

Implementation of Sustainable Development Goals in MGM China, Macau for Transformations

Shirley Mo Ching Yeung¹

Abstract

The aim of this paper is to explore the key elements for transformative entertainment business with sustainable development goals (SDG), art cultural elements and technology via co-branding. Based on a recent qualitative study on MGM Sustainability Report Analysis by the author with literature search between 2020 and 2023 using the key words related to sustainability and brand building. After reviewing the sustainability reports of 4 years, text search of key words by using n'vivo showed the highest frequency are : sustianable development goals implementations - 2079 references, art tourism with impacts - 753 references, and operating labelling - 576 references. A reflection approach has been adopted for the 2049 Macau show of Zhang Yimou and MGM Macau showed the shared values on cobranding with SDG#5, #9 and #17 with humanistic design of SDGs and innovative of AI. The integration of AI into the creative process not only enhances an emerging and emersive way to express traditional cultural contents but also reflects the key elements of transformative leadership and critical success factors of projects related to SDG#3 wellness, SDG#5 gender equality, SDG#8 decent jobs and #9 innovatons. For the use of technology, like artificial intelligence (AI) and blockchain (BC) technology, there is a rising business and new services in the entertainment business and space use. However, these elements are seldom studied for improving the cobranding in cretive art and cultural activities for business and social impacts. With these findings, industry professionals on cobranding with shared values need to re-think the process on identifying partners for sustainable business.

Keywords: *Technology, Sustainable Development, Servant Leadership, Transformation.*

Introduction

The influence of ESG compliance and scores are on the rise not only in the listed companies in Hong Kong, but also SMEs which are working on green procurement and social engagement for gaining trust from customers and improving their company brand. Yeung (2017) recommended to integrating the 17 Sustainable Development Goals (SDGs) of United Nations to empower women (SDG#5) with decent jobs (SDG#8) for economic and social impacts, linking up ISO 26000 CSR guidelines to inclusion. For example, SDG#3 wellness with art as therapy and product re-branding in education, fashion, healthcare, retail, and catering industries. For the use of technology, like artificial intelligence (AI) and blockchain (BC) technology, there is a rising business on intellectual property rights with BC for traceability and transparency in content created. However, there is a lack of research on the applying SDG#3 wellness with therapy and SDG#9 innovations with Ai for collaborations in hospitality services maangement. Based on the findings of Yeung (2024) from eight reports published from 2015 to 2022 about the factors potentially related to employee productivity are human capital, management board diversity, improvement in health, and improvement in quality issues, the aim of this paper is to explore the application of Ai and Art via collaboration with artistic partners for SDG#9 Innovations and # 8 economic impacts.

Literature Review

In a rapidly changing world, technology applications are the basic tools to streamline the process flow for productivity. However, culture and values have to be integrated with the technology applications to align with the mission of the organization and their workplace culture. The United Nations Sustainable Development Goals (SDGs) offer a foundation framework to tackle the most pressing global challenges. It is time to explore the missing link of technology applications; culture and values; and ESG scores for overall branding of an organization. The author's recently published a series of SDG x ESG books which have opened up a new perspective of filling the gaps of the missing link via SDG#3 and # 9 with women

¹ Professor of Practice, School of Business, Gratia Christian College

empowerment to improve the ESG scores in SMEs. A few case study of this missing link has been mentioned without solid solutions implemented with impacts.

Based on a recent article of Deloitte, focused on opportunity for growth and innovation to solve toughest problems with their business knowledge mentioned that “In the current climate of economic uncertainty, the investment focus of High Net Wealth Individual (HNWI)s is shifting towards alternative investments, such as art and other collectibles. Besides emotional and social value unique to art and other collectibles, this asset class has shown low correlation with traditional asset classes, and hence is an ideal hedge against inflation and an important part of a HNWI’s portfolio diversification strategy.

Besides, Matthews & Foster (2014) mentioned that “Mindsets make a big difference to people’s subsequent achievement and fulfillment. Those with a growth mindset have greater confidence and are more willing to take intellectual risks, and they’re more successful academically and professionally than those with a fixed mindset. Those with a fixed mindset are more self-directed, more prone to negative judgements of themselves and others.” (p. 20) It is time to re-think the ways of applying SDG x ESG for post COVID-19 periods to strengthen organizational image with new product and/ or service development.

In an age defined by rapid technological advancements, the emergence of Non-Fungible Tokens (NFTs) and the blockchain ecosystem represents groundbreaking opportunities for innovation across various sectors. The possibilities offered by Web 3.0, characterized by decentralized applications and increased user control, can substantially benefit organizational control with transparency and traceability. As the case of this study is a long standing organization in Japan on women apparel with offices in Hong Kong and Greater Bay area, it is interesting in exploring the values of Asian culture with organizational culture for cobranding via a team of committed staff with cross disciplinary knowledge and community engagement with technology. This paper is going to present some unnoticed areas from community perspective via identifying ways of presenting organizational culture with product development via cobranding with values of Chinese Cultures and technology. By nurturing SDG related initiatives and empowering women communities, we can have more aspirations for the ways of improving ESG Score, embracing SDG#3 wellness with craftsmanship spirit and #16 peace with mindfulness and harmony of values, #9 applications of AI technology for tracing organizational sustainability practices.

AI and Reshape Business Presentation

Artificial Intelligence (AI) is dramatically reshaping the landscape of creativity and the art; and industries with routine processes to be replaced by AI, for example, accounting with transaction entries, public relations with press release. With the growing capabilities of AI, the creative process may have lots of changes and new jobs may be created if we are able to learn AI related tools to streamline the repetitive processes and train AI to help us build ground works for enhancement. Hence, AI may be our collaborator in the creative process. This paper is going to explore the intersection of AI and applications of art and culture in hospitality industry. For example, the collaboration of renowned filmmaker Zhang Yimou and the pioneering efforts of MGM China, led by Pansy Ho, towards implementing Sustainable Development Goals (SDGs) # 9 innovations on transformations – new ways of perceiving the space use of a hotel and the role of women in creative art and hospitality industry with AI.

Based on the information released by HKSAR government on promoting Hong Kong as an Asian tech hub, it is realised that policy support is needed for reshaping the landscaping. Moreover, the 2022 Manpower Survey Report Real Estate Services Industry of VTC, reflected that that there is a high average manpower growth and turnover in the technical and operations level of jobs. (see table of below). Hence, there is a need on AI and technology related training areas for different industries, for example, creative art and culture, real estate with hospitality service management.

“The popular trade specific knowledge and skills as well as generic skills required for employees to keep up with the emerging trend and development are provided in the following table (page 10):

(a) Specific Knowledge and Skills

Sector \ Job level	Managerial & Professional	Supervisory	Technical Support & Operative
Real Estate Development	Project Management Business and Property Law		Business and Property Law Property Technical Know-know
Property Management & Maintenance	Properties & Facilities Management Customer Acquisition and Retention		
Estate Agency	Estate Agents Ordinance / EAA Guideline Legal Practical Knowledge About Estate Agency Work		
Estate Surveying, Valuation & Consultancy	Estate Surveying & Valuation		
Government Department & Public Sector	Project Management	Properties and Facilities Management	Building Maintenance Management

Manpower Projection and Additional Manpower Requirement

1.26 The manpower projection is compiled based on the Labor Market Analysis approach by deriving the relationship between the stock of buildings and the number of employees required:

Year	Residential	Non-Residential	Total Projected Manpower	Growth Rate
2022	79,640	70,106	149,746	-
2023F	80,664	70,861	151,525	1.2%
2024F	81,476	71,481	152,957	0.9%
2025F	82,916	72,013	154,928	1.3%
2026F	84,234	72,463	156,697	1.1%

1.27 The additional annual manpower requirement has taken into account the manpower growth and the number of industry leavers. Details are provided in the following table:

Job Level	Average Manpower Growth	Industry Leavers	Total
Managerial and Professional	167	917	1,084
Supervisory	347	3,050	3,397
Technical Support and Operative	1,224	16,856	18,080
Overall	1,738	20,823	22,561

“Recently, with the popularity of artificial intelligence (AI) products such as ChatGPT, Bard, AI engineering has once again attracted widespread public attention. In 2021, China’s 14th Five-Year Plan established Hong Kong as an International Innovation Technology Center. The HKSAR government has always supported the development of AI in Hong Kong, with a view to promoting Hong Kong as an Asian tech hub. Various measures and initiatives have been launched in recent years to achieve these goals, such as the Smart City Blueprint (2017 & amp; 2020) and the Innovation and Technology Development Blueprint (2022).

(source: <https://www.info.gov.hk/gia/general/202407/08/P2024070800210.htm>)

The Business of AI and Art

From a business perspective, the convergence of technology of AI and creative art and culture presents a variety of business and social opportunities with preservation of intangible cultural assets (ICH) to educate customers, generate revenue, and expand the market across boundaries. Organizations in real estate services management, and hospitality services management may consider to explore the use of AI technologies with artistic contents of different countries to support creative art and cultural tourism and engage the local community to understand the past. Traditional business models are focused on 4Ps – Manpower, Machinery, Materials, and Methods. Under economic downturn, transformative organizations with innovative leadership may need to have a decentralized management structure with a committed team in doing research and development for new services with the use of AI applications for local consumption with overseas investment opportunities. Zec. (2012) mentioned that “designers also find ideas for new or better products by carefully watching what they and other people do – both during everyday activities and in very particular situations. Those who go through life with their eyes open, observing people’s behaviour and their treatment of objects, repeatedly discover clues to what is imperfect or even missing altogether. This leads to ideas for products that respond to a very specific human need. These needs are the most diverse imaginable. They include physical and mental needs as well as user demands relating to the functionality, eco-friendliness or aesthetics of existing objects.” (Zec. 2014, p.12)

Hence, AI-driven analytics can help the team to generate ideas, guide marketing strategies, allow mind-like creators and businesses to work together for solutions to cater the diverse demographics with a replicated business model with social values. This kind of model has not been fully studied in the past few years which need to have business strategy and model designers to work together and evolve symbiotically for results.

MGM China and Sustainable Development Goals#9 Innovations

MGM China, Macau, a leader in the hospitality and entertainment industry, is spearheaded by Pansy Ho, a strong advocate for women’s leadership in the past years via serving the Hong Kong Federation of Women and Hong Kong Girl Guides Association. MGM’s commitment to sustainability aligns with the global agenda set by the United Nations’ Sustainable Development Goals (SDGs). This can be demonstrated from the ESG reports of the organization, promoting responsible creative art and cultural tourism SDG#3/ #16, conserving resources SDG#13, engaging in women empowerment SDG#5 related activities with community development.

“Ms. Pansy Ho, Chairperson and Executive Director of MGM China Holdings Limited said, “We are committed to build for the future. Our vision to ‘Create a Better Tomorrow Today’ is always at the forefront of our efforts to create a sustainable MGM China. With the continuous enhancement of our sustainability framework and strategic pillars, we are determined to strengthen our sustainability governance, guiding us in operating our business and working with our stakeholders to benefit the people and environment in Macau as well as the Greater Bay Area.”

(source: <https://en.mgmchinaholdings.com/media-releases?item=511>)

“MGM China Holdings has been selected as a constituent of the Hang Seng Corporate Sustainability Benchmark Index (HSSUSB), according to a press release from the gaming operator. The inclusion in the HSSUSB has already taken effect, MGM China said. The move sought to recognise its “outstanding performance” in environmental, social, and governance (ESG) practices. The HSSUSB is a benchmark for sustainability investments, and only the top 20 per cent of companies with the highest scores in that regard are chosen as index constituents. The company is the sole Macau-based company included in the Hang Seng Corporate Sustainability Index Series for the 2023 to 2024 period.”

(source: <https://www-macaubusiness-com.webpkgcache.com/doc/-/s/www.macaubusiness.com/mgm-china-included-in-hang-seng-corporate-sustainability-benchmark-index-for-esg-practices/>)

Integration of AI in Sustainability (SDG#3/9)

MGM China, Macau has started to harness AI in creative art and cultural tourism operations via engagement with worldclass artists / performers in different aspects and reduction of carbon footprints with smart technologies, creating an eco-friendly customer experiences in the hotel. Through studying the sustainable development reports of MGM China, commitment of corporate responsibility and SDGs implementations have been shown into their business model. Women transformative leadership of the Chairperson with technology advancement and women empowerment are explicitly demonstrated. Furthermore, AI-powered platforms can be employed to empower women to learn how to apply technology into the three pillars of ESG via ongoing training with established professionals and resources availability for collaborations.

Women Transformative Leadership (SDG#5/9)

Transformational leadership, as defined by Bass and Avolio (1994), is a leadership style characterized by the ability to inspire and motivate followers. “The transformational leader encourages followers by acting as a role model, motivating through inspiration, stimulating intellectually, and giving individualized consideration for needs and goals. The result is individual, group, and organizational achievement beyond expectations.” (Bass and Avolio, 1994) Casimir, A. et. al. (2013) also mentioned that there are critical components on transformations with human value concepts: 1) a transforming vision; 2) community participation in decision-making; 3) power; 4) affirmation of others’ human values such as need for truth, integrity, love, peace, non-violence, worth, or dignity; and 5) conflict resolution. The literature on women’s transformative leadership has been covered the key elements of inclusivity, empathy, and social responsibility in transformative leadership roles. Based on the Theory of Change (TOC), authentic experiences is crucial in the learning process for building organizational culture for success.

According to the UNSDG# 5 gender equality indicators and targets in the economic perspective, the present situations that this paper intend to highlight are:

SDG#5 Indicators (UNSDG)

“With only seven years remaining, a mere 15.4 per cent of Goal 5 indicators with data are “on track”, 61.5 per cent are at a moderate distance and 23.1 per cent are far or very far off track from 2030 targets.

- Around 2.4 billion women of working age are not afforded equal economic opportunity. Nearly 2.4 Billion Women Globally Don’t Have Same Economic Rights as Men
- 178 countries maintain legal barriers that prevent women’s full economic participation. Nearly 2.4 Billion Women Globally Don’t Have Same Economic Rights as Men

SDG#5 Targets (UNSDG)

5.1 End all forms of discrimination against all women and girls everywhere

5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate

5.5 Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decisionmaking in political, economic and public life

5.A Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws

5.B Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women”

(source: <https://www.unwomen.org/en/node/36060>)

<https://www.globalgoals.org/goals/5-gender-equality/>)

In order to achieve the SDG#5 targets, cross-disciplinary SDG related campaigns need to be implemented across boundaries, for example, adopting the UN Principles (source: <https://unglobalcompact.org/take-action/action/womens-principles>) in campaigns to empower women in the workplace, marketplace and community. Through observation the PolyMGM Museum and Macau2049, a show of Zhang Yimou x Pansy Ho, MGM Macau, China on 11th January, 2025, the author has found the following principles have been implemented in relation to SDG#5:

Principle 1: Establish high-level corporate leadership for gender equality under the transformative leadership of the Chairperson, MGM China, Macau and team leaders of MGM Arts & Culture, Brand Marketing team, and Public & Community Relations

Principle 4: Promote education, training and professional development for women and

Principle 5: Implement enterprise development, supply chain and marketing practices that empower women via creative art and cultural show and museum with applications of AI, music, dancing and engineering to empower women and decent job creation.

Principle 6: Promote equality through community initiatives and advocacy and

Principle 7: Measure and publicly report on progress to achieve gender equality via publication of sustainability reports and news of ongoing activities.

The above principles and events of MGM China, Macau, in fact, are also aligned with the HKSAR Policy Address of 2024 Promote Women's Development

“203. There are many women in Hong Kong playing leading roles. To promote women's workplace development, we will establish a network run by leading women from all walks of life and launch a mentorship programme "She Inspires". Under the programme, female university students will be paired with mentors from the senior management of different sectors.”

The Intersection of AI, Art, and Business

The integration of AI into the creative art and culture with business elements, like decent job creation for performers in the 2049 Macau show and curators in the PolyMGM museum, has led to the emergence of several theoretical frameworks that reconcile technology with creativity. The concept of "Creative AI" describes how AI systems can enhance artistic expression while preserving human creativity. As outlined by McCormack, Gifford, and Hutchings (2019), AI-generated art can serve as a tool to implement contents in a creative and immersive way and a medium carrying the contemporary art expressions of artists for diversity.

Zhang Yimou: A Pioneer in Visual Storytelling

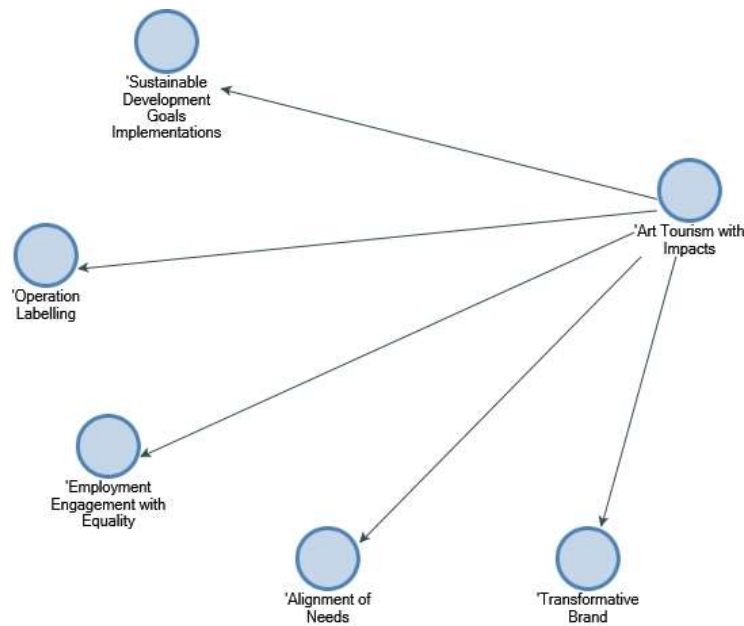
Zhang Yimou, one of China's renowned filmmakers and a prominent figure in the global arts scene. He has adopted a unique approach to integrating technology with stories full of art, China. His films are found with color palettes and striking visuals to impress audience which can be expressed by using AI, a new way of presenting contents to communicate complex narratives across cultural boundaries. Through AI and the team of Zhan, exhibitions, museum and different kind of entertainment shows can be presented in a spirit of creativity while preserving the cultures. With the use of AI technologies, filmmakers, artists, curators,

performers, educators and investors can explore the ways to transfer knowledge (SDG#4.7) in a sustainable way.

Methodology – Nvivo Content Analysis

MGM Sustainability Analysis 2020, 2021,2022,2023

Based on a recent qualitative study on MGM Sustainability Report Analysis by the author with literature search between 2020 and 2023 using the key words related to sustainability and brand building. After reviewing the sustainability reports of 4 years, themes similar to some of the below keywords seemed emerged related to art and cultural tourism with impacts conducted using Nvivo. The results are as follow:



Name	Sources	References
'Art Tourism with Impacts	5	753
'Alignment of Needs	4	119
'Employment Engagement with Equality	4	339
'Operation Labelling	5	576
'Sustainable Development Goals Implementations	5	2079
'Transformative Brand	5	115

Text Search - Art Tourism with Impacts

Name	Sources	References
'Art Tourism with Impacts	5	753

Text Search – Sustainable Development Goals Implementation

Name	References	Coverage
MGM China SR 2022_E	536	1.19%
MGM China SR2021_E	444	1.15%

MGM release_2023Q4_e	China_results	4	0.34%
MGM SR2023_ENG		689	1.27%
MGM_SR2020_E_		406	1.17%

Text Search – Operation Labelling

Name	References	Coverage
MGM China SR 2022_E	139	0.24%
MGM China SR2021_E	135	0.27%
MGM release_2023Q4_e	China_results 4	0.33%
MGM SR2023_ENG	142	0.20%
MGM_SR2020_E_	156	0.32%

Text Search – Employee Engagement

Name	References	Coverage
MGM China SR 2022_E	75	0.12%
MGM China SR2021_E	68	0.12%
MGM SR2023_ENG	109	0.14%
MGM_SR2020_E_	87	0.17%

Text Search – Alignment of Needs

Name	References	Coverage
MGM China SR 2022_E	21	0.02%
MGM China SR2021_E	24	0.03%
MGM SR2023_ENG	44	0.04%
MGM_SR2020_E_	30	0.04%

Text Search – Transformative Brand

Name	References	Coverage
MGM China SR 2022_E	22	0.03%
MGM China SR2021_E	16	0.03%
MGM release_2023Q4_e	China_results 1	0.05%
MGM SR2023_ENG	53	0.07%
MGM_SR2020_E_	23	0.04%



Conclusion and Discussion

The future of AI in art and culture with SDG related projects is promising, especially via co-branding project mentioned in this paper, Zhang Yimou X Pansy Ho, MGM China, Macau. The integration of AI into the creative process not only enhances an emerging and emersive way to express traditional cultural contents but also reflects the key elements of transformative leadership and critical success factors of projects related to SDG#3 wellness, SDG#5 gender equality, SDG#8 decent jobs and #9 innovatons. For the use of technology, like artificial intelligence (AI) and blockchain (BC) technology, there is a rising business and new services in the real estate and space use related activities with respecting intellectual property (IP) rights with BC for traceability and transparency in content created. This paper tries to fill the gap of applying SDG#3 wellness with enjoyment of the 2049 Macau show and SDG#9 innovations with AI for collaborations in the MGM hospitality services management. For example, AI's capabilities in script writing, animated storytelling, visual effects, and even audience engagement analysis in the SDG related projects.

Riding on the previous findings of Yeung (2024) from eight reports published from 2015 to 2022 about the factors potentially related to employee productivity are human capital, management board diversity, improvement in health, and improvement in quality issues, this paper identified the application of AI and Art via collaboration with artistic partners for SDG# 8 economic impacts and #9 innovations via transformative leadership elements in branding found in MGM China, Macau. The commitment to sustainability and transformative female leadership of the project team well align with SDGs to foster an inclusive environment for the next generation of artists and leaders. This paper opens up a new research area about the ways of applying AI, blockchain (BC) and intellectual property rights (IP) for artistic and curation business, hospitality and real estate services management, and educational services management. The power of collaborative spirit of innovative and transformative leaders with a sustainable development mindset will shape the future of AI in business, including social business. This paper serves as a comprehensive overview of the intersection of SDG, transformative leadership and AI in art technology for sustainable business.

References

- Bass, B. M., & Avolio, B. J. (Eds.) (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage Publications.
- Casimir, A. et al. (2013). *Philosophical Expositions of Leadership and Human Values in Catholic Social Teachings: Resolving Nigeria's Leadership Deficit and Underdevelopment*. *Open Journal of Philosophy*, Vol. 3, No. 3.
- Hanh, T. N. (1996). *The mindfulness survival kit*. Parallax Press. <https://www.amazon.com/Mindfulness-Survival-Kit-Essential-Practices/dp/1937006344>
- Harris, Stanley G. (1990). *The fifth discipline: The art and practice of the learning organization*, by Peter Senge, New York: Doubleday/Currency. <https://onlinelibrary.wiley.com/doi/10.1002/hrm.3930290308>
- Kanter, R. M. (2003). *Leadership and the psychology of management*. Harvard Business School Press. <https://www.hbs.edu/faculty/Pages/item.aspx?num=15373>
- Kotler, P., & Keller, K. L. (2016). *Marketing management (15th ed.)*. Pearson. <https://www.scirp.org/reference/referencespapers?referenceid=3155681>
- McCormack, J. Gifford, T. & Hutchings, P. (2019). *Autonomy, Authenticity, Authorship and Intention in computer generated art, EvoMUSART 2019: 8th International Conference on Computational Intelligence in Music, Sound, Art and Design*. April 2019, Leipzig, Germany.
- M. Liu (Eds.), *Artificial Intelligence for Creative Industries* (pp. 1-12). Springer. <https://www.scirp.org/reference/referencespapers?referenceid=3830035>
- MGM China. (2023). *MGM Macau: A commitment to sustainability*. Retrieved from <https://macau2049.mgm.mo/en/> <https://www.info.gov.hk/gia/general/202407/08/P2024070800210.htm>
- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. Doubleday.
- Zec, P. (2014). *Every Product tells a Story*. Reddot. https://m.facebook.com/story.php?story_fbid=3455824824497474&id=335995706480417&ref=homescreenbrowser&__tn__=%2As%2As-R
- <https://www.magisto.com/int/album/video/eXciAQRGGEAY-OjIHDmEwCXx9?l=vsm&o=a&c=w> via magisto.com
- <https://psycnet.apa.org/record/1995-97316-000>
- <https://www.policyaddress.gov.hk/2024/en/p203.html>
- <https://arxiv.org/abs/1903.02166>