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البحوث لدعم السياسات الأسرية
Research to advance family policies

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The Interdependence of Family Stability and Environmental Sustainability: A Multidisciplinary Approach

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United Nations

Department of
Economic and
Social Affairs



START!

EGM on Families and
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HQ, NYC, 15-
16/05/2024



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“Divorce is bad for the environment..

Increased divorce rates has created more households with fewer people, that, in turn, take up more space and more energy and water consumption...

Environmental policy is more complex than one single solution. Governments across the world may need to start factoring in divorce when examining environmental policy”.

–Jianguo “Jack” Liu

An ecologist, human-environment scientist and sustainability scholar, Michigan State University



NEXT!



Introduction!

Drawing on human ecology principles, it explores how environmental conditions impact human behavior, including marital relationships. These conditions can either strengthen or weaken the ties between spouses, ultimately affecting family stability.

Conversely, stable families can contribute to environmental sustainability. Evidence suggests that married couples living together tend to consume fewer resources compared to divorced couples living separately.

This interconnectedness between family stability and environment necessitates a multidisciplinary approach to environmental policy. By acknowledging the social factors that influence resource consumption, policymakers can develop more holistic and sustainable solutions.



Background!

6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



15 LIFE ON LAND



Environment-related SDGs highlight the interlinkages between human behavior and the environment, which reflects a research discipline emerged back in 1950s. Decades of research have since established a body of knowledge on integrating ecology with social studies. However, methodological and conceptual challenges arose regarding how to measure the environment's influence on human behavior and vice versa.

Global Sustainability

Human Ecology!

Environmental Anthropology!

Conceptual Framework

Individuals shape their behavior based on the environment they inhabit.

Our surroundings influence our behavior, and in turn, our actions contribute to shaping the environment we inhabit.

Impact on number of households and associated resources consumption that leads to:

Family

- Urban vs Rural Environment
- Housing Type
- Neighborhood Context
- Food Choices

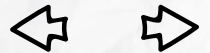
- Family Stability
- Family Disintegration / Divorce

- Environmental Sustainability
- Environmental Degradation

Geophysical environment

Geophysical environment

Impact on human behavior/ spousal relations that leads to:



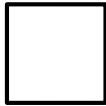


Interdependency



First

Environmental
Impact on Family
Stability



Second

Family Stability
Impact on
Environmental
Sustainability



Third

Conclusion &
Policy
Recommendations



1st: Environmental Impact on Family Stability

A study examined neighborhood context as a factor affecting marital quality among African American couples. The study found that neighborhood quality significantly impacted spousal interaction and marital satisfaction. Lower quality neighborhoods with economic disadvantage were linked to lower marital quality.

Cutrona, C. E., Russell, D. W., Abraham, W. T., Gardner, K. A., Melby, J. N., Bryant, C., & Conger, R. D. (2003). Neighborhood context and financial strain as predictors of marital interaction and marital quality in African American couples. *Personal Relationships*, 10(3), 389-409.

Similarly, research in post-Soviet countries found a higher prevalence of spousal violence in deprived neighborhoods.

Ismayilova, L. (2015). Spousal violence in 5 transitional countries: A population-based multilevel analysis of individual and contextual factors. *American Journal of Public Health*, 105(11), e12-e22.

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**Economic
Conditions of
Neighborhood,
Housing
Structures and
Family Stability:**





1st: Environmental Impact on Family Stability

Housing is another environmental factor considered. A study surveying various housing types in Canada found that factors like limited access to outdoor space, and number of households in a building negatively impacted spousal relationships.

The study concluded that living in apartments, compared to single-family homes, was associated with higher levels of marital conflict and dissatisfaction.

Edwards, J. N., Edwards, P. K., & Booth, A. (1982). Housing type, stress, and family relations. *Social Forces*, 61(1), 241-257.



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**Economic
Conditions of
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1st: Environmental Impact on Family Stability

Several studies suggest that families in rural communities tend to be more cohesive and stable compared to those in urban areas. Tight urban housing (with other factors like work-family balance challenges, etc.) contribute to lower marital quality in cities.

On the other hand, rural settings offer stronger social support structures and a slower lifestyle, leading to less marital tension.

Pimentel, E. E. (2000). Just how do I love thee?: Marital relations in urban China. *Journal of Marriage and Family*, 62(1), 32-47.

02.

**Urban/Rural
Context and
Marital
Relations:**





1st: Environmental Impact on Family Stability

Environmental anthropology argues that rural values and traditional wisdom contribute to a model of rural familism, further strengthening family ties.

Coward, R. T., Smith, W. M., Heller, P. L., & Ploch, L. A. (2019). *The Family In Rural Society*. Routledge.

Supporting this notion, a study examining coping strategies of urban and rural spouses in the United States found that rural respondents reported using more effective coping mechanisms, suggesting stronger family units.

Marotz-Baden, R., & Colvin, P. L. (1986). Coping strategies: A rural-urban comparison. *Family Relations*, 281-288.

02.

**Urban/Rural
Context and
Marital
Relations:**



1st: Environmental Impact on Family Stability

A new study examines the potential link between **food choices** and marital satisfaction. Researchers found that food insecurity can negatively impact mental health and well-being, leading to unhappiness and conflict within marriage

The study also explores the potential role of gut health. By influencing mood and behavior, the gut-brain connection could indirectly impact how couples interact and experience love in their relationship. While the study doesn't claim specific foods directly cause love or conflict, it highlights the importance of considering how food choices impact the overall well-being and potentially marital relationships.

Heidari, M., Khodadadi Jokar, Y., Madani, S., Shahi, S., Shahi, M. S., & Goli, M. (2023). Influence of food type on human Psychological-Behavioral responses and crime reduction. *Nutrients*, 15(17), 3715.

03.

**Geography,
Food
Choices
and Marital
Satisfaction**





1st: Environmental Impact on Family Stability

● Additionally, studies have shown that couples living in coastal areas with access to fresh fish containing high levels of omega-3 fatty acids, known for their mood-boosting impact and reducing anxiety, might experience greater marital relaxation (Vinot et al., 2011).

● Similarly, couples in rural areas with access to fresh vegetables and fruits and the potential calming effect of green surroundings could enjoy enhanced marital relations. Hence, statistics from around the globe show lower divorce rates in rural areas (Hawkins et al., 2013; Reynolds & Walther, 2020).

● However, a simplistic association between processed food consumption in urban environments with increased marital conflict is unwarranted. Stressful work-life balance, social isolation, and other factors likely play a more significant role in the dynamics of urban marital conflict (Gautier et al., 2009).

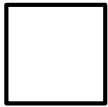
03.

**Geography,
Food
Choices
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Satisfaction**





Interdependency



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2nd: Family Stability Impact on Environmental Sustainability

A 2007 study by the Center for Systems Integration and Sustainability at Michigan State University examined the environmental impacts of divorce across 12 countries.

Divorce often leads to the formation of separate households, which are typically smaller in size and have a higher resource consumption per person. The study concluded that if divorced households had combined to form the same average size as married households, there would have been millions fewer households with a significantly reduced environmental footprint.

Yu, E., & Liu, J. (2007). Environmental impacts of divorce. *Proceedings of the National Academy of Sciences*, 104(51), 20629–20634.

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**Environmental
Cost of
Divorce:**



2nd: Family Stability Impact on Environmental Sustainability

For example, the study by Liu and Yu (2007) found that divorced households in the US used 46% and 56% more electricity and water per person compared to married couples.

Here are some key takeaways:

- In the US alone, divorced couples in 2005 used significantly more electricity (73 billion kWh) and water (627 billion gallons) compared to a scenario where household sizes remained consistent with married couples.

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**Environmental
Cost of
Divorce:**



2nd: Family Stability Impact on Environmental Sustainability

- The study also found that between 1998 and 2002, across the 12 surveyed countries, if divorced households had remained together, there could have been 7.4 million fewer households overall.
- The research also revealed a clear difference in space utilization. Divorced households had 33% to 95% more rooms per person compared to married couples, highlighting inefficient resource use in separate households.

Interestingly, the study found that when divorced individuals remarried, their environmental footprint shrank back to that of continuously married couples. This suggests that promoting family stability could contribute to environmental sustainability.

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**Environmental
Cost of
Divorce:**



2nd: Family Stability Impact on Environmental Sustainability

- In a study that examined energy consumption patterns in China, considering factors like family structure and life stages, the research confirms that married couples with children tend to have lower per capita energy consumption compared to single-person households or childless couples.
- The study found out that the demographic shift to small and ageing households boosts energy consumption and carbon emissions.
- This finding argues that larger, stable families can achieve economies of scale in energy use, potentially leading to lower carbon emissions.

● Yu, B., Wei, Y.-M., Gomi, K., & Matsuoka, Y. (2018). Future scenarios for energy consumption and carbon emissions due to demographic transitions in Chinese households. *Nature Energy*, 3(2), 109–118.

02.

Marriage and Carbon Emissions:



2nd: Family Stability Impact on Environmental Sustainability

02.

Marriage and Carbon Emissions:

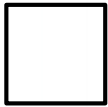
Another study examining the impact of demographic factors on air pollution offered additional insights. The study found that larger households with married couples tend to produce less carbon dioxide per person due to more efficient resource utilization including space, energy, and transportation. Therefore, the rise in smaller households due to divorce contributes to increased air pollution (Cole & Neumayer, 2004; Pradhan et al., 2017).

Data from Eurostat, the statistical office of the European Union, supports this connection. They attribute the decline in average household size partly to an increase in single-person households, linked to higher divorce rates (Eurostat, 2017).



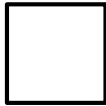


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Conclusion / Key Message

Policy frameworks for environmental sustainability should adopt a multidisciplinary approach that incorporates social policies and intervention programs aimed at strengthening families.

The environment, in its physical and geographical aspects, can influence family stability by impacting spousal relationships. Conversely, family stability can contribute to environmental sustainability through reduced resource consumption associated with single-family households compared to multiple households formed through divorce.

Policy Recommendations

- 1. **Develop and implement family support programs:** Programs promoting healthy communication skills, conflict resolution, and relationship management within families could contribute to reducing divorce rates and strengthening family stability, that would in turn contribute to environmental sustainability.
- 2. **Address the social determinants of family stability:** Policies aimed at tackling issues like poverty, unemployment, and access to affordable housing can create a more supportive environment for families, potentially reducing divorce rates.
- 3. **Integrate family stability considerations into environmental policy:** Environmental policy discussions and interventions should consider the potential impacts of family stability. For example, policies promoting sustainable housing options could consider affordability and family needs.
- 4. **Invest in further research:** More research is needed to explore the relationship between family stability and environmental sustainability across diverse contexts. This research could inform the development of more effective policies for both social and environmental pathways.





Thank You