



# Adapting To Change: A Study Of Post-Pandemic Millennial Housing Preferences

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## ABSTRACT

The COVID-19 pandemic has fundamentally altered societal dynamics, particularly in the realm of residential preferences. This thesis investigates the shifting trends in post-pandemic housing preferences and their impact on residential decision-making. Key factors such as size, layout, amenities, location, outdoor spaces, and technological advancements are scrutinized to comprehend the shifting landscape of residential choices. The study reveals an increased emphasis on home office spaces and adaptable layouts as a response to the pandemic's transformative influence. It also highlights a growing inclination towards outdoor spaces like gardens and multi-function rooms due to the increasing trend of working at home during and after pandemic. Additionally, changing priorities in location selection and the rising importance of health-related aspects in home design are explored. Employing qualitative methods, the research conducts semi-structured interviews with eleven (11) diverse respondents to gain insights into post-COVID-19 house preferences and decision-making processes. The findings provide valuable guidance for real estate professionals, urban planners, and architects, aiding them in adjusting to the evolving needs and preferences of residents. Beyond academic realms, the study carries practical implications, contributing to the creation of innovative housing solutions aligned with changing preferences and responsive to post-pandemic societal demands. Ultimately, it seeks to inform policymakers and stakeholders, facilitating the development of sustainable residential environments that effectively address the evolving needs of individuals and communities in the aftermath of the COVID-19 pandemic.

## INTRODUCTION

The COVID-19 pandemic has triggered substantial shifts in residential decision-making and preferences (Muhyi & Adianto, 2021). Lockdowns, remote work, and distancing measures have

highlighted the importance of adaptable living spaces (Kurniawan et al, 2020). Emerging trends reveal a demand for dedicated home offices (McGee et al, 2023), creating functional and ergonomic work environments within homes (Khanwalkar and Dabir, 2022) private outdoor areas (Duarte et al, 2023), and a preference for suburban living (Gamal et al, 2023).

COVID-19 profoundly impacted Indonesia across healthcare, society, and the economy (Sparrow et al, 2020). The healthcare system strained under the caseload, exposing vulnerabilities and advocating for enhanced infrastructure (Mahendradhata et al., 2020). Societal shifts emphasized hygiene, prompting government-led initiatives (Sinuraya et al., 2023). However, disparities deepened for vulnerable groups (Samudra & Setyonaluri, 2020).

Globally, the pandemic induced economic recessions, necessitating substantial government intervention (Romer, 2020). Macro-level strategies involved fiscal policies and economic stimuli (Baldwin & Weder di Mauro, 2020). At a microeconomic scale, businesses faced closures, shifts to remote work, and a surge in digital transformations (Bartik et al., 2020). The pandemic accelerated e-commerce, online services, and automation, prompting a shift in traditional business models, necessitating businesses to grasp these changes for sustained competitiveness (Amankwah-Amoah et al, 2021).

The property and housing sector underwent significant changes, with governments implementing measures to prevent market collapses (OECD, 2020). Remote work trends led to increased demand for suburban properties while challenging commercial real estate (Dingel & Neiman, 2020). The commercial real estate sector encountered hurdles owing to diminished office space demand, a consequence of the widespread adoption of remote work (Barrero, Bloom, & Davis, 2020). Construction also faced disruptions, impacting costs and timelines (Colliers International, 2020). Despite setbacks, Indonesia's real estate market is projected to grow steadily, aligning with regional growth (Mordor Intelligence, 2023).

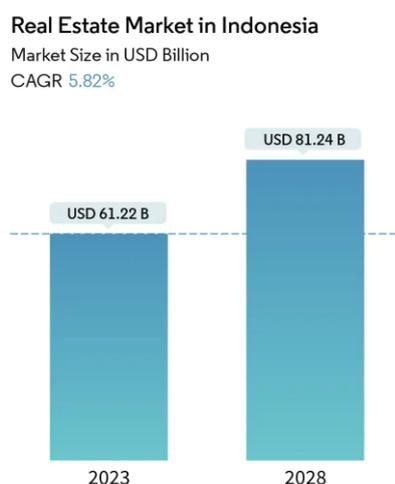


Figure I. Real Estate Market in Indonesia Market Size  
(Source: Mordor Intelligence - Real Estate Market In Indonesia Market Size 2023)

Indonesia's real estate sector displays growth potential but grapples with affordability issues (Ryu, 2022). Government initiatives like the 'One Million Houses' and foreign investments drive construction. Challenges persist, notably rising unemployment, urging proactive measures (Yanwardhana, 2021). Initiatives like the Housing Financing Liquidity Facility and BP Tapera aim to address housing needs for low-income individuals.

The COVID-19 pandemic has significantly impacted residential decision-making, emphasizing the importance of understanding evolving housing preferences (Nicola et al., 2020). As lockdowns and remote work arrangements altered daily routines, homes became focal points, revealing a research gap in comprehending these shifting trends (Bonaccorsi et al., 2020). This gap

poses risks for stakeholders like developers and policymakers, potentially leading to mismatches between housing supply and evolving demands. Previous studies primarily focused on employment, economic concerns, and socio-economic factors (Mahmud et al., 2020), neglecting empirical investigations into post-pandemic house preferences.

An in-depth analysis is crucial to comprehend factors like the demand for home office spaces and adaptable living environments (Nicola et al., 2020). This research aims to bridge this gap, providing insights to guide the housing industry in aligning strategies with evolving post-pandemic needs. The findings will contribute to a comprehensive understanding of the impact of the COVID-19 pandemic on residential decision-making and house preferences, offering valuable guidance for stakeholders to adapt their strategies and offerings in the dynamic post-pandemic era.

## LITERATURE REVIEW

### Housing Industry in Indonesia

Indonesia's housing industry serves as a linchpin in its rapidly advancing economy, mirroring urbanization, demographic shifts, and economic growth. This review navigates Indonesia's property sector, spotlighting challenges, trends, and future trajectories. Fueled by a burgeoning middle class and escalating urbanization, Indonesia's robust economic growth significantly influences its property market (Indonesia Investments, 2023). Yet, regulatory complexities and land acquisition hurdles persist, hindering industry expansion (Ohya, 2021).

The swift urbanization has spiked housing demands, especially in urban centers, revealing a stark gap between supply and demand (Setiawati, et al, 2020). Initiatives like the One Million Houses Program aim to narrow this breach by boosting affordable housing options (Purnamasari, 2021).

Sustainability has gained traction, advocating for green building integration and eco-friendly technologies to align with global environmental goals (Samosir, 2022). Government policies wield substantial influence, with research dissecting their impact on land ownership, taxation, and foreign direct investments, offering insights into market dynamics (Pasaribu et al, 2021).

Cultural norms significantly mold property preferences, shaping housing choices and community living, providing crucial socio-cultural insights (Marcén & Morales. 2018). Addressing affordable housing remains pivotal. Scholars evaluate government-driven initiatives and public-private partnerships, gauging their efficacy and societal impact (Asian Development Bank, 2020).

### Shift in House Preferences

The pandemic catalyzed a paradigm shift in housing preferences, driven by increased remote work, prolonged home stays, and the need for social distancing. This transformation sparked a surge in demand for specific features like dedicated home offices, outdoor spaces, and health-oriented amenities (Mischke, et al., 2023). As people adapt to a new work-life paradigm, the landscape of housing needs is experiencing a profound alteration.

The emergence of remote work as a viable alternative to office-based employment has altered lifestyles significantly. Allan and Miglani's survey (2020) in the Asia-Pacific region indicated the potential rise of a hybrid workplace due to work-from-home policies. While home offices offer flexibility and work-life balance, they cannot entirely replicate the social dynamics of a traditional office (Allan & Miglani, 2021).

Consequently, a hybrid future seems imminent, necessitating dedicated, conducive spaces at home for remote work while acknowledging the irreplaceability of traditional office environments. This shift underscores the importance of comprehending these changes for developers, architects, and policymakers to tailor their offerings and strategies accordingly.

Millennials' housing decisions significantly hinge on their lifestyle preferences. They prioritize convenience, proximity to amenities, and urban centers (Leblanc & Gensler, 2018). In Jakarta, this demographic increasingly seeks properties that offer flexible work and leisure spaces, integrating features like home offices, multi-functional rooms, and communal workspaces (The Jakarta Post, 2018). Additionally, sustainable and eco-friendly elements hold substantial importance in their housing choices (Wijayaningtyas et al., 2021).

Research on housing dynamics in Jakarta sheds light on factors guiding consumers' decisions and housing prices. Mulyano et al. (2020) emphasized location's pivotal role, stressing proximity to workplaces, schools, and adherence to zoning regulations. Design elements, developer reputation, physical attributes, and accessibility factors emerged as crucial considerations for potential buyers.

Price, a central determinant, is influenced by property value, affordability, income level, and market conditions. Enhanced facilities contribute to property desirability, affecting prices. The complexities of land ownership, including certificates and rights tied to different land uses, add layers to the house-buying process (Mulyano et al., 2020).

Rahadi et al. (2015) delved into the multifaceted aspects influencing housing prices from both consumers' and developers' perspectives. Consumers prioritized intangible factors like brand reputation and livability, while developers focused on tangible aspects such as physical qualities and strategic location. External factors, like loan rates and building material prices, also influenced housing costs, calling for government intervention to ensure market stability. Importantly, consumers actively evaluated housing products and developers, contributing to a comprehensive assessment of attributes (Rahadi et al., 2015).

### **COVID-19 Impact on Property Sector**

The COVID-19 pandemic has posed distinctive challenges for the housing industry, ushering in uncertainties regarding market demand, pricing, and consumer inclinations (Zeng & Yi, 2022). Stakeholders must grapple with evolving house preferences to ensure their offerings resonate with potential homebuyers while contending with potential disruptions in construction and supply chains (Farooq et al, 2022). Recognizing these challenges is pivotal for devising strategies to navigate risks effectively.

However, amidst challenges, the pandemic has stimulated innovation within the housing sector. Remote work's emergence has redefined office spaces, leading to the integration of home offices and coworking areas within residential settings (Winstonfield, 2023). Moreover, the amplified emphasis on health and wellness has underscored the significance of sustainable housing design and technology integration for enhanced living experiences (Wardani, 2021). Exploring these opportunities allows stakeholders to offer more desirable housing options amidst the evolving landscape.

Millennials exhibit a significant reliance on technology in their home buying journey. Online property searches, digital mortgage applications, and virtual home tours are prominent among this demographic (Zillow, 2021). Their preference extends to smart home features and connectivity, favoring technologically advanced properties (Rasyidah et al., 2021).

The pandemic has notably shaped millennials' housing preferences. With remote work's prevalence and a quest for improved work-life balance, demand for adaptable and functional home spaces has surged (Tleuken et al., 2022). Outdoor amenities such as gardens and balconies hold heightened importance as millennials aspire to craft personal, pleasant spaces within their homes (Wolday & Böcker, 2023).

Moreover, health and wellness features have gained prominence, with millennials seeking properties boasting ample ventilation, natural light, and access to green spaces (Tleuken et al., 2022). Studies by Amerio et al. (2020) and Alessandro et al. (2020) advocate larger, green-oriented

living spaces for improved well-being, recommending a minimum of 9 square meters of green space per individual (Russo and Cirella, 2018).

The pandemic-induced limitations on outdoor activities have fostered sedentary lifestyles and psychological challenges like increased stress, depression, and a sense of isolation (Zheng et al., 2020; Amerio et al., 2020; Mahmud et al., 2020). Restricted access to public parks has exacerbated this situation for individuals without private green spaces (Freeman & Eykelbosh, 2020).

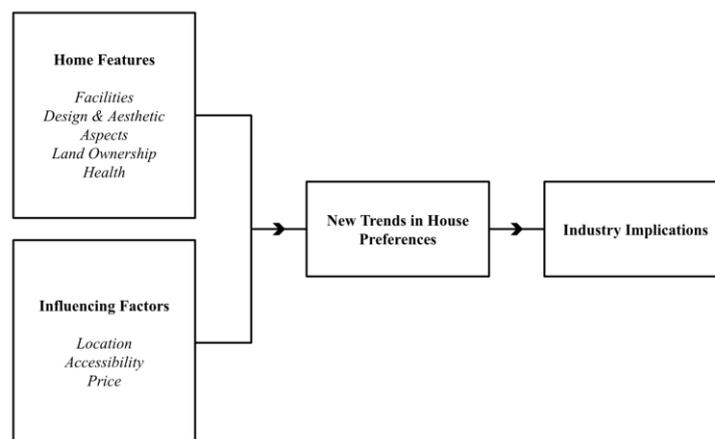
A survey by JPI underscores sentiments in Indonesia during the pandemic. Pre-pandemic, socializing, travel, and attending events were cherished activities. Concerns encompassed health, economic stability, and psychological well-being. Hybrid work models gained traction, impacting daily routines and preferences for in-person and online activities, leading to increased online shopping and home-based activities.

As individuals adapt to the evolving landscape, key recommendations include flexibility in office spaces, anticipation of reduced office occupancy due to hybrid work, and the creation of urban green spaces to cater to the shift towards outdoor activities. Understanding these shifts, challenges, and opportunities is pivotal for stakeholders to effectively respond to evolving housing needs and aspirations.

### Millennials Influence on Real Estate

The research focuses on the impact of millennials, a demographic group crucial to Jakarta's real estate market, shaping shifting trends in homeownership. This generation, born between the early 1980s and mid-1990s, approaches home buying differently, influenced by economic shifts, lifestyle changes, and evolving preferences. Unique to Jakarta, millennials encounter challenges like soaring property prices and affordability concerns (Azwar, 2021). Nevertheless, they exhibit a robust inclination towards homeownership, viewing it as a substantial long-term investment (Abidoeye et al., 2020).

**Figure 2. Conceptual Model for Shifting Trends in House Preferences**



(Source: Author Analysis, 2023)

### METHODS

The research methodology encompasses problem identification, research question formulation, and an extensive literature review. Primary data collection involves qualitative methods, primarily semi-structured interviews, complemented by secondary data integration (Smith, 1995). Semi-structured interviews, a qualitative research method, use open-ended questions to encourage comprehensive responses, allowing interviewers to explore specific themes (Adeoye-Olatunde and Olenik, 2021). Unlike closed-ended questions, this approach elicits

detailed answers instead of simple "yes" or "no" responses (McIntosh et al, 2015). Secondary data from diverse sources establishes foundational theories, supporting a qualitative analysis aimed at understanding post-pandemic housing preferences thoroughly (Galloway, 2005). Targeting Millennials, convenience sampling will be utilized to gather relevant respondents in Jakarta, ensuring comprehensive coverage across diverse backgrounds and socioeconomic statuses (SES) until data saturation is achieved (Marshall, 1996). Triangulation will validate findings by comparing qualitative data from interviews with homeowners and developers alongside insights from experts (Carter et al., 2014). Following interviews, data undergoes coding, organizing it into predefined categories derived from triangulation. This method ensures comprehensive analysis while accommodating emergent themes (Powell and Renner, 2003).

## **RESULTS**

The research explored the nuanced dynamics shaping millennials' housing preferences post-pandemic, derived from extensive interviews conducted in Jakarta. These insights illuminate the multifaceted alterations in considerations influencing homeownership among millennials, providing a comprehensive understanding of their evolving priorities.

## **DISCUSSION**

### **Facility**

Amidst the pandemic's impact on remote work, the indispensability of reliable internet connectivity emerged as a critical factor (Tleuken, et al., 2022). The surge in demand for high-speed internet underscored its pivotal role in facilitating work, education, and entertainment from home. Similarly, the implementation of one-gate systems in residential areas offered enhanced safety and tranquility, particularly for families with children. This preference for restricted access aligned with the pursuit of peaceful neighborhoods amidst limited traffic. The shift towards indoor entertainment during the pandemic prompted the creation of dedicated spaces for home entertainment, reflecting a significant transformation in leisure choices.

### **Accessibility**

Proximity to family emerged as a pivotal influencer in housing decisions, reflecting the amalgamation of personal and practical aspects in homeownership choices. The preference for homes close to family and workplaces embodied a desire for immediate relaxation and closeness to loved ones. Simultaneously, the increasing reliance on remote work prompted an inclination towards residences offering easy access to public transportation. This aligned with the changing work-from-home trends and the need for convenient mobility, emphasizing the evolving lifestyle patterns among millennials (Mulyano et al., 2020).

### **Design**

Practicality emerged as a key determinant, steering millennials towards smaller yet more functional homes over larger properties. The recalibration of kitchen design was particularly noteworthy, adapting to the burgeoning popularity of food delivery services. Kitchens evolved to merge aesthetics with functionality, aligning with the shift towards online food ordering as a more economical choice. Additionally, the diminishing demand for traditional guest rooms underscored the emergence of open spaces as viable alternatives, reflecting cost-effectiveness for developers and accelerated by the pandemic. The increased attention to interior aesthetics and investments across diverse economic backgrounds highlighted a collective desire to enhance living environments.

### **Finance**

The prevailing perception among millennials of landed houses as long-term investments underscored a strong belief in their future value escalation (Abidoye et al., 2020). However, a subset perceived homes as enduring living spaces rather than mere financial assets. Financial

liquidity played a crucial role in the timing of purchases and construction, with some opting to acquire land first and develop incrementally. Despite the post-pandemic price rebounds, buyers sought favorable market rates and payment terms, propelling innovative layouts to optimize available space in Jakarta's high-priced land market.

### **Health**

The unprecedented circumstances of the pandemic heightened consciousness around health and safety in daily life and, significantly, in home design considerations. This pivotal shift led to a notable trend favoring landed houses over vertical housing due to health and privacy concerns. The preference for green and open landscapes gained traction, attributing therapeutic benefits and improved air circulation. The enduring impact of the pandemic instigated the integration of buffer zones within homes, signifying a sustained emphasis on hygiene and health considerations in residential design.

These findings highlight the intricate interplay of personal aspirations and practical considerations in millennials' housing preferences post-pandemic. The comprehensive understanding of these diverse factors elucidates the evolving landscape of homeownership among millennials, underscoring the complex framework that defines their residential decision-making processes.

### **CONCLUSION**

This research delineates the evolving housing preferences among millennials post-pandemic, derived from semi-structured interviews with nine respondents in Jakarta. Findings highlighted amplified concerns regarding internet connectivity, privacy, security, and a desire for increased time spent at home with family. Accessibility and proximity to public transport emerged as significant factors influencing residential decision-making. Moreover, there was an increased investment in creating comfortable home environments post-pandemic, aligning with the Jakarta Property Institute's 2022 findings.

The research aims to offer guidance to property development companies, homeowners, homebuyers, and policymakers to optimize housing design, development, and regulations for millennials in Jakarta and its greater area.

#### **For Development Companies**

1. **Flexible Workspaces Integration:** Incorporate adaptable spaces within housing projects to accommodate remote work culture. Lennar Corporation in the US has set an example by integrating flexible spaces into their designs, catering to remote work needs (Lennar, 2021).
2. **Connectivity Emphasis:** Prioritize easy access to public transit hubs or offer reliable internet connectivity within housing projects, similar to developers in Malaysia like S P Setia and EcoWorld (The Edge Markets, 2021).
3. **Compact, Functional Designs:** Focus on multifunctional spaces and innovative storage solutions, mirroring successful trends seen in Tokyo's Muji Houses (Crook, 2020).
4. **Eco-Friendly Initiatives:** Integrate green spaces, sustainable features, and energy-efficient solutions, following the footsteps of Tata Housing in India (Tata Capital, 2019).

#### **For Homeowners/Homebuyers:**

1. **Proximity Prioritization:** Seek residences near workplaces or accessible public transit hubs for improved work-life balance, aligning with current trends (Mulyano et al., 2020).
2. **Functional Living:** Embrace smaller yet functional living spaces that optimize efficiency without compromising comfort, resonating with the evolving preferences for practicality (Hendrickson, 2019).

3. Aesthetic Investments: Invest in interior design elements that enhance both aesthetics and functionality, fostering a pleasant and adaptable living environment (Jakarta Property Institute, 2021).
4. Community-Centric Spaces: Prioritize properties with communal spaces for social interaction, enhancing mental well-being and community cohesion (Mouratidis, 2021).

For Government and Policymakers:

1. Health-Conscious Urban Planning: Collaborate with developers to create healthier living environments by incorporating green spaces and promoting active lifestyles, drawing inspiration from Singapore's URA (Urban Redevelopment Authority, 2021).
2. Incentivizing Sustainable Practices: Encourage sustainable housing by offering subsidies for eco-friendly renovations and promoting sustainable building materials, following the example set by the Dutch government (DeNederlandscheBank, 2022).
3. Workplace Proximity in Urban Planning: Advocate for urban planning that encourages mixed-use developments to reduce commuting, mirroring successful policies in cities like Portland (Bajelan, 2023).
4. Regulatory Support for Functional Designs: Enforce regulations that promote adaptable home designs, ensuring homes remain relevant to changing needs, taking cues from Sweden's accessible building regulations (Andersson, 2021).

## FUTURE RESEARCH

This qualitative study presents meaningful insights into millennials' housing preferences post-pandemic, offering a qualitative foundation for future research endeavors. To quantify the specific impact of identified factors, a subsequent investigation employing a quantitative methodology, such as surveys or experimental methods, could provide a more nuanced understanding.

Expanding the scope beyond Jakarta and its surroundings, future research might explore housing preferences in diverse regions across Indonesia. Additionally, investigating the post-pandemic housing preferences of different generational cohorts could contribute valuable insights into varied societal needs.

Given the evolving nature of societal dynamics, conducting similar studies in subsequent years presents an opportunity to capture changing trends and preferences, providing a longitudinal perspective on housing choices.

## REFERENCES

- Abidoye, R.B., Puspitasari, G., Sunindijo, R. and Adabre, M. (2020), Young adults and homeownership in Jakarta, Indonesia. *International Journal of Housing Markets and Analysis*. <https://doi.org/10.1108/IJHMA-03-2020-0030>
- Adeoye-Olatunde, O. A., Olenik, N.L. (2021). Research and Scholarly Methods: Semi-structured Interviews. *J Am Clin Pharm*, 4,
- Alessandro, D. D., Gola, M., Appolloni, L., Dettori, M., Maria, G., Rebecchi, A., Settimo, G., & Capolongo, S. (2020). COVID-19 and Living space challenge . *Well-being and Public Health recommendations for a healthy, safe, and sustainable housing*. 91(1), 61–75. <https://doi.org/10.23750/abm.v91i9-S.10115>
- Allan, R & Miglani, K JLL. (2020). Home and away: The new workplace hybrid. <https://www.jll.co.id/en/trends-and-insights/research/home-and-away-employee-survey>
- Amankah-Amoah, J. A., Khan, Z., Wood, G., Knight, G. (2021). COVID-19 and digitalization: The great acceleration. *Journal of Business Research*, 136, 603.
- Amerio, A., Brambilla, A., Morganti, A., Aguglia, A., Bianchi, D., Santi, F., Costantini, L., Odone, A., Costanza, A., Signorelli, C., Serafini, G., Amore, M., & Capolongo, S. (2020). COVID- 19

- Lockdown: Housing Built Environment's Effects on Mental Health. <https://doi.org/10.3390/ijerph17165973>
- Andersson, J. E. (2021). Using Building Requirements as a Means to Create Inclusion. Lund University, 186-188, <http://dx.doi.org/10.4324/9781003120452-12>.
- Asian Development Bank. (2020). Public-Private Partnership Monitor Indonesia, <https://www.adb.org/sites/default/files/publication/688886/public-private-partnership-monitor-indonesia.pdf>.
- Azwar, A. S., (2021). Indonesian millennials put homeownership last on bucket list. The Jakarta Post. <https://www.thejakartapost.com/life/2021/07/08/indonesian-millennials-put-homeownership-last-on-bucket-list.html>.
- Baldwin, R., & Weder di Mauro, B. (Eds.). (2020). Mitigating the COVID Economic Crisis: Act Fast and Do Whatever It Takes. London: CEPR Press.
- Barrero, J. M., Bloom, N., & Davis, S. J. (2020). COVID-19 Is Also a Reallocation Shock (NBER Working Paper No. 27137). National Bureau of Economic Research.
- Bartik, A. W., Bertrand, M., Lin, F., Rothstein, J., & Unrath, M. (2020). Measuring the Labor Market at the Onset of the COVID-19 Crisis. NBER Working Paper No. 27613.
- Bajelan, H. (2023). The Urban Growth Boundary of Portland, Oregon: Assessing Effectiveness - Housing and Affordability. Case In Point 2023, 2-6
- Bonaccorsi, G., Pierri, F., Cinelli, M., Flori, A., Galeazzi, A., Porcelli, F., Schmidt, A. L., Valensise, C. M., Scala, A., Quattrociochi, W., & Pammolli, F. (2020). Economic and social consequences of human mobility restrictions under COVID-19. *Proceedings of the National Academy of Sciences of the United States of America*, 117(27), 15530–15535. <https://doi.org/10.1073/pnas.2007658117>
- Carter, N., Bryant-Lukosius, D. N., DiCenso, A., Blythe, J., Neville, A. J. (2014). The Use of Triangulation in Qualitative Research. *Oncol Nurs Forum*. <https://doi.org/10.1188/14.ONF.545>.
- Colliers International. (2020). COVID-19 and its Impact on Construction Delays. [Research Report].
- Crook, L. (2020). Muji Launches Prefabricated Home to Encourage Indoor-Outdoor Living. Dezeen. <https://www.dezeen.com/2020/01/16/muji-yo-no-ie-prefabricated-home/>
- DeNederlandscheBank. (2022). Encourage Homeowners to Make Their Homes More Sustainable. *DNBulletin*. <https://www.dnb.nl/en/general-news/dnbulletin-2022/encourage-homeowners-to-make-their-homes-more-sustainable/>.
- Dingel, J. I., & Neiman, B. (2020). How Many Jobs Can be Done at Home? *Journal of Public Economics*, 189, 104235.
- Duarte, C.C., Cortiços, N.D., Stefańska, A., Stefańska, A. (2023) Home Balconies during the COVID-19 Pandemic: Future Architect's Preferences in Lisbon and Warsaw. *Appl. Sci*, 13 (1), 298. <https://doi.org/10.3390/app13010298>
- Farooq, S. A., Indhu, B., Jagannathan, P. (2022). Impact of covid-19 on Supply Chain Management in Construction Industry in Kashmir. *Asian J Civ Eng* 24, 429-438 (2023). <https://doi.org/10.1007/s42107-022-00509-w>
- Freeman, S., & Eykelbosh, A. (2020). COVID - 19 and outdoor safety : Considerations for use of outdoor recreational spaces. National Collaborating Centre for Environmental Health.bn
- Galloway, A. (2005). Non-Probability Sampling. In K. Kempf-Leonard (Ed.), *Encyclopedia of Social Measurement* (pp. 859-864). Elsevier. ISBN 9780123693983. <https://doi.org/10.1016/B0-12-369398-5/00382-0>.
- Gamal, A., Rohmah, L., Muhyi, M. M. (2023). Housing Preference Shifting During COVID-19 Pandemic in Indonesia. *Journal of Urban Management*, 12 (3), 268-283
- Hendrickson, V. L. (2019). A 'Big' Change: Why Buyers Are Prioritizing Quality Over Massive Homes. *Mansion Global*. <https://www.mansionglobal.com/articles/a-big-change-why-buyers-are-prioritizing-quality-over-massive-homes-201570>.

- Indonesia Investments. (2023). Taking a Look at the Property Sector of Indonesia; Room for Recovery after the COVID-19 Crisis?. <https://www.indonesia-investments.com/id/business/business-columns/taking-a-look-at-the-property-sector-of-indonesia-room-for-recovery-after-the-covid-19-crisis/item9612?>
- Jakarta Property Institute. (2021). City After The Pandemic How will We Live, Work, and Play?. <https://jpi.or.id/city-after-the-pandemic/>.
- Khanwalkar, P., & Dabir, N. (2022). Visual Ergonomics for Changing Work Environments in the COVID-19 Pandemic. *Work*, 73, 170
- Kurniawan, C., Dewi, L. C., Maulatsih, W., Gunadi., W. (2020). Factors Influencing Housing Purchase Decisions of Millennial Generation in Indonesia, *International Journal of Management*, 11 (4), 352-358.
- Leblanc, W., & Gensler, A. D. (2018). Understanding The Preferences of Millennials: Implications for Chicago's Suburbs. *Illinois Municipal Policy Journal*, 3(1), 1-16.
- Lennar. (2021). Innovatively Designed Work from Home Spaces. Lennar. <https://resourcecenter.lennar.com/florida-tampa/innovatively-designed-work-from-home-spaces/>.
- Mahendradhata, Y., Andayani, N., Hasri, E., Arifi, M., Montesori, R., Solikha, D., & Ali, P. (2021). The Capacity of the Indonesian Healthcare System to Respond to COVID-19. *Front Public Health*, 9 (7), 2.
- Mahmud, M. S., Talukder, M. U., & Rahman, S. M. (2020). Does 'Fear of COVID-19' trigger future career anxiety? An empirical investigation considering depression from COVID-19 as a mediator. *International Journal of Social Psychiatry*. <https://doi.org/10.1177/0020764020935488>
- Marcén, M., & Morales, M. (2018). The Effect of Culture on Home-ownership. *GLO Discussion Paper*, No. 244, 10-16
- Marshall, M. N. (1996). Sampling for qualitative research. *Family practice*, 13(6), 522-526.
- McGee, B. L., Couillou, R. J., & Maalt, K.(2023). Work from Home: Lessons Learned and Implications for Post-pandemic Workspaces. *Interiority*, 6(1), 91–114. <https://doi.org/10.7454/in.v6i1.259>
- McIntosh, M. J., Morse, J. M. (2015). Situating and Constructing Diversity in Semi-Structured Interviews. *Global Qualitative Nursing Research*, 2, 4-6, <https://doi.org/10.1177/2333393615597674>.
- Mischke, J., Luby, R., & Vickery, B., Woetzel, J., White, O., Sangvhi, A., Rhee, J., Fu, A., Palter, R., Dua, A., Smit, S., (2023). Empty spaces and hybrid places: The pandemic's lasting impact on real estate. McKinsey Global Institute, <https://www.mckinsey.com/mgi/our-research/empty-spaces-and-hybrid-places#/>.
- Mordor Intelligence. (2023). Real Estate Market In Indonesia Market Size. <https://www.mordorintelligence.com/industry-reports/real-estate-market-in-indonesia/market-size>
- Mouratidis, K. (2021). Urban Planning and Quality of Life: a Review of Pathways Linking the Built Environment to Subjective Well-Being. *Cities*, 115, 4-5
- Muhyi, M., Adianto, J. (2021). Literature Review: The Effects of Covid-19 Pandemic-Driven Home Behavior in Housing Preference, *Smartcity*, 1(1).
- Mulyano, Y., Rahadi, R. A., & Amaliah, U. (2020). Millennials housing preferences model in Jakarta. *European Journal of Business and Management Research*, 5(1), 6-8.
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., & Al-jabir, A. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery Journal*, 78(January), 185–193.
- Ohya., Y. (2021). The Negative Effect Factors of the Land Acquisition System for Profit-Oriented Enterprises in Order to Promote Economic Growth, *New Frontiers in Regional Science: Asian Perspectives*, 29, 75-84

- Organization for Economic Co-operation and Development. (2020). Housing Amid Covid-19: Policy Responses and Challenges. <https://www.oecd.org/coronavirus/policy-responses/housing-amid-covid-19-policy-responses-and-challenges-cfdc08a8/>.
- Pasaribu, D., Murwani, A., Setiawan, I., (2021). Foreign Direct Investment in Indonesia's Agriculture. Center for Indonesian Policy Studies. Policy Paper, No. 35
- Purnamasari, L. (2021). Effect of Government's Policy to Build 1 Million Houses on Performance of Housing and Apartment Credits of Banks Listed in Indonesia Stock Exchange during Period 2015-2017, *Jurnal Ilmiah Ilmu Administrasi Publik: Jurnal Pemikiran dan Penelitian Administrasi Publik*, 11(1), 40-50.
- Rahadi, R.A. (2015). Value Determinant Factors for Housing Products Pricing in Jakarta Metropolitan Region. (Doctoral Study Program of Science in Management, Bandung Institute of Technology)
- Rasyidah, Z.A., Hariati, A.H., Rosadah, M., & Maryanti, M.R. (2020). Perceptions on smart home concept among the millennials in Johor. *IOP Conf. Series: Materials Science and Engineering*. 849, 012055. <https://doi.org/10.1088/1757-899X/849/1/012055>.
- Renner, M., & Taylor-Powell, E. (2003). Analyzing qualitative data. *Programme Development & Evaluation*, University of Wisconsin-Extension Cooperative Extension.
- Romer, P. M. (2020). What Economic Policymakers Should and Shouldn't Learn from Epidemiologists. *Theoretical Economics*, 15(1), 1-20.
- Russo, A., & Cirella, G. T. (2018). Modern Compact Cities: How Much Greenery Do We Need?. *International journal of environmental research and public health*, 15(10), 2180. <https://doi.org/10.3390/ijerph15102180>
- Ryu, D. (2022). Housing Contract and Household Saving Behavior: Evidence from Newlyweds. *Research Square*, 9-21
- Samosir, D. (2020). Optimizing Business Performance in Property Management with Green Building Evidence in Indonesia. *Media Riset Akuntansi, Auditing & Informasi*, 22 (2), 301-320.
- Samudra, R. R., & Setyonaluri, D. (2020). Inequitable Impact of COVID-19 in Indonesia: Evidence and Policy Response. *Lembaga Demografi Universitas Indonesia*, 2-11
- Setiawati, I., Trilaksono, T., & Aurelia, V. (2020). Supply and Demand Analysis of Indonesia's Subsidized Housing Program. *Economics Development Analysis Journal*, 9(3), 343-360.
- Sinuraya, R.K., Wulandari, C., Amalia, R., & Irma, M. P. (2023). Public Knowledge, Attitudes, and Practices During the First Wave of COVID-19 in Indonesia. *Front Public Health*, 11(8), 06.
- Smith, J. A. (1995). Semi-structured interviewing and qualitative analysis. In J. A. Smith, R. Harre, & L. Van Langenhove (Eds.), *Rethinking methods in psychology* (pp. 9-26). Sage Publications.
- Sparrow, R., Dartanto, R., & Hartwig, R. (2020) Indonesia Under the New Normal: Challenges and the Way Ahead, *Bulletin of Indonesian Economic Studies*, 56 (3), 269-299.
- Tata Capital. (2019). What are Green Buildings and Green Homes?. *Tata Capital*. <https://www.tatacapital.com/blog/loan-for-home/what-are-green-buildings-and-green-homes/>
- The Edge Markets. 2021. The Edge Malaysia: Housing in a Post-Pandemic World. The Edge Markets. <https://assets.theedgemarkets.com/pdf/Housing-Pandemic-Special-Report.pdf>
- The Jakarta Post. (2018). Tech-savvy millennials redefining workspaces. *The Jakarta Post*. <https://www.thejakartapost.com/news/2018/11/24/tech-savvy-millennials-redefining-workspaces.html>.
- Tleuken, A., Turkyilmaz, A., Sovetbek, M., et al. (2022). Effects of the residential built environment on remote work productivity and satisfaction during COVID-19 lockdowns: An analysis of workers' perceptions. *Build Environ*. 219, 109234, <https://doi.org/10.1016/j.buildenv.2022.109234>.
- Urban Redevelopment Authority. (2021). Planning a Resilient, Sustainable City for The Future. *Urban Redevelopment Authority Annual Report 2020/2021*, 5-11.

- Yanwardhana, E. (2021). Jokowi Tebar Rp 28 T, Lanjutkan Program Subsidi Rumah di 2022. CNBC Indonesia. <https://www.cnbcindonesia.com/news/20210820162015-4-269988/jokowi-tebar-rp-28-t-lanjutkan-program-subsidi-rumah-di-2022>
- Wardani, F. K. (2021). Green Building in the midst of Pandemic. SMARTCITY, 1 (1), 4-8
- Wijayanigtyas, Redjo, R. M., Handoko, F., Lukiyanto, K. (2020). The Millennials' Energy Efficiency Behaviour towards Eco-friendly Home. Civil Engineering and Architecture 9(2), 394-403.
- Winstonfield. (2023). The Impact of Remote Work on Residential Real Estate. <https://www.winstonfield.com/the-impact-of-remote-work-on-residential-real-estate/>.
- Wolday, F., & Böcker L. (2023). Exploring Changes in Residential Preference During COVID-19: Implications to Contemporary Urban Planning. Environ Plan B Urban Anal City Sci, 50(5), 1280–1297. doi: 10.1177/23998083231164398.
- Zeng, S., & Yi, C. (2022). Impact of the COVID-19 Pandemic on the Housing Market at the Epicenter of the Outbreak in China, 2 (53), 2-20
- Zheng, C., Huang, W. Y., Sheridan, S., Sit, C. H. P., Chen, X. K., & Wong, S. H. S. (2020). COVID-19 Pandemic Brings a Sedentary Lifestyle: A Cross-Sectional and Longitudinal Study. MedRxiv, March 2020. <https://doi.org/10.1101/2020.05.22.20110825>
- Zillow. (2021). Nearly 40% of Millennials are Comfortable Buying a Home Online. PR Newsire. <https://www.prnewswire.com/news-releases/nearly-40-of-millennials-are-comfortable-buying-a-home-online-301244805.html>