1 menyediakan gambaran data partisipan.

Instrumen

Pro-Environmental Behavior Scale

Pro-Environmental Behavior Scale oleh Larson et al. (2015) terdiri dari 17 butir berdasarkan empat dimensi: (1) *conservation lifestyle*; (2) *land stewardship*; (3) *social environmentalism*; dan (4) *environmental citizenship*. Dalam menjawab pernyataan tersebut, partisipan menggunakan skala Likert, dan tiap pernyataan memberikan lima pilihan jawaban, yaitu: "5 (*Selalu*)", "4 (*Sering*)", "3 (*Terkadang*)", "2 (*Jarang*)" , dan "1 (*Tidak Pernah*)".

Examples of items from each dimension are as follows: (1) conservation lifestyle with "Consumption or purchase of environmentally friendly products."; (2) land stewardship with "Conducting wildlife studies and ecological monitoring."; (3) social environmentalism with "Talking or educating others about environmental issues."; and (4) environmental citizenship with "Writing letters or articles about environmental issues.".

All items are favorable in the Pro-Environmental Behavior Scale. The operational definition of pro-environmental behavior (PEB) is that the higher the total score obtained, the more often participants conduct pro-environmental behavior (PEB), such as purchasing environmentally friendly products, talking or discussing environmental issues with others, liking studies on ecology or environment, and being encouraged to write articles related to environmental issues.

The Cronbach's alpha scores on the original Pro-Environmental Behavior Scale are: (1) .786 for the conservation lifestyle dimension; (2) .638 for the land stewardship dimension; (3) .782 for the social environmentalism dimension; and (4) .839 for the environmental citizenship dimension (Larson et al., 2015). These scores mean that the difference in grain power (the value of item consistency with other items) is consistent and reliable.

Environmental Attitude Scale

The 15-item Environmental Attitude Scale was based on the New Ecological Paradigm (Dunlap et al., 2000), which consists of five dimensions: (1) limits to growth; (2) anti-anthropocentrism; (3) fragility of nature's balance; (4) rejection of exemptionalism; and (5) possibility of an ecocrisis. In answering the statements, the participants utilized a Likert scale, in which each statement provide five answer options, namely: "5 (*Strongly Agree*)", "4 (*Slightly Agree*)", "3 (*Not Sure*)", "2 (*Slightly Disagree*)", and "1 (*Strongly Disagree*)".

Examples of items from each dimension are as follows: (1) limits to growth with "We are approaching the limit on the number of people the Earth can support."; (2) anti-anthropocentrism with "Humans have the right to change the natural environment to suit their needs."; (c) fragility of nature's balance with "When humans disturb nature, it often produces dangerous consequences."; (d) rejection of exemptionalism

Contoh butir dari tiap dimensi adalah sebagai berikut: (1) *conservation lifestyle* dengan "Konsumsi atau pembelian produk ramah lingkungan."; (2) *land stewardship* dengan "Melakukan studi satwa liar dan pemantauan ekologi."; (3) *social environmentalism* dengan "Berbicara atau mendidik orang lain tentang masalah lingkungan."; dan (4) *environmental citizenship* dengan "Menulis surat atau artikel tentang masalah lingkungan".

Semua butir *Pro-Environmental Behavior Scale* adalah *favorable*. Definisi operasional *pro-environmental behavior (PEB)* adalah semakin tinggi skor total yang diperoleh, semakin sering partisipan melakukan *pro-environmental behavior (PEB)*, seperti membeli produk ramah lingkungan, berbicara atau berdiskusi tentang masalah lingkungan dengan individu lain, menyukai studi tentang ekologi atau lingkungan, dan terdorong untuk menulis artikel yang berkaitan dengan masalah lingkungan.

Skor *Cronbach's alpha* pada *Pro-Environmental Behavior Scale* orisinal adalah: (1) 0,786 untuk dimensi *conservation lifestyle*; (2) 0,638 untuk dimensi *land stewardship*; (3) 0,782 untuk dimensi *social environmentalism*; dan (4) 0,839 untuk dimensi *environmental citizenship* (Larson et al., 2015). Skor tersebut berarti perbedaan kekuatan butir (nilai konsistensi butir dengan butir lainnya) konsisten dan reliabel.

Environmental Attitude Scale

15-Item Environmental Attitude Scale didasarkan pada Paradigma Ekologi Baru (Dunlap et al., 2000), yang terdiri dari lima dimensi: (1) *limits to growth*; (2) *anti-anthropocentrism*; (3) *fragility of nature's balance*; (4) *rejection of exemptionalism*; dan (5) *possibility of an ecocrisis*. Dalam menjawab pernyataan tersebut, partisipan menggunakan skala Likert, dan tiap pernyataan menyediakan lima pilihan jawaban, yaitu: "5 (*Sangat Setuju*)", "4 (*Agak Setuju*)", "3 (*Tidak Yakin*)", "2 (*Agak Tidak Setuju*)", dan "1 (*Sangat Tidak Setuju*)".

Contoh butir dari tiap dimensi adalah sebagai berikut: (1) *limits to growth* dengan "Kita mendekati batas jumlah manusia yang dapat didukung Bumi."; (2) *anti-anthropocentrism* dengan "Manusia berhak mengubah lingkungan alam untuk memenuhi kebutuhannya."; (c) *fragility of nature's balance* dengan "Ketika manusia mengganggu alam, seringkali menimbulkan akibat yang berbahaya."; (d) *rejection of exemptionalism* dengan

with “Human intelligence will ensure that we "NOT" make the Earth uninhabitable.”; and (e) possibility of an ecocrisis with “Humans are very damaging to the environment.”.

In 15-Item Environmental Attitude Scale, 12 items are favorable and three are unfavorable. The operational definition of environmental attitude (EA) is that the higher the total score obtained, the higher the environmental attitude (EA) of the participant (as an example is that participants take care of their environment more).

The validity value of the original Environmental Attitude Scale is .33 - .62, while the reliability coefficient is .83 (Dunlap et al., 2000). These scores mean that the difference in grain power (the value of the consistency of items with other items) is consistent and reliable.

Spiritual Well-Being Scale

The Spiritual Well-Being Scale (Fisher, 2010) consists of 16 items and covers four dimensions: (1) personal; (2) communal; (3) transcendental; and (4) environmental. In answering the statements, the participants utilized a Likert scale, in which each statement provide five answer options, namely: “5 (*Strongly Agree*)”, “4 (*Agree*)”, “3 (*Hesitate*)”, “2 (*Disagree*)”, and “1 (*Strongly Disagree*)”.

Examples of items from each dimension are as follows: (1) personal with “I am aware of what my identity is.”; (2) communal with “I find it difficult to trust other people.”; (3) transcendental with “My relationship is very close to God.”; and (4) environmental with “I feel very sad when I hear about environmental damage.”.

There are five unfavorable items and 11 favorable items in the Spiritual Well-Being Scale. The operational definition of spiritual well-being (SpWB) is that the higher the spiritual well-being (SpWB) score obtained, the more participants feel close to God, feel close to the environment, trust others, and realize their identity.

Cronbach's alpha scores on the original Spiritual Well-Being Scale are: (1) .89 for the personal dimension; (2) .79 for the communal dimension; (3) .86 for the transcendental dimension; and (4) .76 for the environmental dimension. The combined Cronbach's alpha score is .92 (Fisher, 2010). These scores mean that the

"Kecerdasan manusia akan memastikan bahwa kami "TIDAK" membuat Bumi tidak dapat dihuni.”; dan (e) *possibility of an ecocrisis* dengan “Manusia sangat merusak lingkungan.”.

Dalam *15-Item Environmental Attitude Scale*, 12 butir adalah butir *favorable* disukai dan tiga butir adalah butir *unfavorable*. Definisi operasional dari *environmental attitude (EA)* adalah semakin tinggi skor total yang diperoleh, maka semakin tinggi pula *environmental attitude (EA)* partisipan (sebagai contoh adalah artisipan lebih menjaga lingkungannya).

Nilai validitas *Environmental Attitude Scale* orisinal adalah 0,33 - 0,62, sedangkan koefisien reliabilitasnya adalah 0,83 (Dunlap et al., 2000). Skor tersebut berarti perbedaan kekuatan butir (nilai konsistensi butir dengan butir lainnya) konsisten dan reliabel.

Spiritual Well-Being Scale

Spiritual Well-Being Scale (Fisher, 2010) terdiri dari 16 butir dan mencakup empat dimensi: (1) *personal*; (2) *communal*; (3) *transcendental*; dan (4) *environmental*. Dalam menjawab pernyataan, partisipan menggunakan skala Likert, dan tiap pernyataan menyediakan lima pilihan jawaban, yaitu: “5 (*Sangat Setuju*)”, “4 (*Setuju*)”, “3 (*Ragu*)”, “2 (*Tidak Setuju*) ”, dan “1 (*Sangat Tidak Setuju*)”.

Contoh butir dari tiap dimensi adalah sebagai berikut: (1) *personal* dengan “Saya sadar apa identitas saya.”; (2) *communal* dengan “Saya sulit mempercayai orang lain.”; (3) *transcendental* dengan “Hubungan saya sangat dekat dengan Tuhan.”; dan (4) *environmental* dengan “Saya merasa sangat sedih ketika mendengar tentang kerusakan lingkungan.”.

Ada lima butir *unfavorable* dan 11 butir *favorable* dalam *Spiritual Well-Being Scale*. Definisi operasional *spiritual well-being (SpWB)* adalah semakin tinggi skor *spiritual well-being (SpWB)* yang diperoleh, semakin partisipan merasa dekat dengan Tuhan, merasa dekat dengan lingkungan, mempercayai pihak lain, dan menyadari jati dirinya.

Skor *Cronbach’s alpha* pada *Spiritual Well-Being Scale* orisinal adalah: (1) 0,89 untuk dimensi *personal*; (2) 0,79 untuk dimensi *communal*; (3) 0,86 untuk dimensi *transcendental*; dan (4) 0,76 untuk dimensi *environmental*. Skor *Cronbach’s alpha* gabungan adalah 0,92 (Fisher, 2010). Skor tersebut berarti perbedaan

difference in grain power (the value of the consistency of items with other items) is consistent and reliable.

Perceived Sustainability Policy Scale

The Perceived Sustainability Policy Scale (Kim et al., 2015) consists of 14 items and is measured based on three dimensions: (1) economic sustainability; (2) social sustainability; and (3) environmental sustainability. In answering the statements, the participants utilized a Likert scale, in which each statement provide five answer options, namely: "5 (*Very Appropriate*)", "4 (*Appropriate*)", "3 (*Slightly Appropriate*)", "2 (*Not Appropriate*)", and "1 (*Very Not Appropriate*)".

Examples of items from each dimension are as follows: (1) economic sustainability with "University governance is appropriate."; (2) social sustainability with "Universities care about human rights."; and (3) environmental sustainability with "Universities invest in the environment.".

All items are favorable in the Perceived Sustainability Policy Scale. The operational definition of perceived sustainability policy (PSP) is that the higher the total score obtained, the higher the participants' perception regarding the implementation of sustainability policies. As an example is the higher the university's investment in the environment, the higher the participants' perception of implementing sustainability policies as well.

Cronbach's alpha scores on the original Perceived Sustainability Policy Scale are: 0.643 for the economic sustainability dimension; (2) 0.904 for the social sustainability dimension; and (3) 0.931 for the environmental sustainability dimension (Kim et al., 2015).

Data Analysis

Confirmatory Factor Analysis (CFA) for each instrument in this study was carried out based on the total item score of each dimension. After each instrument in this study was stated to be valid and reliable, the study continued to data analysis utilizing Structural Equation Modeling (SEM), in order to explain the relationship between the study variables thoroughly. Utilizing Structural Equation Modeling (SEM) in this study is not to design a theory but to examine and justify a model. Structural Equation Modeling (SEM) is a combination of regression and path analysis, therefore the study data must be ensured to have met the classical assumption test of regression,

kekuatan butir (nilai konsistensi butir dengan butir lainnya) konsisten dan reliabel.

Perceived Sustainability Policy Scale

Perceived Sustainability Policy Scale (Kim et al., 2015) terdiri dari 14 butir dan diukur berdasarkan tiga dimensi: (1) *economic sustainability*; (2) *social sustainability*; dan (3) *enviromental sustainability*. Dalam menjawab pernyataan, partisipan menggunakan skala Likert, dan tiap pernyataan memberikan lima pilihan jawaban, yaitu: "5 (*Sangat Sesuai*)", "4 (*Sesuai*)", "3 (*Agak Sesuai*)", "2 (*Tidak Sesuai*)", dan "1 (*Sangat Tidak Sesuai*)".

Contoh butir dari tiap dimensi adalah sebagai berikut: (1) *economic sustainability* dengan "Tata kelola universitas sudah sesuai."; (2) *social sustainability* dengan "Universitas peduli hak asasi manusia."; dan (3) *environmental sustainability* dengan "Universitas berinvestasi di lingkungan.".

Semua butir merupakan butir *favorable* dalam *Perceived Sustainability Policy Scale*. Definisi operasional dari *perceived sustainability policy (PSP)* adalah semakin tinggi total skor yang diperoleh, semakin tinggi pula persepsi partisipan tentang penerapan kebijakan keberlanjutan. Sebagai contoh adalah semakin tinggi investasi universitas pada lingkungan, maka semakin tinggi pula persepsi partisipan terhadap implementasi kebijakan keberlanjutan.

Skor *Cronbach's alpha* pada *Perceived Sustainability Policy Scale* orisinal adalah: 0,643 untuk dimensi *economic sustainability*; (2) 0,904 untuk dimensi *social sustainability*; dan (3) 0,931 untuk dimensi *environmental sustainability* (Kim et al., 2015).

Analisa Data

Confirmatory Factor Analysis (CFA) untuk tiap instrumen dalam studi ini dilakukan berdasarkan total skor butir tiap dimensi. Setelah tiap instrumen dalam studi ini dinyatakan valid dan reliabel, studi dilanjutkan dengan analisis data menggunakan *Structural Equation Modeling (SEM)*, untuk menjelaskan hubungan antar variabel studi secara menyeluruh. Pemanfaatan *Structural Equation Modeling (SEM)* dalam studi ini bukan untuk merancang sebuah teori melainkan untuk mengkaji dan membuat justifikasi sebuah model. *Structural Equation Modeling (SEM)* merupakan gabungan antara regresi dan analisis jalur, oleh karena itu data studi harus dipastikan telah memenuhi uji asumsi klasik regresi,

Table 2
Confirmatory Factor Analysis (CFA) First Order Summary

Variable	Dimensions	Indicator Code	*Loading Factor* ≥ 0.50	*Standard Error*	*Construct Reliability*	
					CR	*AVE*
PEB	Social Environmentalism	SE	0.75	0.08	0.96	0.63
	Land Stewardship	LS	0.87	0.08		
	Conservation Lifestyle	CL	0.73	0.08		
	Environmental Citizenship	EC	0.81	0.08		
EA	Limits to Growth	LTG	0.48	0.11	0.84	0.25
	Anti-Anthropocentrism	AA	- 0.16	0.11		
	The Fragility of Nature's Balance	FNB	0.76	0.12		
	Rejection of Exemptionalism	ROE	0.58	0.12		
	The Possibility of an Ecocrisis	POE	0.06	0.11		
SpWB	Personal	PERS	0.68	0.15	0.83	0.30
	Communal	COMM	0.38	0.11		
	Transcendental	TRANC	0.63	0.14		
	Environmental	ENVIR	- 0.09	0.11		
PSP	Economic Sustainability	ECS	0.55	0.10	0.94	0.56
	Social Sustainability	SS	1.01	0.11		
	Environmental Sustainability	EVS	0.60	0.10		

Notes. PEB = Pro-Environmental Behavior; EA = Environmental Attitude; SpWB = Spiritual Well-Being; PSP = Perceived Sustainability Policy.

Tabel 2
Rangkuman First Order Dari Confirmatory Factor Analysis (CFA)

Variabel	Dimensi	Kode Indikator	*Loading Factor* ≥ 0,50	*Standard Error*	*Construct Reliability*	
					CR	*AVE*
PEB	*Social Environmentalism*	*SE*	0,75	0,08	0,96	0,63
	Land Stewardship	*LS*	0,87	0,08		
	Conservation Lifestyle	*CL*	0,73	0,08		
	Environmental Citizenship	*EC*	0,81	0,08		
EA	*Limits to Growth*	*LTG*	0,48	0,11	0,84	0,25
	Anti-Anthropocentrism	*AA*	- 0,16	0,11		
	The Fragility of Nature's Balance	*FNB*	0,76	0,12		
	Rejection of Exemptionalism	*ROE*	0,58	0,12		
	The Possibility of an Ecocrisis	*POE*	0,06	0,11		
SpWB	*Personal*	*PERS*	0,68	0,15	0,83	0,30
	Communal	*COMM*	0,38	0,11		
	Transcendental	*TRANC*	0,63	0,14		
	Environmental	*ENVIR*	- 0,09	0,11		
PSP	*Economic Sustainability*	*ECS*	0.55	0,10	0,94	0,56
	Social Sustainability	*SS*	1,01	0,11		
	Environmental Sustainability	*EVS*	0,60	0,10		

Catatan. PEB = Pro-Environmental Behavior; *EA = Environmental Attitude*; *SpWB = Spiritual Well-Being*; *PSP = Perceived Sustainability Policy.*

such as the normality test, multicollinearity test, heteroscedasticity test, and linearity test (Sarwono, 2010). Based on the results, this study has fulfilled all the classical regression assumption test requirements using the estimator approach (maximum likelihood).

seperti uji normalitas, uji multikolinieritas, uji heteroskedastisitas, dan uji linieritas (Sarwono, 2010). Berdasarkan hasil tes, studi ini telah memenuhi semua syarat uji asumsi regresi klasik dengan menggunakan pendekatan estimator (kemungkinan maksimum).

Table 3
Overall Model Fit Test (Goodness of Fit) Results

GOF Size	Target Match Rate	Estimated Results	Match Rate
Chi-Square	Small Value; $p < .05$	$\chi^2 = 82.27$ ($p = .024$)	Good Fit
RMSEA	$RMSEA \leq 0.05$	0.05	Good Fit
CFI	$CFI \geq 0.90$	0.96	Good Fit
GFI	$GFI \geq 0.90$	0.91	Good Fit
AGFI	$0.8 \leq AGFI < 0.9$	0.86	Good Fit
ECVI	Small Value and Close to ECVI Saturated	M*: 1.17	Good Fit
		S*: 1.46	
		I*: 6.46	
AIC	Small Value and Close to AIC Saturated	M*: 146.27	Good Fit
		S*: 182.00	
		I*: 809.93	

Notes. M* = Model; S* = Saturated; I* = Independence.

Tabel 3
Hasil Tes Model Fit (Goodness of Fit) Secara Umum

Ukuran GOF	*Target Match Rate*	Estimasi Hasil	*Match Rate*
Chi-Square	Small Value; $p < 0,05$	$\chi^2 = 82,27$ ($p = 0,024$)	*Good Fit*
RMSEA	$RMSEA \leq 0,05$	0,05	*Good Fit*
CFI	$CFI \geq 0,90$	0,96	*Good Fit*
GFI	$GFI \geq 0,90$	0,91	*Good Fit*
AGFI	$0,8 \leq AGFI < 0,9$	0,86	*Good Fit*
ECVI	Small Value and Close to ECVI Saturated	M*: 1,17	*Good Fit*
		S*: 1,46	
		I*: 6,46	
AIC	Small Value and Close to AIC Saturated	M*: 146,27	*Good Fit*
		S*: 182,00	
		I*: 809,93	

Catatan. M* = *Model*; S* = *Saturated*; I* = *Independence*.

Result

Measurement By Measurement Models Confirmatory Factor Analysis (CFA)

The reliability of all constructs was adequate, with the construct reliability (CR) value of 0.70 and the *AVE value* < 0.50, indicating adequate convergence (Hair, 2010). Even though the AVE value is less than 0.50, Fornell and Larcker (1981) stated that it is still acceptable when the construct reliability (CR) value is more significant than 0.60. Therefore, all environmental attitude (EA) instruments in this study are valid and reliable. More detailed results are available in Table 2.

Data Analysis Technique

Overall model fit test was conducted by analyzing the data's fit with the LISREL program's overall model called the Goodness of Fit (GoF). This test aims to evaluate whether the resulting model is a fit model or not.

Hasil

Pengukuran Dengan Model Pengukuran Confirmatory Factor Analysis (CFA)

Reliabilitas semua konstruk memadai, dengan nilai reliabilitas konstruk 0,70 dan nilai *AVE* < 0,50, menunjukkan konvergensi yang memadai (Hair, 2010). Meskipun nilai AVE kurang dari 0,50, Fornell dan Larcker (1981) menyatakan bahwa skor masih dapat diterima apabila nilai reliabilitas konstruk lebih signifikan dari 0,60. Maka dari itu, semua instrumen *environmental attitude (EA)* dalam studi ini valid dan reliabel. Hasil lebih rinci tersedia pada Tabel 2.

Teknik Analisa Data

Uji *model fit* secara keseluruhan dilakukan dengan menganalisis kecocokan data dengan model keseluruhan program *LISREL* yang disebut *Goodness of Fit (GoF)*. Pengujian ini bertujuan untuk mengevaluasi apakah model

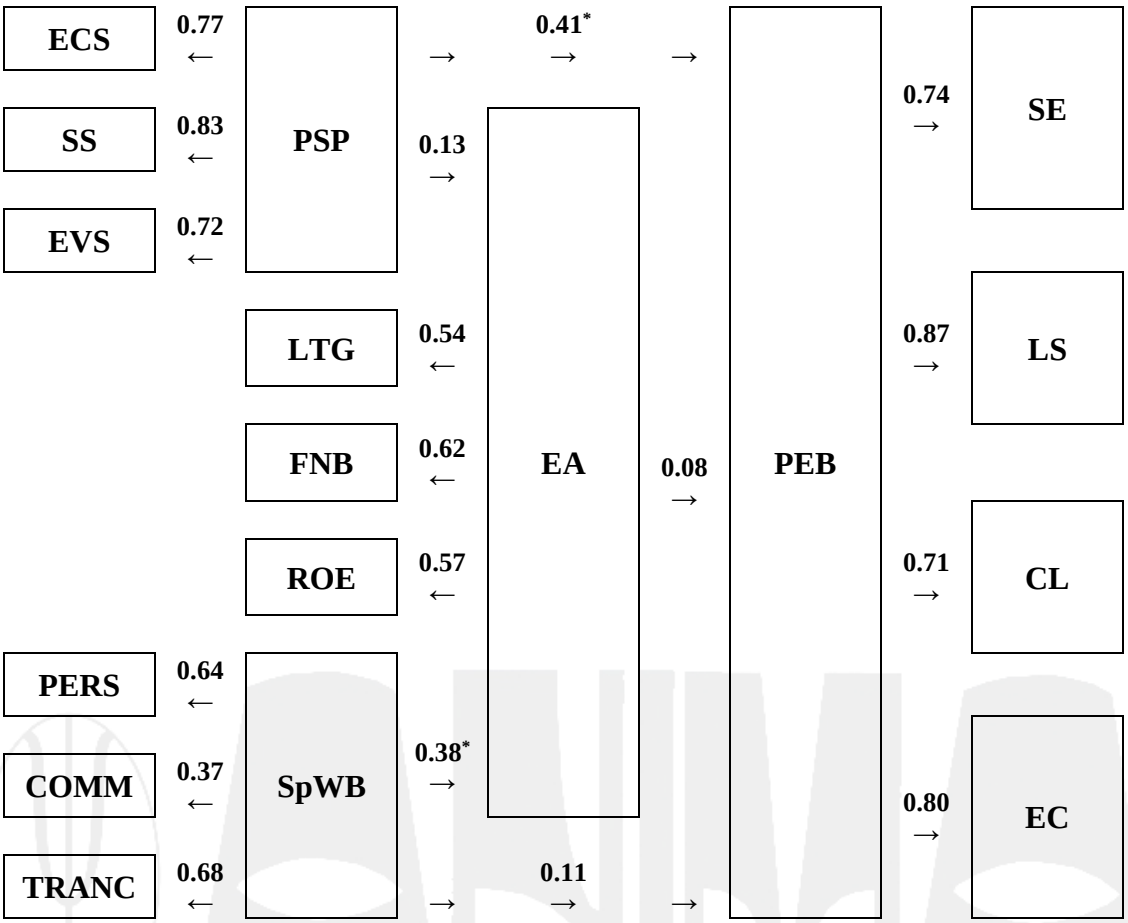


Figure 1. Complete empirical structural equation modeling.

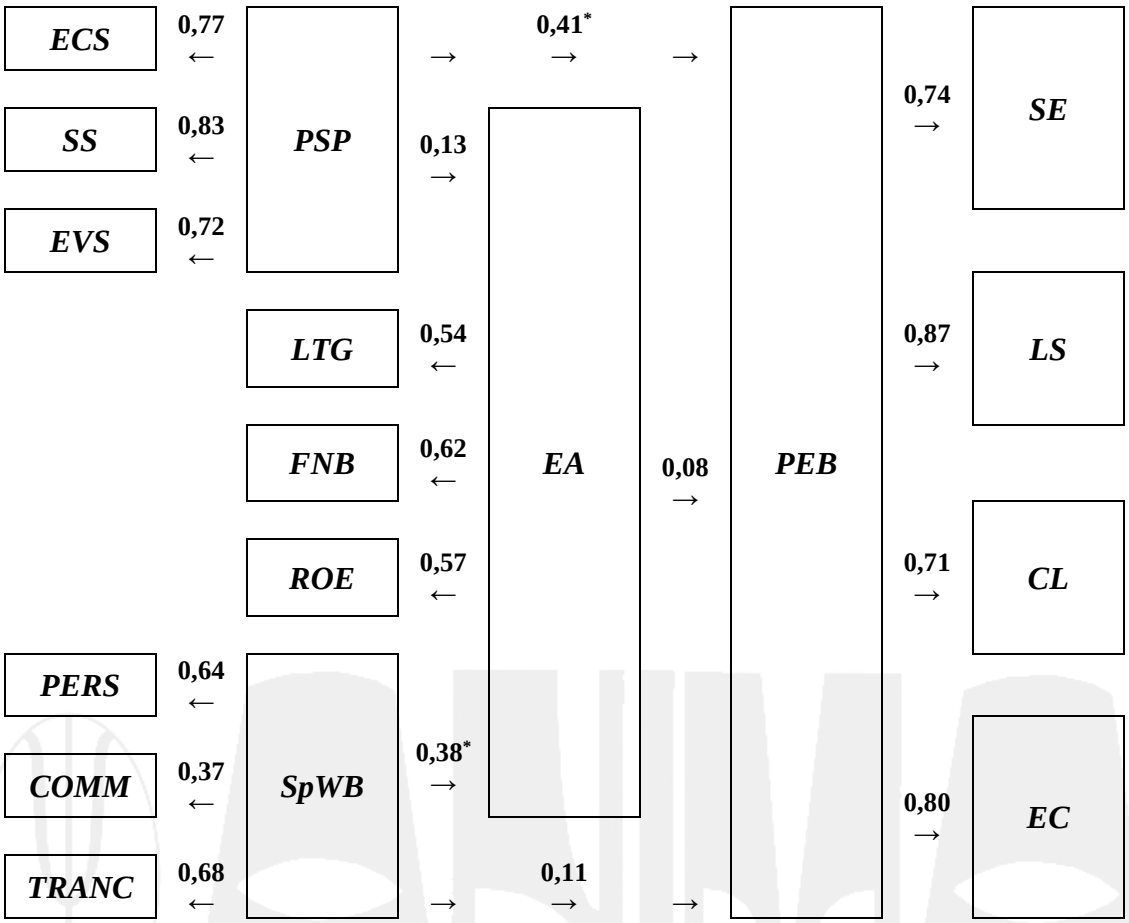
Notes. *Chi-Square* = 82.27; *df* = 59; *p-value* = .024; *RMSEA* = 0.05; $^{*}p < .05$; ECS = Economic Sustainability; SS = Social Sustainability; EVS = Environmental Sustainability; PERS = Personal; COMM = Communal; TRANC = Transcendental; PSP = Perceived Sustainability Policy; LTG = Limits to Growth; FNB = The Fragility of Nature's Balance; ROE = Rejection of Exemptionalism; SpWB = Spiritual Well-Being; EA = Environmental Attitude; PEB = Pro-Environmental Behavior; SE = Social Environmentalism; LS = Land Stewardship; CL = Conservation Lifestyle; EC = Environmental Citizenship.

The analysis of the overall fit model can be seen from the results of statistical data processing provided in Table 3.

Based on Table 3, the aforementioned discussion shows that all Goodness of Fit (GoF) sizes show a good fit. After testing the model's overall fit, the authors proceed to the next stage, which is the structural model fit test. This test aims to determine how the environmental attitude (EA) variable mediates the relationship between the perceived sustainability policy (PSP) variable and the spiritual well-being (SpWB) variable on pro-environmental behavior (PEB). Afterwards, this test will answer whether the hypothesis in the study model is accepted or rejected.

yang dihasilkan sesuai atau tidak. Analisis model yang secara keseluruhan sesuai dapat dilihat dari hasil pengolahan data statistik yang disajikan pada Tabel 3.

Berdasarkan Tabel 3, kajian sebelumnya menunjukkan bahwa semua ukuran *Goodness of Fit (GoF)* menunjukkan kecocokan yang baik. Setelah dilakukan pengujian kecocokan model secara keseluruhan, penulis melanjutkan ke tahap berikutnya yaitu uji kecocokan model struktural. Pengujian ini bertujuan untuk mengetahui bagaimana variabel *environmental attitude (EA)* memediasi hubungan antara variabel *perceived sustainability policy (PSP)* dengan variabel *spiritual well-being (SpWB)* terhadap *pro-environmental behavior (PEB)*. Selanjutnya, pengujian ini akan menjawab apakah hipotesis dalam model studi ini diterima atau ditolak.



Gambar 1. Structural equation modeling empiris lengkap.

Catatan. Chi-Square = 82,27; *df* = 59; *p-value* = 0,024; *RMSEA* = 0,05; **p* < 0,05; *ECS = Economic Sustainability*; *SS = Social Sustainability*; *EVS = Environmental Sustainability*; *PERS = Personal*; *COMM = Communal*; *TRANC = Transcendental*; *PSP = Perceived Sustainability Policy*; *LTG = Limits to Growth*; *FNB = The Fragility of Nature's Balance*; *ROE = Rejection of Exemptionalism*; *SpWB = Spiritual Well-Being*; *EA = Environmental Attitude*; *PEB = Pro-Environmental Behavior*; *SE = Social Environmentalism*; *LS = Land Stewardship*; *CL = Conservation Lifestyle*; *EC = Environmental Citizenship*.

Hypothesis Test Results

Based on Figure 1, the model is "fit" and significant with study data based on the Goodness of Fit (GoF) parameter, resulting in Hypothesis 1 being accepted.

From the path diagram in Figure 1, it can be seen that the results of the model test are: β = 0.20; *SE* = 0.36; *t* = 0.55 (n.s.), meaning that the *t-value* < 1.96, indicating that Hypothesis 2 is rejected., as the relationship in Hypothesis 2 is not significant.

Regarding Hypothesis 3, test results show that: β = 0.49; *SE* = 0.14; *t* = 3.50; *p* < .05, meaning that the *t-value* > 1.96, indicating that Hypothesis 3 is accepted.

Hasil Uji Hipotesis

Berdasarkan Gambar 1, model dinyatakan "sesuai" (*fit*) dan signifikan dengan data studi berdasarkan parameter *Goodness of Fit (GoF)*, sehingga Hipotesis 1 diterima.

Dari diagram jalur pada Gambar 1 terlihat bahwa hasil pengujian model adalah: β = 0,20; *SE* = 0,36; *t* = 0,55 (n.s.), yang berarti *t-value* < 1,96, menunjukkan bahwa Hipotesis 2 ditolak, karena hubungan pada Hipotesis 2 tidak signifikan.

Mengenai Hipotesis 3, hasil pengujian menunjukkan bahwa: β = 0,49; *SE* = 0,14; *t* = 3,50; *p* < 0,05, artinya *t-value* > 1,96, menunjukkan bahwa Hipotesis 3 diterima.

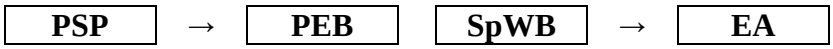
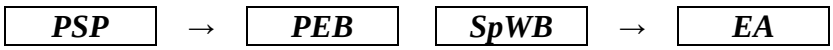


Figure 2. The first empirical structural equation model.
Notes. PSP = Perceived Sustainability Policy; PEB = Pro-Environmental Behavior; SpWB = Spiritual Well-Being; EA = Environmental Attitude.



Gambar 2. Structural equation model empiris pertama.
Catatan. PSP = Perceived Sustainability Policy; *PEB = Pro-Environmental Behavior*; *SpWB = Spiritual Well-Being*; *EA = Environmental Attitude*.

Related to Hypothesis 4, test results show that: β = 0.35; *SE* = 0.17; *t* = 2.09; $p < .05$, meaning that the *t-value* > 1.96, indicating that Hypothesis 4 is accepted.

Hypothesis 5 states that environmental attitude (EA) is a mediator of the relationship between spiritual well-being (SpWB) and pro-environmental behavior (PEB). Hypothesis 5 is neither accepted nor rejected. The direct effect of environmental attitude (EA) on pro-environmental behavior (PEB) has *t-value* < 1.96 with a t-value (95% confidence level) of 0.55, so it cannot prove that environmental attitude (EA) can mediate spiritual well-being (SpWB) to pro-environmental behavior (PEB). However, the direct effect of the spiritual well-being (SpWB) variable on environmental attitude (EA) has a t-value of 2.09, which is significant.

Testing on Hypothesis 6 shows that environmental attitude (EA) does not significantly mediate the relationship between perceived sustainability policy (PSP) and pro-environmental behavior (PEB), so Hypothesis 6 is neither accepted nor rejected. It is due to the direct effect of environmental attitude (EA) on pro-environmental behavior (PEB) has *t-value* < 1.96 with a t-value (95% confidence level) of 0.55, and the relationship between perceived sustainability policy (PSP) and environmental attitude (EA) resulted in β = 0.061; *SE* = 0.064; *t* = 0.94 (n.s.), so it cannot prove that environmental attitude (EA) mediates perceived sustainability policy (PSP) to pro-environmental behavior (PEB). Therefore, it is concluded that it could not prove that environmental attitude (EA) has a role as a good mediator between spiritual well-being (SpWB) and pro-environmental behavior (PEB), so the model that fits the data is explained in Figure 2.

Terkait dengan Hipotesis 4, hasil pengujian menunjukkan bahwa: β = 0,35; *SE* = 0,17; *t* = 2,09; $p < 0,05$, artinya *t-value* > 1,96, menunjukkan bahwa Hipotesis 4 diterima.

Hipotesis 5 menyatakan bahwa *environmental attitude (EA)* merupakan mediator hubungan antara *spiritual well-being (SpWB)* dan *pro-environmental behavior (PEB)*. Hipotesis 5 tidak diterima ataupun ditolak. Pengaruh langsung *environmental attitude (EA)* terhadap *pro-environmental behavior (PEB)* memiliki nilai *t-value* < 1,96 dengan t-value (95% *confidence level*) sebesar 0,55, sehingga tidak dapat dibuktikan bahwa *environmental attitude (EA)* dapat memediasi *spiritual well-being (SpWB)* pada *pro-environmental behavior (PEB)*. Walaupun demikian, pengaruh langsung variabel *spiritual well-being (SpWB)* terhadap *environmental attitude (EA)* memiliki *t-value* sebesar 2,09 yang signifikan.

Pengujian pada Hipotesis 6 menunjukkan bahwa *environmental attitude (EA)* tidak secara signifikan memediasi hubungan antara *perceived sustainability policy (PSP)* dan *pro-environmental behavior (PEB)*, sehingga Hipotesis 6 tidak diterima ataupun ditolak. Hal ini disebabkan pengaruh langsung *environmental attitude (EA)* terhadap *pro-environmental behavior (PEB)* memiliki nilai *t-value* < 1,96 dengan t-value (95% *confidence level*) sebesar 0,55, dan hubungan antara *perceived sustainability policy (PSP)* dan *environmental attitude (EA)* menghasilkan β = 0,061; *SE* = 0,064; *t* = 0,94 (n.s.), sehingga tidak membuktikan bahwa *environmental attitude (EA)* memediasi *perceived sustainability policy (PSP)* pada *pro-environmental behavior (PEB)*. Maka dari itu, disimpulkan bahwa tidak dapat dibuktikan bahwa *environmental attitude (EA)* berperan sebagai mediator yang baik antara *spiritual well-being (SpWB)* dan *pro-environmental behavior (PEB)*, sehingga model yang sesuai dengan data dijelaskan dalam Gambar 2.

Thus, it can be concluded that environmental attitude (EA) consistently does not play a significant role as a mediator, both through the first model tested and the second and third model tested.

Discussion

Based on the data analysis results, it can be concluded that the environmental attitude (EA) variable does not play a significant role in predicting the pro-environmental behavior (PEB) variable. Furthermore, there is a significant relationship between the perceived sustainability policy (PSP) variable and the pro-environmental behavior (PEB) variable. The perception of pro-environmental policies set by higher education management affects the behavior of lecturers and education staff, resulting in them caring more about their environment. In addition, there is a significant relationship between the spiritual well-being (SpWB) variable and environmental attitude (EA), showing that the individual's spiritual well-being (SpWB) affects the individual's attitude towards their environment. Furthermore, the environmental attitude (EA) variable does not have a significant role as a mediator in the relationship between spiritual well-being (SpWB) and pro-environmental behavior (PEB). Lastly, the environmental attitude (EA) variable does not have a significant role as a mediator in the relationship between perceived sustainability policy (PSP) and pro-environmental behavior (PEB).

Referring to the results of data analysis which shows a significant influence between perceived sustainability policy (PSP) on pro-environmental behavior (PEB), this implies the importance of higher education management policies regarding environmental conservation (also known as the green policy) as an essential factor in fostering environmental care behavior and culture on campus. The results of this study also support the study conducted by Wang et al. (2021), which states that perceived sustainability policy (PSP) is the main factor of situational antecedents that influence an individual's controlled attitude and behavior toward the environment.

Implementing pro-environmental policies in universities can encourage the emergence of environmentally friendly lecturers and teaching staff. The data of this study shows that spiritual well-being (SpWB) proved to have a significant effect on environmental attitude (EA), providing implications for

Dengan demikian, dapat disimpulkan bahwa *environmental attitude (EA)* secara konsisten tidak berperan signifikan sebagai mediator, baik melalui pengujian model pertama maupun pengujian model kedua dan ketiga.

Diskusi

Berdasarkan hasil analisis data, dapat disimpulkan bahwa variabel *environmental attitude (EA)* tidak berperan signifikan dalam memprediksi variabel *pro-environmental behavior (PEB)*. Lebih lanjut, terdapat hubungan yang signifikan antara variabel *perceived sustainability policy (PSP)* dengan variabel *pro-environmental behavior (PEB)*. Persepsi kebijakan pro-lingkungan yang ditetapkan oleh manajemen perguruan tinggi mempengaruhi perilaku dosen dan tenaga kependidikan, sehingga mereka lebih peduli terhadap lingkungannya. Selain itu, terdapat hubungan yang signifikan antara variabel *spiritual well-being (SpWB)* dengan *environmental attitude (EA)*, yang menunjukkan bahwa *spiritual well-being (SpWB)* individu mempengaruhi sikap individu tersebut terhadap lingkungannya. Lebih lanjut, variabel *environmental attitude (EA)* tidak memiliki peran yang signifikan sebagai mediator dalam hubungan antara *spiritual well-being (SpWB)* dan *pro-environmental behavior (PEB)*. Terakhir, variabel *environmental attitude (EA)* tidak memiliki peran signifikan sebagai mediator dalam hubungan antara *perceived sustainability policy (PSP)* dan *pro-environmental behavior (PEB)*.

Mengacu pada hasil analisis data yang menunjukkan adanya pengaruh yang signifikan antara *perceived sustainability policy (PSP)* terhadap *pro-environmental behavior (PEB)*, maka berimplikasi pada pentingnya kebijakan pengelolaan perguruan tinggi mengenai pelestarian lingkungan (disebut juga *green policy*) sebagai faktor penting dalam menumbuhkan perilaku dan budaya peduli lingkungan di kampus. Hasil studi ini juga mendukung studi yang dilakukan oleh Wang et al. (2021), yang menyatakan bahwa *perceived sustainability policy (PSP)* merupakan faktor utama anteseden situasional yang mempengaruhi sikap dan perilaku terkontrol individu terhadap lingkungan.

Implementasi kebijakan pro-lingkungan di perguruan tinggi dapat mendorong munculnya dosen dan tenaga pengajar yang ramah lingkungan. Data studi ini menunjukkan bahwa *spiritual well-being (SpWB)* terbukti berpengaruh signifikan terhadap *environmental attitude (EA)*, menyediakan implikasi pentingnya *spiritual*

the importance of spiritual well-being (SpWB) as one of the factors thought to affect attitudes towards the environment. Therefore, to overcome environmental problems, policymakers in universities need to improve effective pro-environment policies, spiritual well-being (SpWB), and environmental attitude (EA) to direct the entire academic community to pro-environmental behavior (PEB). Meanwhile, the minor influence of spiritual well-being (SpWB) on pro-environmental behavior (PEB) is due to it still being at the level of attitude instead of observed behavior.

The results of this study, which concluded that environmental attitude (EA) is not a good mediator in the relationship between pro-environmental behavior (PEB), perceived sustainability policy (PSP), and spiritual well-being (SpWB), are supported by the study conducted by Tamar et al. (2021), which states that environmental behavior does not have a significant relationship with attitudes, and environmental attitude (EA) does not mediate prosocial values. Although the influence of environmental attitude (EA) on pro-environmental behavior (PEB) adheres to the Theory of Planned Behavior (Ajzen, 1991), this study's results were different. It is likely because the data obtained is of poor quality (too many items in the measuring instruments so participants experience saturation). The correlation matrix table results shows that only the relationship between spiritual well-being (SpWB) to environmental attitude (EA) and perceived sustainability policy (PSP) to pro-environmental behavior (PEB) is significant.

The Theory of Planned Behavior states that attitudes can drive behavior, but other factors can influence the relationship between attitudes and behavior in pro-environmental behavior (PEB). A positive attitude towards the environment does not always directly affect pro-environmental behavior (PEB).

Environmental attitude (EA) does not act as a mediator in this study, and this can be caused by environmental attitude (EA) having no effect. After all, the external locus of control is stronger than the internal locus of control. The participants in this study may be more afraid of applicable policies or rules and are more concerned with their belief in their God.

Based on this study's results, there is a significant relationship between the perceived sustainability policy (PSP) and pro-environmental behavior (PEB). It

well-being (SpWB) sebagai salah satu faktor yang diduga mempengaruhi sikap terhadap lingkungan. Maka dari itu, untuk mengatasi masalah lingkungan, pembuat kebijakan di perguruan tinggi perlu meningkatkan kebijakan pro-lingkungan, *spiritual well-being (SpWB)*, dan *environmental attitude (EA)* yang efektif untuk mengarahkan seluruh *civitas akademika* pada *pro-environmental behavior (PEB)*. Sementara itu, kecilnya pengaruh *spiritual well-being* (SpWB) terhadap *pro-environmental behavior (PEB)* adalah karena masih berada pada level sikap dan bukan perilaku yang teramati.

Hasil studi ini yang menyimpulkan bahwa *environmental attitude (EA)* bukanlah mediator yang baik dalam hubungan antara *pro-environmental behavior (PEB)*, *perceived sustainability policy (PSP)*, dan *spiritual well-being (SpWB)*, didukung oleh studi yang dilakukan oleh Tamar et al. (2021) yang menyatakan bahwa perilaku lingkungan tidak memiliki hubungan yang signifikan dengan sikap, dan *environmental attitude (EA)* tidak memediasi nilai prososial. Meskipun pengaruh *environmental attitude (EA)* terhadap *pro-environmental behavior (PEB)* menganut *Theory of Planned Behavior* (Ajzen, 1991), hasil studi ini berbeda. Hal ini kemungkinan karena data yang diperoleh berkualitas buruk (terlalu banyak butir dalam alat ukur sehingga partisipan mengalami kejenuhan). Hasil tabel matriks korelasi menunjukkan bahwa hanya hubungan antara *spiritual well-being (SpWB)* dengan *environmental attitude (EA)* dan *perceived sustainability policy (PSP)* dengan *pro-environmental behavior (PEB)* yang signifikan.

Theory of Planned Behavior menyatakan bahwa sikap dapat mendorong perilaku, tetapi faktor lain dapat mempengaruhi hubungan antara sikap dan perilaku dalam *pro-environmental behavior (PEB)*. Sikap positif terhadap lingkungan tidak selalu berdampak langsung pada *pro-environmental behavior (PEB)*.

Environmental attitude (EA) tidak berperan sebagai mediator dalam studi ini, dan hal ini dapat disebabkan karena *environmental attitude (EA)* tidak berpengaruh. Hal ini dikarenakan lokus kendali eksternal lebih kuat daripada lokus kendali internal. Partisipan dalam studi ini mungkin lebih takut terhadap kebijakan atau aturan yang berlaku dan lebih mementingkan keyakinannya terhadap Tuhan-nya.

Berdasarkan hasil studi ini, terdapat hubungan yang signifikan antara *perceived sustainability policy (PSP)* dan *pro-environmental behavior (PEB)*. Ini mendukung

supports the implementation of a sustainability policy with many benefits, especially for institutions and the surrounding community. Thus, campus reforestation efforts through a sustainability policy can create a living laboratory model that can be comprehended as a model or example for individuals outside the university (Legacy, 2004, as cited in Leal Filho et al., 2015). If the university can implement a perceived sustainability policy (PSP) for the entire academic community, it can increase pro-environmental behavior (PEB).

Previous studies (Tapia-Fonllem et al., 2013) only linked well-being in general with pro-environmental behavior (PEB), and no study has linked spiritual well-being (SpWB) in particular with environmental attitude (EA). However, results of the study by Netuveli dan Watts (2020) supported this study, by showing a relationship between well-being and environmental attitude (EA). In addition, the study results concluded that there was a direct influence between the spiritual well-being (SpWB) on environmental attitude (EA).

Study results state that spiritual well-being (SpWB) guarantees life in relationships with others, one's self, and one's God, concerned with transcendent and existential dimensions combined with individual interactions with the environment (Akhtar & Siddiqui, 2021). The existence of spiritual well-being (SpWB) in an individual provides them with a positive attitude (Gomez & Fisher, 2003). Similarly, an individual with high spiritual well-being (SpWB) affects their environmental attitude (EA). It is also explained by Heintzman (2009) that an individual's spirituality relates to their attitudes towards the environment.

Limitations

Based on the authors' experience in compiling this study, there were several limitations experienced, which require attention for future researchers to improve studies on pro-environmental behavior (PEB), environmental attitude (EA), spiritual well-being (SpWB), and perceived sustainability policy (PSP).

Other factors such as environmental knowledge, green campaigns, and green leadership may have a significant relationship to pro-environmental behavior (PEB), requiring further studies. In addition, the lack of samples was due to the COVID-19 pandemic conditions, which did not allow the direct distribution of questionnaires. In theory, the required sample can be

penerapan kebijakan keberlanjutan dengan banyak manfaat, terutama bagi institusi dan masyarakat sekitar. Dengan demikian, upaya penghijauan kampus melalui kebijakan keberlanjutan dapat menciptakan model laboratorium hidup yang dapat dipahami sebagai model atau contoh bagi individu di luar universitas (Legacy, 2004, sitat dalam Leal Filho et al., 2015). Jika universitas dapat menerapkan *perceived sustainability policy (PSP)* bagi seluruh *civitas akademika*, maka hal tersebut dapat meningkatkan *pro-environmental behavior (PEB)*.

Studi sebelumnya (Tapia-Fonllem et al., 2013) hanya menghubungkan kesejahteraan secara umum dengan *pro-environmental behavior (PEB)*, dan tidak ada studi yang menghubungkan *spiritual well-being (SpWB)* secara khusus dengan *environmental attitude (EA)*. Namun, hasil studi Netuveli dan Watts (2020) mendukung studi ini, dengan menunjukkan hubungan antara kesejahteraan dan *environmental attitude (EA)*. Selain itu, hasil studi menyimpulkan bahwa terdapat pengaruh langsung antara *spiritual well-being (SpWB)* terhadap *environmental attitude (EA)*.

Hasil studi menyatakan bahwa *spiritual well-being (SpWB)* menjamin kehidupan dalam hubungan dengan pihak lain, diri sendiri, dan Tuhan, memperhatikan dimensi transenden dan eksistensial yang dikombinasikan dengan interaksi individu dengan lingkungan (Akhtar & Siddiqui, 2021). Adanya *spiritual well-being (SpWB)* pada individu menyediakan sikap positif (Gomez & Fisher, 2003). Demikian pula, individu dengan *spiritual well-being (SpWB)* yang tinggi mempengaruhi *environmental attitude (EA)* mereka. Hal ini juga dijelaskan oleh Heintzman (2009), bahwa spiritualitas individu berkaitan dengan sikapnya terhadap lingkungan.

Keterbatasan

Berdasarkan pengalaman penulis dalam menyusun studi ini, terdapat beberapa keterbatasan yang dialami, yang memerlukan perhatian bagi peneliti selanjutnya untuk meningkatkan kajian tentang *pro-environmental behavior (PEB)*, *environmental attitude (EA)*, *spiritual well-being (SpWB)*, dan *perceived sustainability policy (PSP)*.

Faktor lain seperti pengetahuan lingkungan, kampanye hijau, dan kepemimpinan hijau mungkin memiliki hubungan yang signifikan dengan *pro-environmental behavior (PEB)*, dan membutuhkan studi lebih lanjut. Selain itu, kurangnya sampel juga disebabkan oleh kondisi pandemi COVID-19 yang tidak memungkinkan penyebaran kuesioner secara langsung. Secara teori,

calculated based on the formula of "5 x number of items (62) = 310 participants", which was much higher than what was obtained and utilized in this study.

Suggestions

It is necessary to conduct studies that examine the construct and content of instruments, especially regarding environmental attitude (EA) and spiritual well-being (SpWB), in order to develop a version appropriate to the Indonesian culture and context.

Further studies by taking samples in Jakarta and throughout Indonesia are required, so that the results are more accurate and varied (and not just from universities that take part in the UI-Green Metric program). In addition, the authors suggest adapting various other instruments and adding other methods (such as qualitative) to obtain more representative data.

If a researcher desires to continue the study, and the results of this study can be of support, the obtained empirical model is available for use as the basis.

sampel yang dibutuhkan dapat dihitung berdasarkan rumus "5 x jumlah butir (62) = 310 partisipan", yang jauh lebih tinggi dari yang diperoleh dan digunakan dalam studi ini.

Saran

Perlu dilakukan kajian yang menelaah konstruk dan isi instrumen, khususnya mengenai *environmental attitude (EA)* dan *spiritual well-being (SpWB)*, guna mengembangkan versi yang sesuai dengan budaya dan konteks Indonesia.

Diperlukan studi lebih lanjut dengan mengambil sampel di Jakarta dan seluruh Indonesia, agar hasilnya lebih akurat dan bervariasi (dan tidak hanya dari universitas yang mengikuti program *UI-Green Metric*). Selain itu, penulis menyarankan untuk mengadaptasi berbagai instrumen lain dan menambahkan metode lain (seperti kualitatif) untuk mendapatkan data yang lebih representatif.

Apabila peneliti berkeinginan untuk melanjutkan studi, dan hasil studi ini dapat mendukung, maka model empiris yang diperoleh dapat digunakan sebagai dasar.

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