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Keep Your Distance, Stay Away from the Crowd! Between Past Compliance, Motivation, and Intention Against Physical Distancing Protocol (*Jaga Jarak, Jauhi Kerumuman! Antara Kepatuhan Lampau, Motivasi, Niat Terhadap Protokol Pembatasan Fisik*)

CLEOPUTRI YUSAINY^{[1],[2]}, ALFI NUR FAUZIYYAH^[1], AMIRA LATINSADINA^[1], WAHYU WICAKSONO^[2]

^[1] Departemen Psikologi, Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Brawijaya, Indonesia

^[2] Placebo Research Group, Indonesia

ABSTRACT

Physical presence is crucial in almost every social event in Indonesia, but could potentially inhibit obedience to physical distance protocol during COVID-19 pandemic. This study ($N = 114$ undergraduates, 62,3% female; M age = 21,69; $SD = 2,19$) explored the extent to which adherence of physical distance could be predicted by three social-cognitive factors from the Theory of Planned Behaviour (i.e., attitude, subjective norm, and perceived behavioural control), autonomy motivation from the Self-Determination Theory, and past adherence behaviour. We found that 68.02% of the variance in intention to perform physical distancing in the future was predicted by autonomy motivation, attitude, and perceived behavioural control explained. Moreover, after accounting autonomy motivation the role of subjective norm and past adherence behavior were no longer significant. It is therefore timely to shift focus from merely reporting past adherence behaviour to promoting an individual's autonomy motivation.

Keywords: *autonomy motivation, intention, past adherence, physical distance, social-cognitive factors*

ABSTRAK

Kehadiran fisik menyertai hampir seluruh ritus penting tradisi kemasyarakatan di Indonesia, namun berpotensi menghambat kepatuhan terhadap protokol pembatasan fisik di masa pandemi COVID-19. Penelitian ini ($N = 114$ mahasiswa, 62,3% perempuan; M usia = 21,69; $SD = 2,19$) menguji sejauh mana niat untuk mematuhi pembatasan fisik dapat diprediksi oleh ketiga faktor sosial-kognitif dari *Theory of Planned Behaviour* (sikap, norma subjektif, dan persepsi kontrol perilaku), motivasi otonom berdasarkan *Self-Determination Theory*, dan perilaku kepatuhan terhadap pembatasan fisik di masa lampau. Peneliti menemukan bahwa 68,02% dari varians niat dapat diprediksi oleh motivasi otonom, sikap, dan persepsi kontrol perilaku. Lebih jauh, setelah memperhitungkan peran motivasi otonom, niat tidak lagi diprediksi oleh norma subjektif maupun perilaku kepatuhan di masa lampau. Promosi motivasi otonom perlu ditempuh untuk meningkatkan konsistensi antara niat dan perilaku pembatasan fisik.

Kata kunci: *faktor sosial-kognitif, kepatuhan lampau, motivasi otonom, niat, pembatasan fisik*

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*Alamat korespondensi: Jalan Veteran, Malang, 65145, Indonesia. Pos-el: cleo.yusainy@ub.ac.id



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INTRODUCTION

The sustainability of a system is highly dependent on its elements. One of the supporting elements is compliance. Among many systems requiring compliance, the healthcare sector is at the top of the list. During the COVID-19 pandemic, situation may worsen as compliance drops (Hills & Eraso, 2021). While virus is constantly multiplicative in nature, human behavior actually modulates the viral transmission rate. Consequently, controlling human behavior is equivalent to controlling transmission. However, disobedience to control is a manifestation of basic self-defense function (Bruce & Miller, 2020). Hence, understanding compliance is fundamental to designing effective health protocols during a pandemic.

This study examines the compliance with the health protocols during the COVID-19 pandemic, especially the rules of physical distancing. In Indonesia, the physical distancing required individuals to keep a minimum of one meter distance from one another and to avoid crowds (Kementerian Kesehatan Republik Indonesia, 2020). Compared to other regulations during the pandemic, researchers assumed that Indonesians found it particularly difficult to comply with the physical distancing protocol due to their high level of social interaction. Many Indonesian sociocultural events, such as baby birth rituals, celebration for circumcisions, marriage party, and funeral, involve social interaction. During the COVID-19 pandemic situation, these events can be problematic. An Indonesian Central Statistics Agency's survey of more than 65 thousand participants found that six months after the COVID-19 pandemic, only 73.54% of them complied with the physical distancing protocol, 76.69% of them often or always avoided crowds, while the compliance rate for wearing masks was almost 92% (Badan Pusat Statistik, 2020).

Quoting a statement from the Head of the Behavioral Change Division of the COVID-19 Task Force, Dr. Sonny Harry B Harmadi, simply obeying is not enough. Maintaining consistency of a behavior requires awareness of the importance of the behavioral change (Satuan Tugas Penanganan COVID-19, 2021). As psychological contributing factors in the effort to flatten the contagion curve, several elements of compliance with physical distancing were investigated in this study based on the integration of the main concepts in the Theory of Planned Behavior (Ajzen, 1991) and the Self-Determination Theory (Deci & Ryan, 1985).

According to TPB, stronger intentions lead to greater likelihood of the actual behavior (Ajzen, 2020). Intention shows the extent to which a person is willing to try and put in effort into a behavior. Although an individual's past behavior is generally correlated with the intention to repeat the same behavior, the predictive value of this past behavior is inconsistent (Conner & Armitage, 1998). In TPB, intention is formulated as a function of three factors: positive or negative evaluation of behavioral performance (i.e., attitude), perceived role of significant figures in the execution of behavior (i.e., subjective norm), and perceived degree of difficulty of a behavior (i.e., perceived behavioral control). As concluded in a meta-analysis, these three socio-cognitive factors can predict 44% – 53% of the intention to display behavior (Abamecha & Tena, 2020).

TPB's perspective has at least two limitations: it does not take into account the contribution of general cognition to its three factors and it ignores the existence of general motivation as a source of information on the formation of intentions (Hagger et al., 2002). According to SDT, TPB concerns "what" goal one wants to achieve, but fails to explain the process of individual self-regulation (i.e., the "why") that gives rise to that intention (Deci & Ryan, 2000). SDT was proposed to address this and it views intention as a reflection of the relative strength of an individual's autonomous motivation to engage in a particular behavior. The process of self-regulation that originates from autonomous motivation is more consistent because individuals value their activities as something important, valuable, and personally useful, as part of themselves, and because they feel happy and satisfied with the activity itself. In line with this statement, a meta-analysis concluded that increased autonomous motivation resulted in changes in the target behavior in healthcare interventions (Sheeran dkk., 2021).

Overall, this study aims to find out whether the intention to comply with the physical distancing protocol can be predicted by the three socio-cognitive factors of TPB, namely (a) attitude (Hypothesis 1a), (b) subjective norm (Hypothesis 1b), and (c) perceived behavioral control (Hypothesis 1c); SDT's autonomous motivation (Hypothesis 2); and compliance with physical distancing in the past after taking into account the role of the former four predictors (Hypothesis 3). The target participants in this study were college students, considering this age group was the most emotionally affected during the COVID-19 pandemic as compared to other age groups (Twenge & Joiner, 2020). For college students, emotional problems during the pandemic stemmed from various factors, such as cancellation of important events, deteriorating personal relationships, worsening financial conditions, and a lack of physical activity (Chen & Lucock, 2022). Even two years after the pandemic began, there were reports of college students' mental health problems such as fear and high levels of stress, as well as academic problems such as low quality of learning (Hu et al., 2022).

METHOD

Design and Participants

The design of this study was quantitative correlational. Participants were undergraduate students who were recruited using convenience sampling through advertisement on the researcher's social media. Based on an estimation using G*Power v. 3.1 (Faul et al., 2007), in order to detect a medium effect ($f^2 = .15$) in a linear multiple regression with a fixed model and R² increase analysis, using five predictors (i.e., past compliant behavior, autonomous motivation, attitude, subjective norm, and perceived behavioral control) at 5% significant level and 80% statistical power, the minimum required sample size was 92. A total of 131 students consented to participate in an online survey and 114 of them submitted complete response (87.02%). The data were collected during the COVID-19 pandemic, in June 2021.

Measurement

The instruments used in this study were a TPB questionnaire, an autonomous motivation scale based on (SDT), and the past compliant behavior scale by Chan et al. (2015). This study used the Indonesian version of the instruments as adapted by Chan et al. (2020) and Yusainy et al. (2019) for use in the context of students' physical activity. Adjusting to the context of this study, the researcher modified the scale based on the guidelines to modify TPB measurement by Hagger (2019). The key modification was in the definition of physical distancing as "keeping a minimum of one meter distance from others and avoiding crowds." (Kementerian Kesehatan Republik Indonesia, 2020). These modified instruments were evaluated by three assessors. This process confirmed the clarity of the provided information and instructions, comprehensibility of sentences, and the ease of use of the online survey layout.

Ethic clearance for the study was obtained from the in-house Ethics Committee of the the researchers' institution. Following an informed consent form and a demographic questionnaire, participants were presented with the measurement scales. A debrief was given via emails after all data has been collected.

In the TPB questionnaire, participants were asked to rate some statements on a 7-point Likert scale (0 = strongly disagree dan 7 = strongly agree) for behavioral intention (3 items; e.g., "I intend to do physical distancing in the following month."), subjective norm (3 items; e.g., "Most people around me think that I should to practice physical distancing in the following month."), and perceived behavioral control (3 items; e.g., "If I want to, I can do physical distancing in the following month."). Meanwhile, five attitude-related items (all starting with "For me, doing enough physical activity in the following month will be..." were rated on a different 7-point Likert scale (0 = very harmful/very unpleasant/very worthless/very bad/very unpleasant dan 7 = very profitable/very enjoyable/very valuable/very good/very exciting). In this study, the internal consistency coefficients (Cronbach's α) were .97, .89, and .80 for behavioral intention, subjective norm, and perceived behavioral control respectively.

The autonomous motivation scale was a 7-point Likert scale (1 = very untrue and 7 = very true) assessing autonomous motivation to practice physical distancing (6 items; e.g., "I want to practice physical distancing because I feel like I want to take responsibility for my own health."). Higher averaged scores in this scale indicated higher self-determination to exercise physical distancing. The internal consistency coefficient (Cronbach's α) of this scale was .93.

Aligning with preceding measures of past compliant behavior, the time frame used in the scale in this study was limited to the last two weeks. Participants rated on a 7-point Likert scale for one item about frequency of compliant behavior (1 = never and 7 = very often) and one item about effort to perform the behavior (1 = minimum effort and 7 = maximum effort). Higher averaged scores indicated greater adequacy of past physical distancing behavior. This scale had a Cronbach's α coefficient of .88.

Data Analysis

A hierarchical regression analysis was conducted to find out whether the intention to comply with physical distancing could be predicted by the three TPB socio-cognitive factors (i.e., attitude (Hypothesis 1a), subjective norm (Hypothesis 1b), and perceived behavioral control (Hypothesis 1c)); SDT's autonomous motivation (Hypothesis 2); and compliance to physical distancing regulations in the past after taking into account the role of all former predictors (Hypothesis 3).

RESULTS

The sample ($N = 114$) consisted of 71 women (62.3%) and 43 men (37.7%), with an average age of 21.69 years ($SD = 2.19$).

Table 1. Intervariable correlation matrix and descriptive statistics

Scale	Autonomous motivation	Subjective norm	Perceived behavioral control	Attitude	Intention	Past compliant behavior
Autonomous motivation		.41***	.45***	.66***	.70***	.60***
Subjective norm			.41***	.39***	.47***	.24**
Perceived behavioral control				.58***	.65***	.41***
Attitude					.72***	.36***
Intention						.46***



Past compliant behavior						
<i>Mean</i>	5.75	4.55	5.59	5.20	5.55	5.31
<i>SD</i>	1.12	1.71	1.15	1.27	1.55	1.28

*** $p < .001$; ** $p < .01$

Table 1 shows that in general, the relationships among past compliant behavior, the three TPB socio-cognitive factors (i.e., attitude, subjective norm, and perceived behavioral control), SDT's autonomous motivation, and intention were in the predicted direction. Past compliant behavior and greater autonomous motivation were associated with more positive attitude as well as higher perceived subjective norm and perceived behavioral control. Furthermore, both past compliant behavior and autonomous motivation were positively correlated with the intention to exercise physical distancing in the following month.

Table 2. Hierarchical regression analysis predicting intention to comply with physical restrictions using an integration of TPB and SDT

Outcome	Step	Predictors	ΔR^2	Total R^2	Final beta
Intention to comply with physical distancing	1	Past compliance behavior	.20***	.20	.55***
	2	Attitude	.43***	.62	.56***
		Subjective norm			.14*
		Perceived behavioral control			.35**
	3	Autonomous motivation	.04***	.68	.45***

*** $p < .001$; ** $p < .01$; * $p < .05$

The results of the hierarchical regression analysis are presented in Table 2. Past compliant behaviors were entered as a predictor at Step 1 and could explain 20.82% of the variance of intention to comply with physical distancing. In Step 2, the three TPB factors contributed an 42.93% increase in the total variance explained, so the model explained a total of 63.76% variance. After taking the role of the three TPB factors into account, the role of past compliant behavior was still significant ($\beta = .18$; $t = 2.34$; $p = .02$). At Step 3, the inclusion of autonomous motivation as a predictor increased the total variance explained by 4.27%, so the total explained variances became 68.02%. In this final model, intention to comply with physical distancing was significantly predicted by attitude (Hypothesis 1a: $\beta = .37$; $t = 3.70$; $p < .001$), perceived behavioral control (Hypothesis 1c: $\beta = .38$; $t = 3.91$; $p < .001$), and autonomous motivation (Hypothesis 2: $\beta = .45$; $t = 3.80$; $p < .001$). After accounting for the role of autonomous motivation, intention was no longer predicted by subjective norm (Hypothesis 1b: $\beta = .10$; $t = 1.71$; $p = .09$) or past compliant behavior (Hypothesis 3: $\beta = .02$; $t = .21$; $p = .83$).

DISCUSSION

This study integrated the perspective of TPB and (SDT) to map predictors of intention to comply with physical distancing protocols during the COVID-19 pandemic. In general, it can be concluded that, in line with the hypotheses, the attitude and perceived behavioral control factors from TPB and the autonomous motivation from SDT contributed to intention to comply. However, the predictive powers of subjective norm and past compliant behavior variable were not significant.

The significant role of the first predictor, i.e., attitude, is in line with many previous meta-analyses that concluded attitude as the main determinant of intention (Ajzen, 2020). A previous study involving Indonesian students found that, as compared to students with negative attitudes, those with positive attitudes were twice as likely to exercise COVID-19 preventive behaviors (Linawati et al., 2021).

Furthermore, perceived behavioral control was also found to be a significant predictor. According to TPB, this factor refers to an individual's belief in their ability to perform certain behaviors and their

perceptions about their opportunities to perform these behaviors (Ajzen, 1991). When intention is coupled with strong perceived behavioral control, actual behavior will be more likely to occur as compared to when the individual has weak perceived behavioral control (Ajzen, 2020).

On the other hand, the third factor in TPB, i.e., subjective norm, could not predict intention to comply with physical distancing. Interestingly, this finding is consistent with a previous study among Indonesian university students which focused on the contribution of the three socio-cognitive factors of TPB to intention to implement health protocols in general. In that study, however, the role of SDT's autonomous motivation and past compliant behavior was not taken into account (Fuady et al., 2021). In a meta-analysis, the weak predictive power of subjective norm in comparison with the other TPB factors was thought to be related to measurement issues and the need for improvements in the normative component of this factor (Armitage & Conner, 2001). Apart from this issue, the finding of this study may imply that subjective norm is actually not a key factor in shaping compliance. The sources of these normative beliefs are generally individuals or groups, from whom approvals and prohibitions are used as the standards for behaviors (Fishbein & Ajzen, 2010). Therefore, in order to develop an intention to comply with the physical distancing protocol during the pandemic, it is not enough to merely use public figures such as community leaders, political figures, and influencers.

Moreover, this study highlighted the importance of autonomous motivation in predicting intentions to perform physical distancing in the future. Autonomous motivation is distinct from controlled motivation. In controlled motivation, a behavior is maintained as long as there is recognition from external parties or when one avoids feeling guilty for not performing the expected behavior (Deci & Ryan, 1985). An experiment conducted by the Psychological Science Accelerator Self-Determination Theory Collaboration (2022) in 89 different countries found that controlled motivation was associated with more non-compliance and lower long-term intention to comply with physical distancing, whereas autonomous motivation was associated with less disobedience as well as with high short and long-term intention to comply with physical distancing. Consequently, efforts to promote compliance with physical distancing would become less effective when it was solely based on external rewards or shame and guilt-evoking messages. On the contrary, it is considered more effective to promote the expected behavior as having positive personal values (e.g., "I do physical distancing because I want to be healthy") and as having relevance to aspects of one's life (e.g., "I do physical distancing as a tradition that is respected by family"). Individuals who are in an environment that supports autonomy will be able to identify themselves with the values of that environment, then internalize physical distancing behavior during a pandemic. Autonomous motivation was also found to be negatively associated with boredom that arose due to physical distancing during the implementation of online learning (Benneker et al., 2023).

Interestingly, past compliance to physical distancing protocol no longer significantly predicted intentions to comply with physical distancing in the future when viewed from the integrated perspective of TPB and SDT. Bias on the individual level allows for variations in future behavior. For example, among individuals who feel that they have complied with the protocol well but still get an infection compliance may deteriorate as that behavior may no longer be regarded as useful. Meanwhile, for those who have never been infected, there are two possibilities: maintaining the compliant behavior or rather relaxing it as the situation has become perceived as safe.

CONCLUSIONS

This study found that autonomous motivation to fulfil the need for self-determination, together with positive attitude towards physical distancing and low perceived difficulties in complying with such protocol, predicted intention to implement physical distancing during the COVID-19 pandemic. Once the role of autonomous motivation was accounted for, the contribution of past physical distancing behavior

and subjective norm based on the influence of significant figures for the individuals was no longer significant in predicting compliance.

Future studies need to be conducted on populations other than students as the findings of this study might not be generalizable to them. As this study is cross-sectional with only one measurement, longitudinal studies are warranted to investigate whether intention to comply with physical distancing is indeed manifested. Despite the limitations of this study, the findings can be used as input for health promotion programs, especially regarding the development of physical distancing protocols for communities with very strong levels of social interaction.

Jaga Jarak, Jauhi Kerumunan! Antara Kepatuhan Lampau, Motivasi, Niat Terhadap Protokol Pembatasan Fisik

Kelestarian suatu keteraturan sangat bergantung kepada partisipasi unsur yang terlibat. Salah satu elemen penyangganya ialah kepatuhan. Di antara sistem yang membutuhkan kepatuhan, ranah kesehatan berada di urutan prioritas. Di masa pandemi, situasi semakin memburuk apabila kepatuhan diabaikan (Hills & Eraso, 2021). Virus bersifat konstan multiplikatif, sedangkan variabel yang mampu menaikturunkan laju penularan terletak pada perilaku manusia. Artinya, perilaku manusia yang terkendali ekuivalen dengan pengendalian penularan. Di sisi lain, secara fungsi dasar proses mental, sikap menolak untuk patuh adalah fungsi pertahanan diri (Bruce & Miller, 2020). Maka dari itu, pemahaman mendasar tentang kepatuhan menjadi krusial supaya penanganan dapat berjalan efektif.

Penelitian ini menelisik tentang kepatuhan terhadap protokol kesehatan di masa pandemi COVID-19, khususnya pembatasan fisik. Di Indonesia, pembatasan fisik mewajibkan individu untuk menjaga jarak minimal satu meter dan menghindari kerumunan (Kementerian Kesehatan Republik Indonesia, 2020). Di antara protokol kesehatan, peneliti menduga bahwa masyarakat Indonesia sulit untuk menerapkan pembatasan dikarenakan tingkat interaksi sosial yang sangat kuat. Indonesia memiliki banyak acara sosiokultural, diantaranya kelahiran bayi, sunatan, pernikahan, sampai upacara kematian, yang mana menimbulkan kerumunan, dari sinilah peran sosial terdefiniskan. Dalam situasi pandemi COVID-19, kebiasaan ini akan kontraproduktif. Survei Badan Pusat Statistik terhadap lebih dari 65 ribu partisipan menemukan bahwa enam bulan setelah pandemi COVID-19, hanya 73,54% responden yang menerapkan protokol jaga jarak minimal 1 meter, 76,69% sering/selalu menghindari kerumunan; padahal tingkat kepatuhan dalam memakai masker hampir 92% (Badan Pusat Statistik, 2020).

Mengutip pernyataan Ketua Bidang Perubahan Perilaku Satuan Tugas COVID-19, Dr. Sonny Harry B Harmadi, sekadar patuh tidaklah cukup, karena untuk mengawal konsistensi perilaku, harus ada kesadaran akan alasan dari pentingnya perubahan perilaku (Satuan Tugas Penanganan COVID-19, 2021). Sebagai kontribusi psikologis untuk meratakan kurva penularan, beberapa variabel pembentuk kepatuhan terhadap pembatasan fisik diuji melalui penelitian ini berdasarkan integrasi konsep-konsep utama *Theory of Planned Behaviour* (Ajzen, 1991) dan *Self-Determination Theory* (Deci & Ryan, 1985).

Menurut TPB, semakin kuat niat, semakin besar kecenderungan individu untuk menampilkan perilaku aktual (Ajzen, 2020). Niat menunjukkan sejauh mana kesediaan seseorang untuk mencoba, serta seberapa keras usahanya untuk menampilkan perilaku. Meskipun perilaku seseorang di masa lampau umumnya berkorelasi dengan niat untuk mengulang perilaku serupa, nilai prediksi perilaku lampau ini tidak konsisten (Conner & Armitage, 1998). Dalam TPB, niat dirumuskan sebagai fungsi dari tiga faktor; evaluasi positif atau negatif terhadap performa perilaku (sikap), persepsi atas peran yang dimiliki oleh figur signifikan terhadap eksekusi perilaku (norma subjektif), dan persepsi terhadap derajat kesulitan suatu perilaku (persepsi kontrol perilaku). Sebagaimana ditarik kesimpulan dari tiga studi meta-analisis, ketiga faktor sosial-kognitif ini dapat memprediksi 44% – 53% niat untuk menampilkan perilaku (Abamecha & Tena, 2020).

Perspektif TPB sedikitnya memiliki dua keterbatasan, yaitu tidak diperhitungkannya kontribusi kognitif yang bersifat lebih umum terhadap ketiga variabel TPB, serta diabaikannya keberadaan motivasi umum sebagai sumber informasi terhadap pembentukan niat (Hagger dkk., 2002). Menurut SDT, TPB mampu menjawab pertanyaan “apa” tentang konten dari tujuan yang ingin dicapai individu, namun gagal menjelaskan tentang proses regulasi diri individu yang memunculkan niat untuk menampilkan perilaku tertentu (Deci & Ryan, 2000). Dari sini lah kemudian berkembang proposal dari SDT yang memandang niat sebagai refleksi dari kekuatan relatif motivasi otonom individu untuk terlibat dalam perilaku tersebut. Proses regulasi diri yang bersumber dari motivasi otonom lebih konsisten karena individu

menilai aktivitas tersebut sebagai sesuatu yang penting, bernilai, dan bermanfaat secara personal, sebagai bagian dari diri, serta karena rasa senang dan puas terhadap aktivitas itu sendiri. Sejalan dengan hal ini, meta-analisis menyimpulkan bahwa peningkatan motivasi otonom dapat mengakibatkan perubahan perilaku target intervensi di bidang kesehatan (Sheeran dkk., 2021).

Secara keseluruhan, penelitian ini bertujuan untuk mengetahui apakah niat dalam mematuhi protokol pembatasan fisik dapat diprediksi oleh ketiga faktor sosial-kognitif TPB berupa (a) sikap (Hipotesis 1a), (b) norma subjektif (Hipotesis 1b), dan (c) persepsi kontrol perilaku (Hipotesis 1c), motivasi otonom berdasarkan SDT (Hipotesis 2), serta perilaku kepatuhan terhadap pembatasan fisik di masa lampau setelah memperhitungkan peran ketiga faktor sosial-kognitif dari TPB dan motivasi otonom berdasarkan SDT (Hipotesis 3). Target partisipan penelitian ini adalah mahasiswa, dengan pertimbangan bahwa usia mahasiswa adalah kelompok usia yang paling terdampak secara emosional selama pandemi COVID-19 dibandingkan kelompok usia lainnya (Twenge & Joiner, 2020). Bagi mahasiswa, masalah emosional selama pandemi bersumber dari beragam faktor, seperti pembatalan acara yang dianggap penting, relasi personal yang memburuk, kondisi finansial yang menurun, sampai kurangnya aktivitas fisik (Chen & Lucock, 2022). Bahkan dua tahun setelah pandemi, para mahasiswa masih melaporkan masalah kesehatan mental seperti rasa takut dan tingkat stres yang tinggi serta masalah akademis berupa kualitas pembelajaran yang rendah (Hu dkk., 2022).

METODE

Desain dan Partisipan

Desain penelitian ini bersifat kuantitatif korelasional. Partisipan penelitian adalah mahasiswa S1 yang direkrut menggunakan *convenience sampling* melalui media sosial peneliti. Berdasarkan perhitungan G*Power v. 3.1 (Faul dkk., 2007) menggunakan Linear Multiple Regression Fixed Model R^2 increase dengan parameter alpha level 0,05 dan power 0,80, jumlah sampel minimal untuk lima prediktor (perilaku kepatuhan lampau, motivasi otonom, sikap, norma subjektif, dan persepsi kontrol perilaku) adalah 92 (*medium effect*: $f^2 = 0,15$). Sejumlah 131 mahasiswa menyatakan kesediaan untuk mengikuti survei daring, dan 114 di antaranya memberikan jawaban lengkap (87,02%). Pengambilan data dilakukan pada saat pandemi COVID-19 yaitu bulan Juni 2021.

Pengukuran

Instrumen yang digunakan dalam penelitian ini adalah skala *Theory of Planned Behaviour* (TPB), skala motivasi otonom dalam *Self-Determination Theory* (SDT), dan skala perilaku kepatuhan lampau yang disusun oleh Chan dkk. (2015). Skala-skala ini telah diadaptasi dalam Bahasa Indonesia oleh Chan dkk. (2020) dan Yusainy dkk. (2019) untuk konteks aktivitas fisik mahasiswa. Dalam menyesuaikan konteks penelitian ini, peneliti memodifikasi skala berdasarkan panduan modifikasi pengukuran TPB dari Hagger (2019). Elemen kunci yang dimodifikasi peneliti adalah definisi pembatasan fisik sebagai “jaga jarak fisik antar individu dengan cara mengatur jaga jarak minimal satu meter dan menghindari kerumunan” (Kementerian Kesehatan Republik Indonesia, 2020). Skala modifikasi ini diujicobakan kepada tiga penilai. Hasil uji coba mengonfirmasi kejelasan redaksional informasi dan instruksi, kemudahan dalam memahami kalimat yang disajikan, serta tata letak tampilan dari survei daring.

Izin untuk melakukan penelitian ini diperoleh dari Komite Etik instansi asal peneliti. Pada tampilan survei, setelah memberikan *informed consent* dan mengisi data demografis, partisipan disajikan skala dari TPB, SDT, serta skala perilaku kepatuhan lampau terhadap pembatasan fisik. *Debrief* diberikan via email setelah seluruh data terkumpul.

Dalam penelitian ini, partisipan memberikan nilai dalam skala Likert 7-poin (0 = *sangat tidak setuju* dan 7 = *sangat setuju*) untuk variabel niat (3 butir; contoh, “Saya berniat untuk melakukan pembatasan fisik

di bulan selanjutnya.”), norma subjektif (3 butir; contoh, “Kebanyakan orang yang dekat dengan saya berpikir bahwa saya harus melakukan pembatasan fisik di bulan selanjutnya.”), dan persepsi kontrol perilaku (3 butir; contoh, “Jika saya mau, saya bisa melakukan pembatasan fisik di bulan selanjutnya.”), Khusus variabel sikap, pernyataan yang diajukan (5 butir) selalu sama yaitu, “Melakukan aktivitas fisik yang cukup di bulan selanjutnya bagi saya akan...” dengan variasi penilaian dalam skala Likert 7-poin (0 = *sangat merugikan/sangat tidak menyenangkan/sangat tidak berharga/sangat buruk/sangat tidak mengasyikkan* dan 7 = *sangat menguntungkan/sangat menyenangkan/sangat berharga/sangat baik/sangat mengasyikkan*). Dalam penelitian ini diperoleh reliabilitas α Cronbach sebesar masing-masing 0,97 (variabel niat), 0,89 (norma subjektif), dan 0,80 (persepsi kontrol perilaku).

Untuk skala motivasi otonom berdasarkan SDT, partisipan memberikan nilai dalam skala Likert 7-poin (1 = *sangat tidak benar* dan 7 = *sangat benar*) tentang motivasi otonom untuk melakukan pembatasan fisik (6 butir; contoh, “Saya ingin melakukan pembatasan fisik karena saya merasa ingin bertanggung jawab atas kesehatan saya sendiri.”). Semakin tinggi nilai rerata motivasi otonom, semakin tinggi determinasi diri individu untuk terlibat dalam pembatasan fisik. Nilai reliabilitas α Cronbach untuk skala motivasi otonom sebesar 0,93.

Sesuai dengan skala terdahulu untuk mengukur perilaku kepatuhan lampau, target waktu dibatasi berupa perilaku kepatuhan terhadap pembatasan fisik selama dua minggu terakhir. Partisipan memberikan nilai dalam skala Likert 7-poin untuk satu butir pernyataan mengenai frekuensi perilaku (1 = *tidak pernah* dan 7 = *sangat sering*) dan satu butir pernyataan mengenai usaha untuk menampilkan perilaku (1 = *usaha minimal* dan 7 = *usaha maksimal*). Semakin tinggi skor rerata kedua butir ini, semakin adekuat perilaku pembatasan fisik partisipan. Nilai reliabilitas α Cronbach untuk skala perilaku kepatuhan lampau sebesar 0,88.

Analisis Data

Model diuji dengan analisis regresi hierarki untuk mengetahui apakah niat untuk mematuhi pembatasan fisik dapat diprediksi oleh ketiga faktor sosial-kognitif dari *Theory of Planned Behaviour* (TPB) berupa (a) sikap (Hipotesis 1a), (b) norma subjektif (Hipotesis 1b), dan (c) persepsi kontrol perilaku (Hipotesis 1c), motivasi otonom berdasarkan *Self-Determination Theory* (SDT: Hipotesis 2), dan perilaku kepatuhan terhadap pembatasan fisik di masa lampau setelah memperhitungkan peran peran ketiga faktor sosial-kognitif dari TPB dan motivasi otonom berdasarkan SDT (Hipotesis 3).

HASIL PENELITIAN

Total partisipan final adalah 114 mahasiswa, terdiri dari 71 perempuan (62,3%) dan 43 laki-laki (37,7%), dengan rerata usia 21,69 tahun ($SD = 2,19$).

Tabel 1. Korelasi antar skala integrasi *Theory of Planned Behaviour* (TPB) dan *Self-Determination Theory* (SDT)

Skala	Motivasi otonom	Norma subjektif	Persepsi kontrol perilaku	Sikap	Niat	Perilaku kepatuhan lampau
Motivasi otonom		0,41***	0,45***	0,66***	0,70***	0,60***
Norma subjektif	0,41***		0,41***	0,39***	0,47***	0,24**
Persepsi kontrol perilaku	0,45***	0,41***		0,58***	0,65***	0,41***
Sikap	0,66***	0,39***	0,58***		0,72***	0,36***
Niat	0,70***	0,47***	0,65***	0,72***		0,46***

Perilaku kepatuhan lampau	0,60***	0,24*	0,41***	0,36***	0,456***	
Mean	5,75	4,55	5,59	5,20	5,55	5,31
SD	1,12	1,71	1,15	1,27	1,55	1,28

Ket. *** $p < 0,001$; ** $p < 0,01$

Data pada Tabel 1 menunjukkan bahwa secara umum, keterkaitan antara perilaku kepatuhan lampau, tiga faktor sosial-kognitif TPB (sikap, norma subjektif, dan persepsi kontrol perilaku), motivasi otonom berdasarkan SDT, dan niat sesuai dengan arah yang yang diprediksikan Peneliti. Perilaku kepatuhan lampau dan motivasi otonom sama-sama memiliki asosiasi dengan sikap, norma subjektif, dan persepsi kontrol perilaku yang lebih tinggi. Lebih jauh, perilaku kepatuhan lampau dan motivasi otonom juga memiliki korelasi positif dengan niat untuk menampilkan pembatasan fisik di bulan selanjutnya.

Tabel 2. Analisis regresi hierarki niat untuk mematuhi pembatasan fisik berdasarkan integrasi *Theory of Planned Behaviour* (TPB) dan *Self-Determination Theory* (SDT)

Kriteria	Step	Prediktor	ΔR^2	Total R^2	Final beta
Niat mematuhi pembatasan fisik	1	Perilaku kepatuhan lampau	0,20***	0,20	0,55***
	2	Sikap	0,43***	0,62	0,56***
		Norma subjektif			0,14*
		Persepsi kontrol perilaku			0,35**
	3	Motivasi otonom	0,04***	0,68	0,45***

Ket. *** $p < 0,001$; ** $p < 0,01$; * $p < 0,05$

Hasil analisis regresi hierarki dengan variabel kriteria berupa niat untuk mematuhi pembatasan fisik dari prediktor perilaku kepatuhan lampau, tiga faktor sosial-kognitif TPB (sikap, norma subjektif, dan persepsi kontrol perilaku), dan motivasi otonom SDT disajikan pada Tabel 2. Perilaku kepatuhan lampau dimasukkan sebagai prediktor pada Step 1 dan dapat memprediksi 20,82% varians niat untuk mematuhi pembatasan fisik. Pada Step 2, ketiga faktor TPB memberikan sumbangan varians yang terjelaskan sebesar 42,93% sehingga prediksi R^2 meningkat menjadi 63,76%. Setelah memperhitungkan peran ketiga faktor TPB, peran perilaku kepatuhan lampau masih signifikan ($\beta = 0,18$; $t = 2,34$; $p = 0,02$). Pada Step 3, motivasi otonom SDT meningkatkan penjelasan varians sebesar 4,27% sehingga prediksi R^2 menguat menjadi 68,02%. Pada model final ini, niat untuk mematuhi pembatasan fisik diprediksi oleh sikap (Hipotesis 1a: $\beta = 0,37$; $t = 3,70$; $p < 0,001$), persepsi kontrol perilaku (Hipotesis 1c: $\beta = 0,38$; $t = 3,91$; $p < 0,001$), dan motivasi otonom (Hipotesis 2: $\beta = 0,45$; $t = 3,80$; $p < 0,001$). Setelah memperhitungkan peran motivasi otonom, niat tidak lagi diprediksi oleh norma subjektif (Hipotesis 1b: $\beta = 0,10$; $t = 1,71$; $p = 0,09$) maupun perilaku kepatuhan lampau (Hipotesis 3: $\beta = 0,02$; $t = 0,21$; $p = 0,83$).

DISKUSI

Penelitian ini menggunakan perspektif integrasi *Theory of Planned Behaviour* (TPB) dan *Self-Determination Theory* (SDT) untuk memetakan prediktor terhadap niat mematuhi protokol pembatasan fisik di masa pandemi COVID-19. Secara umum dapat disimpulkan bahwa sejalan dengan prediksi, variabel sikap dan persepsi kontrol perilaku dari TPB serta variabel motivasi otonom dari SDT memiliki peran terhadap variabel niat untuk patuh. Meskipun demikian, nilai prediksi variabel norma subjektif dari TPB maupun variabel perilaku kepatuhan di masa lampau terhadap variabel niat tidak signifikan.

Signifikansi peran faktor pertama yaitu sikap sejalan dengan banyaknya meta-analisis terdahulu yang menyimpulkan sikap sebagai determinan utama bagi niat (Ajzen, 2020). Studi sebelumnya dengan partisipan mahasiswa di Indonesia menemukan bahwa, dibandingkan mahasiswa dengan sikap negatif,

mahasiswa dengan sikap positif berpeluang dua kali lebih tinggi untuk melakukan perilaku pencegahan COVID-19 (Linawati dkk., 2021). Peran faktor kedua, yaitu persepsi kontrol perilaku juga signifikan. Seturut dengan premis TPB, persepsi kontrol perilaku adalah keyakinan individu akan kemampuannya menampilkan perilaku tertentu serta persepsi terhadap kesempatan yang ia miliki untuk menampilkan perilaku tersebut (Ajzen, 1991). Kombinasi antara niat dan persepsi kontrol perilaku yang kuat akan meningkatkan kecenderungan ditampilkannya perilaku aktual, dibandingkan dengan apabila individu memiliki persepsi kontrol perilaku lemah (Ajzen, 2020).

Di sisi lain, faktor ketiga dalam TPB yaitu norma subjektif tidak dapat memprediksi niat mematuhi pembatasan fisik. Menariknya, pola temuan ini konsisten dengan penelitian sebelumnya terhadap mahasiswa di Indonesia yang berfokus pada peran ketiga faktor sosial-kognitif TPB terhadap intensi menerapkan protokol kesehatan secara umum, meskipun dalam riset tersebut peran variabel motivasi otonom SDT dan perilaku kepatuhan lampau belum diperhitungkan (Fuady dkk., 2021). Dalam meta-analisis TPB, lemahnya nilai prediktif norma subjektif dibandingkan variabel TPB lainnya diduga berkaitan dengan masalah pengukuran maupun perlunya perbaikan dalam komponen normatif variabel tersebut (Armitage & Conner, 2001). Terlepas dari kemungkinan tersebut, implikasi dari temuan ini adalah norma subjektif bukan merupakan faktor kunci dalam menciptakan kepatuhan. Sumber dari keyakinan normatif ini pada umumnya adalah individu atau kelompok, dimana persetujuan dan larangan dijadikan patokan bagi tampilnya suatu perilaku tertentu (Fishbein & Ajzen, 2010). Maka, untuk menciptakan niat mematuhi protokol pembatasan fisik di masa pandemi ini tidak cukup sekadar memosisikan figur publik seperti pemuka masyarakat, tokoh politik, sampai *influencer* dalam mengintervensi perilaku yang diharapkan.

Lebih jauh, penelitian ini menggarisbawahi pentingnya keberadaan variabel motivasi otonom berdasarkan SDT terhadap niat individu untuk mencoba serta berusaha keras melakukan pembatasan fisik di masa yang akan datang. Motivasi otonom berbeda dengan motivasi terkontrol. Pada motivasi terkontrol, suatu perilaku dipertahankan selama ada pengakuan dari pihak eksternal maupun untuk menghindari rasa bersalah apabila individu tidak melakukan aktivitas tersebut (Deci & Ryan, 1985). Eksperimen lintas 89 negara oleh Psychological Science Accelerator Self-Determination Theory Collaboration (2022) menemukan bahwa motivasi terkontrol berasosiasi dengan lebih banyaknya ketidakpatuhan dan rendahnya niat jangka panjang untuk mematuhi pembatasan fisik, sedangkan motivasi otonom berasosiasi dengan lebih sedikitnya ketidakpatuhan serta tingginya niat jangka pendek dan jangka panjang untuk mematuhi pembatasan fisik. Sebagai implikasi dari signifikannya peran motivasi otonom, promosi peningkatan kepatuhan pembatasan fisik menjadi kurang efektif jika semata-mata didasarkan pada pemberian penghargaan maupun pesan yang membangkitkan emosi malu dan rasa bersalah. Sebaliknya, promosi konteks motivasi untuk menampilkan perilaku yang dianggap memiliki nilai positif dan berharga (contoh: Saya melakukan pembatasan fisik karena saya ingin sehat) serta terkait dengan nilai dan perilaku lain dalam berbagai domain kehidupan (contoh: Saya melakukan pembatasan fisik sebagai tradisi yang dihormati oleh keluarga) menjadi lebih efektif. Individu yang berada pada lingkungan yang mendukung otonomi akan mampu mengidentifikasi dirinya dengan nilai-nilai dari lingkungan tersebut, kemudian melakukan internalisasi terhadap perilaku pembatasan fisik di masa pandemi. Motivasi otonom juga berasosiasi negatif dengan perasaan jenuh yang muncul akibat pembatasan fisik selama periode pembelajaran daring (Benneker dkk., 2023).

Menariknya, perilaku kepatuhan terhadap pembatasan fisik di masa lampau tidak lagi signifikan dalam memprediksi niat untuk mematuhi pembatasan fisik di masa yang akan datang setelah ditinjau dari perspektif integrasi TPB dan SDT. Bias pada level individual memungkinkan terjadinya variasi perilaku di masa depan. Misalnya, pada individu yang merasa telah mematuhi protokol dengan baik namun tetap terkena infeksi, maka individu ini mungkin melonggarkan perilaku kepatuhan selanjutnya karena dianggap sebagai hal yang kurang bermanfaat. Sementara itu, pada individu yang sampai saat ini tidak

pernah terinfeksi, terdapat dua peluang perilaku; mempertahankan perilaku lama, atau justru melonggarkan batasan karena selama ini terbukti aman.

SIMPULAN

Melalui penelitian ini, peneliti menemukan bahwa motivasi otonom untuk memenuhi kebutuhan determinasi diri, dikombinasikan dengan sikap positif terhadap protokol pembatasan fisik dan rendahnya persepsi individu terhadap derajat kesulitan mematuhi protokol ini sama-sama memprediksi niat untuk menampilkan perilaku pembatasan fisik selama pandemi COVID-19. Setelah peran motivasi otonom diperhitungkan, kontribusi dari perilaku kepatuhan pembatasan fisik di masa lampau dan norma subjektif yang didasarkan pada pengaruh figur signifikan bagi individu tidak lagi memprediksi niat untuk patuh.

Penelitian selanjutnya perlu dilakukan terhadap populasi komunitas di luar kelompok mahasiswa karena temuan yang dihasilkan dari penelitian ini tidak dapat digeneralisasi. Pengambilan data penelitian ini dilakukan hanya satu kali dengan menggunakan dasar perilaku kepatuhan lampau, sehingga diperlukan penelitian lanjutan untuk mengetahui sejauh mana niat mematuhi pembatasan fisik benar-benar ditampilkan dalam bentuk perilaku. Terlepas dari keterbatasan yang ada, hasil penelitian ini dapat dimanfaatkan sebagai masukan bagi program promosi kesehatan, terutama terkait protokol pembatasan fisik dalam konteks masyarakat dengan tingkat interaksi sosial yang sangat kuat.

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DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST / DEKLARASI POTENSI TERJADINYA KONFLIK KEPENTINGAN

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REFERENCES / PUSTAKA ACUAN

- Abamecha, F., & Tena, A. (2020). Effect of past behavioral experience on intention to use cervical cancer screening services among women in resources poor settings of Ethiopia: Applicability of theory of planned behavior [Preprint]. In Review. <https://doi.org/10.21203/rs.3.rs-20979/v1>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4), 314–324. <https://doi.org/10.1002/hbe2.195>
- Armitage, C. J., & Conner, M. (2001). Efficacy of the Theory of Planned Behaviour: A meta-analytic review. *British Journal of Social Psychology*, 40(4), 471–499. <https://doi.org/10.1348/014466601164939>
- Badan Pusat Statistik. (2020). Perilaku masyarakat di masa pandemi COVID-19. <https://www.bps.go.id/publication/2020/09/28/f376dc33cfcdeec4a514f09c/perilaku-masyarakat-di-masa-pandemi-covid-19.html>



- Benneker, I. M. B., Lee, N. C., & van Atteveldt, N. (2023). Mindset and perceived parental support of autonomy safeguard adolescents' autonomous motivation during COVID-19 home-based learning. *Npj Science of Learning*, 8(1), 4. <https://doi.org/10.1038/s41539-023-00153-2>
- Bruce, L., & Miller, M. D. (2020). Science Denial and COVID Conspiracy Theories: Potential Neurological Mechanisms and Possible Responses. *JAMA*, 324(22), 2255. <https://doi.org/10.1001/jama.2020.21332>
- Chan, D. K. C., Ivarsson, A., Yang, X. S., Stenling, A., & Hagger, M. S. (2015). General response tendency moderates the construct validity and predictive power of motivation and intention of health behaviours? A randomised controlled trial. Paper presented at the Annual Conference of Australasian Society of Behavioural Health and Medicine. Perth, Australia. <http://derwinchan.iwopop.com/TSRQ-Adequate-Physical-Activity>
- Chan, D. K. C., Stenling, A., Yusainy, C., Hikmiah, Z., Ivarsson, A., Hagger, M. S., Rhodes, R. E., & Beauchamp, M. R. (2020). Editor's Choice: Consistency tendency and the theory of planned behavior: a randomized controlled crossover trial in a physical activity context. *Psychology & Health*, 35(6), 665–684. <https://doi.org/10.1080/08870446.2019.1677904>
- Chen, T., & Lucock, M. (2022). The mental health of university students during the COVID-19 pandemic: An online survey in the UK. *PLOS ONE*, 17(1), e0262562. <https://doi.org/10.1371/journal.pone.0262562>
- Conner, M., & Armitage, C. J. (1998). Extending the Theory of Planned Behavior: A Review and Avenues for Further Research. *Journal of Applied Social Psychology*, 28(15), 1429–1464. <https://doi.org/10.1111/j.1559-1816.1998.tb01685.x>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Springer US. <https://doi.org/10.1007/978-1-4899-2271-7>
- Deci, E. L., & Ryan, R. M. (2000). The “What” and “Why” of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175–191. <https://doi.org/10.3758/BF03193146>
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach* (hlm. xix, 518). Psychology Press.
- Fuady, I., Yusnita, T. Y., & Prasati, D. (2021). Faktor-faktor yang mempengaruhi intensi mahasiswa dalam penerapan protokol kesehatan dalam pencegahan penularan COVID 19. *Window of Health: Jurnal Kesehatan*, 4(2), 116–124.
- Hagger, M. S. (2019). *The Reasoned Action Approach and the Theories of Reasoned Action and Planned Behavior*. Dalam M. S. Hagger, *Psychology*. Oxford University Press. <https://doi.org/10.1093/obo/9780199828340-0240>
- Hagger, M. S., Chatzisarantis, N. L. D., & Biddle, S. J. H. (2002). A Meta-Analytic Review of the Theories of Reasoned Action and Planned Behavior in Physical Activity: Predictive Validity and the Contribution of Additional Variables. *Journal of Sport and Exercise Psychology*, 24(1), 3–32. <https://doi.org/10.1123/jsep.24.1.3>
- Hills, S., & Eraso, Y. (2021). Factors associated with non-adherence to social distancing rules during the COVID-19 pandemic: A logistic regression analysis. *BMC Public Health*, 21(1), 352. <https://doi.org/10.1186/s12889-021-10379-7>

- Hu, K., Godfrey, K., Ren, Q., Wang, S., Yang, X., & Li, Q. (2022). The impact of the COVID-19 pandemic on college students in USA: Two years later. *Psychiatry Research*, 315, 114685. <https://doi.org/10.1016/j.psychres.2022.114685>
- Kementerian Kesehatan Republik Indonesia. (2020). Pedoman Pencegahan dan Pengendalian Coronavirus Disease (COVID-19). <https://covid19.kemkes.go.id/protokol-covid-19/kmk-no-hk-01-07-menkes-413-2020-ttg-pedoman-pencegahan-dan-pengendalian-covid-19>
- Linawati, H., Helmina, S. N., Intan, V. A., Oktavia, W. S., Rahmah, H. F., & Nisa, H. (2021). Pengetahuan, Sikap, dan Perilaku Pencegahan COVID-19 Mahasiswa. *Media Penelitian dan Pengembangan Kesehatan*, 31(2), 125–132. <https://doi.org/10.22435/mpk.v31i2.3456>
- Psychological Science Accelerator Self-Determination Theory Collaboration, Legate, N., Nguyen, T., Weinstein, N., Moller, A., Legault, L., Vally, Z., Tajchman, Z., Zsido, A. N., Zrimsek, M., Chen, Z., Ziano, I., Gialitaki, Z., Ceary, C. D., Jang, Y., Lin, Y., Kunisato, Y., Yamada, Y., Xiao, Q., ... Primbs, M. A. (2022). A global experiment on motivating social distancing during the COVID-19 pandemic. *Proceedings of the National Academy of Sciences*, 119(22), e2111091119. <https://doi.org/10.1073/pnas.2111091119>
- Satuan Tugas Penanganan COVID-19. (2021, September 1). Tak sekadar patuh, masyarakat harus sadar protokol kesehatan. <https://covid19.go.id/berita/tak-sekadar-patuh-masyarakat-harus-sadar-protokol-kesehatan>
- Sheeran, P., Wright, C. E., Avishai, A., Villegas, M. E., Rothman, A. J., & Klein, W. M. P. (2021). Does increasing autonomous motivation or perceived competence lead to health behavior change? A meta-analysis. *Health Psychology*, 40(10), 706–716. <https://doi.org/10.1037/hea0001111>
- Twenge, J. M., & Joiner, T. E. (2020). Mental distress among U.S. adults during the COVID-19 pandemic. *Journal of Clinical Psychology*, 76(12), 2170–2182. <https://doi.org/10.1002/jclp.23064>
- Yusainy, C., Chan, D. K. C., Hikmiah, Z., & Anggono, C. O. (2019). Physical activity in Indonesian University students: The contradictory roles of dispositional mindfulness and self-control. *Psychology, Health & Medicine*, 24(4), 446–455. <https://doi.org/10.1080/13548506.2018.1546015>