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Developing a conceptual model of the impact of sustainable urban regeneration projects on mental health of citizens

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Introduction

In recent decades, different cities in developed countries and even developing countries have been involved in urban regeneration projects and policies. The plans and programs of the aforementioned approach mainly targeted the deprived areas, thus doing so, beyond the physical restoration of buildings and the mere consideration of the aesthetic aspects of the human environment, and along with this resolution. Problems seek to solve some social problems, improve the quality of human settlements, as well as promote and promote sustainability. While health may appear as one of the transitory concerns of urban policies, it has been found today that it is on the agenda of regeneration projects due to other dimensions, but the effects of such projects on various aspects of health, including mental health, are not well known. On the other hand, cities affect our mental statuses and will affect the public health and citizens' relationships, and the sum of this affects the whole city, so it is important for these relationships to bring happiness and joy for citizens. The city can be identified as a tool for improving mental health that enhances health (against disease). Urban planners and designers, architects, transportation professionals and politicians are all capable of affecting the mental health of citizens. In fact, it can be improved by promoting psychological well-being, empowerment and tolerance of individuals, as well as creating a better living environment. As such, it is important to study the relationship between urban regeneration projects and identify their effective indicators of mental health to improve the mental health of community members and reduce the incidence of mental disorders.

Mental health is one of the foundations of quality of life that enables people to have meaningful lives and be creative and active citizens. It is also an essential component of social cohesion, peace and stability in the living environment, which contributes to the promotion of social capital and the economic development of societies. On the other hand, the target of development projects with any approach is the citizens, who must have a certain level of health in order to have a productive life in cities. Therefore, the health of citizens in urban development policies should not be considered as a separate goal, and the health of the city cannot be considered independent from its citizens. In recent decades, various cities in developed and even developing countries have been involved in urban regeneration projects and policies. The plans and programs resulting from this approach mainly target deprived areas, and thus such measures go beyond the physical restoration of the buildings and just addressing the aesthetic aspects of the built environment. Urban regeneration policies as a comprehensive and integrated approach that targets disadvantaged areas to improve the quality of settlements, promote



sustainability and seek out to solve social and economic problems. As sustainable urban regeneration policies look for elimination of inequalities and deprivations within target areas, citizens' mental health and well-being can be effected by such interventions.

Methodology

The aim of present study is to explain the relationship between different dimensions of sustainable urban regeneration projects on the mental health of citizens.

This is a review study that focuses on the relationship between sustainable urban regeneration projects and the mental health of citizens, based on researches conducted in this field. The meta-analysis method, that is a comprehensive review of the literature related to the subject, has been used to collect data.

Results and Discussion

Based on the collection of the main categories and sub-categories of urban regeneration projects on the mental health of citizens, it was shown in a conceptual model that this relationship includes all the features of project planning processes and consequently the built, social and economic environments, as well as the process of implementation can affect physical and social health and therefore indirectly affect mental health or directly by changing the lifestyle and socio-economic status of individuals.

Conclusion

Sustainable urban regeneration approach by helping individuals to progress and develop in order to choose a better lifestyle and with positive changes in socio-economic conditions, can improve the mental health of citizens. The impact of sustainable urban regeneration projects on the mental health of citizens directly and indirectly includes all the features of urban planning processes and its product in the built environment, socio-economic conditions and by the project implementation process. The process, product and implementation of urban regeneration projects can affect the mental health of citizens by changing their lifestyle and socio-economic status.

Keyword: Urban Regeneration; Sustainability; Mental Health; Conceptual Model; Metaanalysis.

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Refrences Persian References

- Baghery Beheshty, A., Loghmani, H. (2020). Analysis of effective criteria on happy city (Case study: District Two of Tehran), *Iranian Urbnanism Journal*, 3 (5), 24-33.
- Bonyadi, N. (2012). The evolution of the notion of urban restoration, *Hoviat Shahr Journal*, 6(10), 67-78.
- Habibi, M. (2015). The concept of urban regeneration in theory and practice: Interview with Dr. Seyed Mohsen Habibi (Interviewers: Ali Ali Al-Janabian & Zohreh Dodangeh). *Haft Shahr Journal*, No. 51 & 52, 55-59.



- Habibi, M., Khabiri, S. (2018). Urban Regeneration Policy: Perspectives and Necessities. *Haft Shahr Journal*, 62(4), 22-27.
- Habibi, M., Maghsoudi, M. (2002). Urban restoration: Definitions, theories, experiences, global charters and resolutions, urban practices and practices, Tehran: Publishing Institute of University of Tehran.
- Izadi, M. S. (2018a). Urban regeneration approach: Towards a new urban agenda. *Haft Shahr Journal*, 62(4), 8-15.
- Izadi, M. S. (2018b). Words of Editor in Chief. Abadi Journal, No. 81 & 82, 4-6.
- Izadi, M. S. (2019). Explaining the executive strategies of urban regeneration: Improving the viability and quality of urban life in target areas, *Special issue on regeneration of deteriorated and dilapidated urban areas*, Urban Renewal Organization of Tehran, 48-56.
- Pakzad, J. (2006). Theories and Process of Urban Design, Tehran: Shahidi Publishers.
- Sadeghi Fasaei, S., Erfan Manesh, E. (2015). Methodological foundations of documentary research in social sciences (Case study: the effects of modernization on the Iranian family), *Rahbord Farhang Journal*, 29 (8), 61-96.
- Urban Regeneration Corporation of Iran (2014a). Sustainable Urban Regeneration Rules and Regulations: National Strategic Document for Rehabilitation, Improvement, Renovation and Empowerment of Dilapidated and Inefficient Urban Structures (Approved by the Cabinet), Ministry of Roads and Urban Development of Iran.
- Urban Regeneration Corporation of Iran (2014b). *Comprehensive Framework of Sustainable Urban Regeneration*, 1st Edition, Ministry of Roads and Urban Development of Iran.
- Vafadari Kamaralia, D., Kafi, M. (2021). Investigating the role of urban landscapes and green spaces in improving mental health, *Iranian Urbnanism Journal*, 4 (7), 251-259.

Latin References

- Aboelata, M. J., Ersoylu, L., & Cohen, L. (2011). Community engagement in design and planning. *In Making Healthy Places* (pp. 287-302). Island Press, Washington, DC.
- Águeda Marujo, H., Miguel Neto, L., & Casais, M. (2020). Enhancing collective happiness in the city: Felicitas publica and the availability of relational goods. *Journal of Urban Regeneration & Renewal*, 13(3), 308-319.
- Ahmed, J. U. (2010). Documentary research method: New dimensions. *Indus Journal of Management & Social Sciences*, 4(1), 1-14.
- Ailshire, J., Karraker, A., & Clarke, P. (2017). Neighborhood social stressors, fine particulate matter air pollution, and cognitive function among older US adults. *Social science & medicine*, 172, 56-63.
- Akhter, S., Pauyo, T., & Khan, M. (2019). What is the difference between a systematic review and a meta-analysis?. *Basic Methods Handbook for Clinical Orthopaedic Research*, 331-342.
- Amerio, A., Brambilla, A., Morganti, A., Aguglia, A., Bianchi, D., Santi, F., ... & Serafini, G. (2020). COVID-19 Lockdown: Housing Built Environment's Effects on Mental Health. *International journal of environmental research and public health*, 17(16), 5973.
- Anderson, J., Ruggeri, K., Steemers, K., & Huppert, F. (2017). Lively social space, well-being activity, and urban design: Findings from a low-cost community-led public space intervention. *Environment and behavior*, 49(6), 685-716.
- Aneshensel, C. S., & Sucoff, C. A. (1996). The neighborhood context of adolescent mental health. *Journal of health and social behavior*, 293-310.
- Astell-Burt, T., & Feng, X. (2019). Association of urban green space with mental health and general health among adults in Australia. *JAMA network open*, 2(7), e198209-e198209.
- Baba, C., Kearns, A., McIntosh, E., Tannahill, C., & Lewsey, J. (2017). Is empowerment a route to improving mental health and wellbeing in an urban regeneration (UR) context?. *Urban studies*, 54(7), 1619-1637.
- Balduzzi, S., Rücker, G., & Schwarzer, G. (2019). How to perform a meta-analysis with R: a practical tutorial. *Evidence-based mental health*, 22(4), 153-160.



- Banks, J., Fancourt, D. & Xu, X. (2021). Mental Health and the COVID-19 Pandemic. *World Happiness Report 2021*, 107-130.
- Barton, J., & Pretty, J. (2010). What is the best dose of nature and green exercise for improving mental health? A multi-study analysis. *Environmental science & technology*, 44(10), 3947-3955.
- Berkman, L. F., Kawachi, I., & Glymour, M. M. (Eds.). (2014). *Social epidemiology*. Oxford University Press.
- Bircher, J. (2005). Towards a dynamic definition of health and disease. *Medicine, Health Care and Philosophy*, 8(3), 335-341.
- Bond, L., Kearns, A., Mason, P., Tannahill, C., Egan, M., & Whitely, E. (2012). Exploring the relationships between housing, neighbourhoods and mental wellbeing for residents of deprived areas. *BMC public health*, 12(1), 48.
- Boyle, M., Murray, C., & Jarvis, S. (2020). Improving urban regeneration and renewal outcomes by engaging an urban psychology. *Journal of Urban Regeneration & Renewal*, *13*(3), 220-230.
- Burton, E., Mitchell, L., & Lynne Mitchell, M. E. S. (2006). *Inclusive urban design: Streets for life*. Taylor & Francis.
- Businelle, M. S., Ma, P., Kendzor, D. E., Reitzel, L. R., Chen, M., Lam, C. Y., ... & Wetter, D. W. (2014). Predicting quit attempts among homeless smokers seeking cessation treatment: an ecological momentary assessment study. *Nicotine & Tobacco Research*, *16*(10), 1371-1378.
- Chmielewski, S., Lee, D. J., Tompalski, P., Chmielewski, T. J., & Wężyk, P. (2016). Measuring visual pollution by outdoor advertisements in an urban street using intervisibility analysis and public surveys. *International Journal of Geographical Information Science*, 30(4), 801-818.
- Corcoran, R. (2020). Urban regeneration and the mental health and well-being challenge: In support of evidence-based policy. *Journal of Urban Regeneration & Renewal*, *13*(3), 257-269.
- Curl, A., Kearns, A., Mason, P., Egan, M., Tannahill, C., & Ellaway, A. (2015). Physical and mental health outcomes following housing improvements: evidence from the GoWell study. *J Epidemiol Community Health*, 69(1), 12-19.
- Davidson, G., McGuinness, D., Greenhalgh, P., Braidford, P., & Robinson, F. (2013). 'It'll get worse before it gets better': Local experiences of living in a regeneration area. *Journal of Urban Regeneration & Renewal*, 7(1), 55-66.
- Ding, D., Gebel, K., Phongsavan, P., Bauman, A. E., & Merom, D. (2014). Driving: a road to unhealthy lifestyles and poor health outcomes. *PloS one*, 9(6), e94602.
- Downey, L., & Van Willigen, M. (2005). Environmental stressors: the mental health impacts of living near industrial activity. *Journal of health and social behavior*, 46(3), 289-305.
- Egan, M., & Lawson, L. (2012). Residents' Perspectives of Health and Its Social Contexts: Qualitative Findings from Three of Glasgow's Transformational Regeneration Areas. *GoWell, Glasgow*.
- Eicher, C., & Kawachi, I. (2011). Social Capital and Community Design. In A. Dannenberg, H. Frumkin, & R. Jackson, *Making Healthy Places: Designing and Building for Health, Well-being, and Sustainability* (pp. 117-128). Washington: Island Press.
- Evans, G. W. (2003). The built environment and mental health. *Journal of urban health*, 80(4), 536-555.
- Evans, G. W. (Ed.). (1984). Environmental stress. CUP Archive.
- Evans, J., & Jones, P. (2008). Rethinking sustainable urban regeneration: ambiguity, creativity, and the shared territory. *Environment and Planning A*, 40(6), 1416-1434.
- Francis, J., Wood, L. J., Knuiman, M., & Giles-Corti, B. (2012). Quality or quantity? Exploring the relationship between Public Open Space attributes and mental health in Perth, Western Australia. *Social science & medicine*, 74(10), 1570-1577.
- Frank, L. D., Sallis, J. F., Conway, T. L., Chapman, J. E., Saelens, B. E., & Bachman, W. (2006). Many pathways from land use to health: associations between neighborhood walkability and active transportation, body mass index, and air quality. *Journal of the American Planning Association*, 72(1), 75-87.
- Frumkin, H. (2002). Urban sprawl and public health. Public health reports, 117(3), 201-217.
- Frumkin, H., Frank, L., & Jackson, R. J. (2004). Urban sprawl and public health: Designing, planning,



and building for healthy communities. Island Press.

- Garretsen, H., Stoker, J., Soudis, D., Martin, R., & Rentfrow, J. (2020). Urban psychology and British cities: Do personality traits matter for resilience to recessions?. *Journal of Urban Regeneration & Renewal*, *13*(3), 290-307.
- Grover, A., Singh, R. B. (2019). Urban Health and Wellbeing, Indian Case Studies. Springer, Singapore.
- Halpern, D. (1995). *Mental Health and The Built Environment: More Than Bricks and Mortar?* London: Taylor & Francis.
- Halpern, D. (2005). Social Capital. Cambridge: Polity Press.
- Healey, P. (1992). Planning through debate: the communicative turn in planning theory. *Town planning review*, 63(2), 143.
- Healey, P. (1998). Building institutional capacity through collaborative approaches to urban planning. *Environment and planning A*, 30(9), 1531-1546.
- Hjelm, J. R. (2012). The dimensions of health: conceptual models. London: Jones & Bartlett Publishers.
- Ho, H. C., & Wong, M. S. (2019). Urban environmental influences on the temperature–mortality relationship associated mental disorders and cardiorespiratory diseases during normal summer days in a subtropical city. *Environmental Science and Pollution Research*, 26(23), 24272-24285.
- Huber, M., Knottnerus, J. A., Green, L., Horst, H., Jadad, A. R., Kromhout, D., ... & Schnabel, P. (2011). How should we define health?. Bmj. *British Medical Journal (Compact Ed.)*, 343, d4163-d4163.
- Huxley, P., Evans, S., Leese, M., Gately, C., Rogers, A., Thomas, R., & Robson, B. (2004). Urban regeneration and mental health. *Social psychiatry and psychiatric epidemiology*, 39(4), 280-285.
- Innes, J. E. (1992). Group processes and the social construction of growth management: Florida, Vermont, and New Jersey. *Journal of the American Planning Association*, 58(4), 440-453.
- James, P., Banay, R. F., Hart, J. E., & Laden, F. (2015). A review of the health benefits of greenness. *Current epidemiology reports*, 2(2), 131-142.
- Johnston, P., Everard, M., Santillo, D., & Robèrt, K. H. (2007). Reclaiming the definition of sustainability. *Environmental science and pollution research international*, 14(1), 60-66.
- Kawachi, I., & Berkman, L. F. (2001). Social ties and mental health. *Journal of Urban health*, 78(3), 458-467.
- Kearns, A., Ghosh, S., Mason, P., & Egan, M. (2020). Urban regeneration and mental health: Investigating the effects of an area-based intervention using a modified intention to treat analysis with alternative outcome measures. *Health & Place*, 102262.
- Kearns, A., Tannahill, C., & Bond, L. (2009). Regeneration and health: conceptualising the connections. *Journal of Urban Regeneration & Renewal*, 3(1), 56-76.
- Kearns, A., Whitley, E., Bond, L., & Tannahill, C. (2012). The residential psychosocial environment and mental wellbeing in deprived areas. *International Journal of Housing Policy*, 12(4), 413-438.
- Kearns, A., Whitley, E., Bond, L., Egan, M., & Tannahill, C. (2013). The psychosocial pathway to mental well-being at the local level: investigating the effects of perceived relative position in a deprived area context. *J Epidemiol Community Health*, 67(1), 87-94.
- Lakey, B., & Orehek, E. (2011). Relational regulation theory: a new approach to explain the link between perceived social support and mental health. *Psychological review*, 118(3), 482.
- Lawson, L., & Kearns, A. (2010). Community engagement in regeneration: are we getting the point?. *Journal of Housing and the Built Environment*, 25(1), 19-36.
- Leary, M. E., & McCarthy, J. (Eds.). (2013). *The Routledge companion to urban regeneration*. Routledge.
- Li, M., Ferreira, S., & Smith, T. A. (2020). Temperature and self-reported mental health in the United States. *PLOS ONE*, 15(3), 1-20.
- Lorenc, T., Clayton, S., Neary, D., Whitehead, M., Petticrew, M., Thomson, H., ... & Renton, A. (2012). Crime, fear of crime, environment, and mental health and wellbeing: mapping review of theories and causal pathways. *Health & place*, 18(4), 757-765.
- MacGregor, C. (2010). Urban regeneration as a public health intervention. Journal of Social



Intervention: Theory and Practice, 19(3), 38-51.

- Mason, P., & Kearns, A. (2013). Physical activity and mental wellbeing in deprived neighbourhoods. *Mental Health and Physical Activity*, 6(2), 111-117.
- McCay, L. (2019). Urban design and mental health. In *Urban Mental Health* (pp. 32-48). Oxford University Press, United Kingdom.
- McCay, L., Bremer, I., Endale, T., Jannati, M., & Yi, J. (2017). Urban design and mental health. In *Mental health and illness in the city* (pp. 421-444). Springer, Singapore.
- McKenzie, K. (2008). Urbanization, social capital and mental health. *Global Social Policy*, 8(3), 359-377.
- McKenzie, K., & Harpham, T. (2006). Social capital and mental health. Jessica Kingsley Publishers.
- Mehdipanah, R. (2014). Urban renewal and health: the effects of the Neighbourhoods Law on health and health inequalities in Barcelona (Doctoral dissertation, Universitat Pompeu Fabra).
- Miles, R., Coutts, C., & Mohamadi, A. (2012). Neighborhood urban form, social environment, and depression. *Journal of Urban Health*, 89(1), 1-18.
- Minkler, M. (1994). Ten commitments for community health education. *Health education research*, 9(4), 527-534.
- Moya, Á. R. Z., & Yáñez, C. J. N. (2020). Urban regeneration policies and mental health in a context of economic crisis in Andalusia (Spain). *Journal of Housing and the Built Environment*, 1-13.
- Murray, C., & Landry, C. (2020). Urban Regeneration 3.0: Realising the potential of an urban psychology. *Journal of Urban Regeneration & Renewal*, *13*(3), 231-240.
- Niblock, S. (2020). From the couch to the concrete: How psychotherapy can help build healthy cities. *Journal of Urban Regeneration & Renewal*, 13(3), 270-279.
- Nozzi, D. (2003). *Road to ruin: an introduction to sprawl and how to cure it*. Greenwood Publishing Group.
- Nutsford, D., Pearson, A. L., & Kingham, S. (2013). An ecological study investigating the association between access to urban green space and mental health. *Public health*, 127(11), 1005-1011.
- Okkels, N., Kristiansen, C. B., Munk-Jørgensen, P., & Sartorius, N. (2018). Urban mental health: challenges and perspectives. *Current opinion in psychiatry*, 31(3), 258-264.
- Okkels, N., Kristiansen, C. B., & Munk-Jørgensen, P. (2017). Review of Urban mental health. In *Mental Health and Illness in the City* (pp. 1-12). Springer.
- Portella, A. (2016). Visual pollution: advertising, signage and environmental quality. Routledge.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Simon and schuster.
- Raco, M., Henderson, S., & Bowlby, S. (2008). Sustainable Urban Regeneration in a Global City-The Regeneration of Paddington Basin. In *Cities between Competitiveness and Cohesion* (pp. 187-203). Springer, Dordrecht.
- Richardson, E. A., Pearce, J., Mitchell, R., & Kingham, S. (2013). Role of physical activity in the relationship between urban green space and health. *Public health*, 127(4), 318-324.
- Roberts, P. (2005). Urban and Regional Regeneration: Principles, Practice and Lessons from Experience in *Shifting Sense: Looking back to the future in Spatial Planning*, Techne Press, North Holland.
- Roberts, P., Sykes, H., & Granger, R. (Eds.). (2017). Urban regeneration (Second Edition). Sage.
- Rogers, S. H., Halstead, J. M., Gardner, K. H., & Carlson, C. H. (2011). Examining walkability and social capital as indicators of quality of life at the municipal and neighborhood scales. *Applied Research in Quality of Life*, 6(2), 201-213.
- Rogers, A., Huxley, P., Evans, S., & Gately, C. (2008). More than jobs and houses: mental health, quality of life and the perceptions of locality in an area undergoing urban regeneration. *Social psychiatry and psychiatric epidemiology*, 43(5), 364-372.
- Rogers, A., Huxley, P., Thomas, R., Robson, B., Evans, S., Stordy, J., & Gately, C. (2001). Evaluating the impact of a locality based social policy intervention on mental health: conceptual and methodological issues. *International Journal of Social Psychiatry*, 47(4), 41-54.
- Rohe, W. M. (1985). Urban planning and mental health. Journal of Prevention & Intervention in the



Community, 4(1-2), 79-110.

- Schneider, M. (2011). Behavioral Choices and the Built Environment. *In Making Healthy Places* (pp. 261-270). Island Press, Washington, DC.
- Seligman, M. E., & Csikszentmihalyi, M. (2014). Positive psychology: An introduction. In *Flow and the foundations of positive psychology* (pp. 279-298). Springer, Dordrecht.
- Stouten, P. L. (2010). *Changing contexts in urban regeneration: 30 years of modernisation in Rotterdam* (Vol. 8). Techne Press.
- Sullivan, W. C., & Chang, C. Y. (2011). Mental health and the built environment. In *Making healthy places* (pp. 106-116). Island Press, Washington, DC.
- Talen, E. (2000). Measuring the public realm: A preliminary assessment of the link between public space and sense of community. *Journal of Architectural and Planning Research*, 344-360.
- Tallon, A. (2010). Urban Regeneration in the UK. Routledge.
- Thomas, D. (2016). *Placemaking: An urban design methodology*. Routledge.
- Thomson, H., Atkinson, R., Petticrew, M., & Kearns, A. (2006). Do urban regeneration programmes improve public health and reduce health inequalities? A synthesis of the evidence from UK policy and practice (1980–2004). *Journal of Epidemiology & Community Health*, 60(2), 108-115.
- Umberson, D., & Karas Montez, J. (2010). Social relationships and health: A flashpoint for health policy. *Journal of health and social behavior*, 51(1_suppl), S54-S66.
- WCED, S. W. S. (1987). World commission on environment and development. *Our common future*, 17, 1-91.
- Weinberg, R. S., & Gould, D. (2019). Foundations of sport and exercise psychology, 7E. Human Kinetics.
- World Health Organization (2001). *Mental Health: New Understanding, New Hope.* Geneva, Switzerland: World Health Organization.
- Younger, M., Morrow-Almeida, H. R., Vindigni, S. M., & Dannenberg, A. L. (2008). The built environment, climate change, and health: opportunities for co-benefits. *American journal of preventive medicine*, 35(5), 517-526.
- Zimring, C. M. (1981). Stress and the designed environment. *Journal of Social Issues*, 37(1), 145-171. Zuniga-Teran, A. A., Orr, B. J., Gimblett, R. H., Chalfoun, N. V., Guertin, D. P., & Marsh, S. E. (2017). Neighborhood design, physical activity, and wellbeing: applying the walkability model. *International journal of environmental research and public health*, 14(1), 76.



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