HURRICANE SANDY: AN EDUCATIONAL BIBLIOGRAPHY OF KEY RESEARCH STUDIES

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ABSTRACT

There, undoubtedly, will be a flurry of research activity in the 'Superstorm' Sandy impact area on a myriad of disaster-related topics, across academic disciplines. The purpose of this study was to review the disaster research related specifically to hurricanes in the educational and social sciences that would best serve as a compendium bibliography for researchers, academic faculty, and policymakers in the Hurricane Sandy impact area. To that end, this study, based on a content analysis procedure, identified key articles on hurricanes based on the extant literature indexed in the database PsycINFO. Of the 1,408 references identified, 1000 were scholarly qualitative and quantitative research articles. The author developed a bibliography of 100 key citations to articles, categorized across select topical areas, based on issues central to investigatory efforts following natural disasters. Future research should recommend research designs that address specific concerns of both researchers and policymakers in high-impact, heavily populated areas of the U.S. susceptible to major tropical storm or hurricane damage.

Introduction

The field of disaster studies has grown at an exponential pace over the past 30 years and, accordingly, the knowledge base of the field is presently quite voluminous (Rodriguez et al., 2007)). While investigations on the impacts of natural disasters in the areas of climate science and the general sciences have a long history, research on the human impact of hurricanes is a more recent phenomenon in the social sciences. The enormous devastation of Hurricane Andrew in 1990 and its impact on human populations, social institutions, and commerce was a key turning point on the emphasis and value that social scientists place on research findings regarding all aspects of natural disasters. Hurricane Katrina, in 2005, spurred on exponential growth in investigatory efforts across all the social sciences. Perhaps to put this rapid rise in research output into perspective, a keyword search for the term *Hurricane* in the database PsycINFO in 1985 yielded just 10 hits; today, this search would identify over 1,400 reference citations.

Hurricane Sandy (October 30, 2012), a category 1 'super' storm, produced untold destruction on the U.S. east coast, particularly New Jersey and greater New York City coastal areas. Property damage has been estimated at about $75 billion and the death toll is reported as 72 adults and children.

The Current Study

The purpose of this article is to provide a bibliography of key peer-reviewed research studies on the human, social, health, organizational, and policy aspects of hurricanes. Such research references provide a concise listing of highly-relevant articles for researchers, professional practitioners, and policymakers in the Hurricane Sandy impact areas. To that end, the database PsycINFO was searched as this file is considered the premier bibliographic source for literature in the behavioral and social sciences. Moreover, PsycINFO indexes periodicals in the social, health-related, and policy fields.

The author conducted a keyword (i.e., All Fields) search, inputting the term "Hurricane", on March 10, 2013. This operation yielded 1,410 citations, of which 1000 were journal articles that appear in peer-reviewed periodicals. These 1000 references were then reviewed for their saliency as a robust, major reference (the intent was to select articles that were both well-researched and informative). Thus, the articles that appeared to be most helpful and useful to researchers, practitioners, and policymakers were selected for inclusion. A typology of 10 focus areas served as a template for categorization. Table 1 shows the reference citations to the 100 articles across these typologies.

Table 1

Citations to Articles across Topical Areas in Hurricane Research in the PsycINFO database (March 2013)

Preparedness

Meyer, R.J. (2012). Failing to learn from experience about catastrophes: The case of hurricane preparedness. *Journal of Risk & Uncertainty*, 45(1), 25-50.

Nepal, V., et al. (2012). Disaster preparedness of linguistically isolated populations: Practical issues for planners. *Health Promotion & Practice*, 13(2), 265-271.

Yun, K., et al. (2010). Moving mental health into the disaster preparedness spotlight. *New England Journal of Medicine*, 363(13), Sept. 23, 1193-1195.

Faupel, C.E., & Styles, S.P. (1993). Disaster education, household preparedness, and stress responses following Hurricane Hugo. *Environment and Behavior*, 25(2), 228-249.

Risk Factors

Kelly, D.L., et al. (2012). Evolution of subjective hurricane risk perceptions: A Bayesian approach. *Journal of Economic Behavior and Organization*, 81(2), 644-663.

Sakura, K., et al. (2011). Customers' views toward the insurance industry response post-hurricane. *Organization Development Journal*, 29(4), 33-52.

Zahran, S., et al. (2011). Economics of disaster risk, social vulnerability, and mental health resilience. Risk *Analysis*, 31(7), 1107-1119.

Zhang, Y., et al. (2010). Hazard proximity or risk perception? Evaluating effects of natural and technical hazards on housing values. *Environment and Behavior*, 42(5), 597-624.

Lindell, M.K., & Huang, S.N. (2008). Households' perceived personal risk and responses in a multi-hazard environment. *Risk Analysis*, 28(2), 539-556.

Crisis Communication

Veil, S.R., & Husted, R.A. (2012). Best practices as an assessment for crisis communication. *Journal of Communication Management*, 16(2), 131-145.

Aten, J.D., & Topping, S. (2010). An online social networking disaster preparedness tool for faith communities. *Psychological Trauma: Theory, Research, Practice, and Policy*, 2(2), 130-134.

Doerfel, M.L., et al. (2010). The evolutionary role of inter-organizational communication: Modeling social capital in disaster contexts. *Human Communication Research*, 36(2), 125-162.

Shklovski, I., et al. (2010). Technology adoption and use in the aftermath of Hurricane Katrina in New Orleans. *American Behavioral Scientist*, 53(8), 1228-1246.

Macias, W., et al. (2009). Blog functions as risk and crisis communication during Hurricane Katrina. *Journal of Computer-mediated Communication*, 15(1), 1-31.

Beaudoin, C.E. (2007). Mass media use, neighborliness, and social support: Assessing causal links with panel data. *Communication Research*, 34(6), 637-664.

Littlefield, R.S., & Quenette, A.M. (2007). Crisis leadership and Hurricane Katrina: The portrayal of authority by media in natural disaster. *Journal of Applied Communication Research*, 35(1), 26-47.

Thelwall, M., & Stuart, D. (2007). RUOK? Blogging communication technologies during crises. *Journal of Computer-mediated Communication*, 12(2), 523-548.

Evacuation

Castle, N.G., & Engberg, J.B. (2011). The health consequences of relocation for nursing home residents following Hurricane Katrina. *Research on Aging*, 33(6), 661-687.

Stein, R.M., et al. (2010). Who evacuates when hurricanes approach? The role of risk, information, and location. *Social Sciences Quarterly*, 91(3), 816-834.

Horney, J., et al. (2010). Individual, actual, or perceived property flood risk: Did it predict evacuation from Hurricane Isabel in North Carolina, 2003. *Risk Analysis*, 30(3), 501-511.

Regnier, E. (2008). Public evacuation decisions and hurricane track uncertainty. *Management Science*, 54(1), 16-28.

Thomas, J., & Lackey, N. (2008). How to evacuate a psychiatric hospital: A Hurricane Katrina success story. *Journal of Psychosocial Nursing & Mental Health Services*, 46(1), 35-40.

Kang, J.E., et al. (2007). Hurricane evacuation expectations and actual behavior in Hurricane Lili. *Journal of Applied Social Psychology*, 37(4), 887-903.

Dombrowski, M., et al. (2006). Predicting emergency evacuation and sheltering behavior: A structured analytical approach. *Risk Analysis*, 26(6), 1675-1688.

Arlikatti, S., et al. (2006). Risk area accuracy and hurricane evacuation expectations of coastal residents. *Environment and Behavior*, 38(2), 226-247.

Psycho-Social

Yamashita, J. (2012). A review of psychosocial aspects for disaster mental health studies. *Psychological Trauma*, 4(6), 560-567.

Rendall, M.S. (2011). Breakups in New Orleans households after Hurricane Katrina. *Journal of Marriage & Family*, 73(3), 654-668.

Spence, P.R. (2007). Crisis communication, race, and natural disaster. *Journal of Black Studies*, 37(4), 539-554.

Dugan, B. (2007). Loss of identity in disaster: How do you say goodbye to home? *Perspectives in Psychiatric Care*, 43(1), 41-46.

Elliott, J.R., & Pais, J. (2006). Race, class, and Hurricane Katrina: Social differences in human responses to disaster. *Social Science Research*, 35(2), 295-321.

Bourque, L.B., et al. (2006). Weathering the storm: The impact of hurricanes on physical and mental health. *Annals of the American Academy of Political and Social Science*,604, 129-150.

Peguero, A. (2006). Latino disaster vulnerability: The dissemination of hurricane mitigation information among Florida's homeowners. *Hispanic Journal of Behavioral Sciences*, 28(1), 5-22.

Cohan, C.L., & Cole, S. (2002). Life course transitions and natural disaster: Marriage, birth, and divorce following Hurricane Hugo. *Journal of Family Psyc*hology, 16(1), 14-25.

Riad, J.K., & Norris, F.H. (1996). The influence of relocation on the environmental, social, and psychological stress experienced by disaster victims. *Environment and Behavior*, 28(2), 163-182.

Community Recovery

Storr, V.H., & Haeffele-Balch, S. (2012). Post-disaster community recovery in heterogeneous, loosely connected communities. *Review of Social Economy*, 70(3), 295-314.

Pyles, L. (2007). Community organizing for post-disaster social development: Locating social work. *International Social Work*, 50(3), 321-333.

Bartley, A.G. (2007). Confronting the realities of volunteering for a natural disaster. *Journal of Mental Health Counseling*, 29(1), 4-16.

Michel, L.M. (2007). Personal responsibility and volunteering after a natural disaster: The case of Hurricane Katrina. *Sociological Spectrum*, 27(6), 633-652.

Scurfield, R.M. (2006). Post-Katrina aftermath and helpful interventions on the Mississippi gulf coast. *Traumatology*, 12(2), 104-120.

Rodriguez, H., et al. (2006). Rising to the challenges of a catastrophe: The emergent and prosocial behavior following Hurricane Katrina. *Annals of the American Academy of Political and Social Science*, 604, 82-101.

Kaniasty, K., & Norris, F.H. (1995). In search of altruistic community: Patterns of social support mobilization following Hurricane Hugo. *American Journal of Community Psychology*, 23(40), 447-477.

Recovery-Human Populations

Hrostowski, S., & Rehner, T. (2012). Five years later: Resiliency among older adult survivors of Hurricane Katrina. *Journal of Gerontological Social Work*, 55(4), 337-351.

Many, M., et al. (2012). The function of avoidance in improving understanding of disaster recovery. *Journal of Human Behavior in the Social Environment*, 22(4), 436-450.

Weil, F., et al. (2012). The burdens of social capital: How socially-involved people dealt with stress after Hurricane Katrina. *Social Science Research*, 41(1), 110-119.

Cherry, K.E., et al. (2011). Longitudinal assessment of cognitive and psychosocial functioning after Hurricane Katrina and Rita: Exploring disaster impact on middle-aged, older, and oldest-old adults. *Journal of Applied Biobehavioral Research*, 16(3-4), 187-211.

Lowe, S.R., et al. (2011). The impact of child-related stressors on the psychological functioning of lower-income mothers after Hurricane Katrina. *Journal of Family Issues*, 32(10), 1303-1324.

Fox, M.H., et al. (2010). The psychological impact of Hurricane Katrina on persons with disabilities and independent living center staff living on the American gulf coast. *Rehabilitation Psychology*, 55(3), 231-240.

Henderson, T.L., et al. (2010). Older adults' responses to Hurricane Katrina: Daily hassles and coping strategies. *Journal of Applied Gerontology*, 29(1), 48-69.

Stough, L.M., et al. (2010). Disaster case management and individuals with disabilities. *Rehabilitation Psychology*, 55(30), 211-220.

Hamblen, J.L., et al. (2009). Cognitive behavior therapy for post-disaster distress: A community-based treatment program for survivors of Hurricane Katrina. *Administration & Policy in Mental Health & Mental Health Services Research*, 36(3), 206-214.

Acierno, R., et al. (2006). Risk and protective factors for psychopathology among older versus younger adults after the 2004 Florida hurricanes. *American Journal of Geriatric Psychiatry*, 14(12), 1051-1059.

Coffman, S. (1996). Parents' struggle to rebuild family life after Hurricane Andrew. *Issues in Mental Health Nursing*, 17(4), 353-367.

Recovery-Children

La Greca, A.M., et al. (2010). Hurricane-related exposure and stressors, other life events, and social support: Concurrent and prospective impact on children's persistent posttraumatic stress symptoms. *Journal of Consulting and Clinical Psychology*, 78(6), 794-805.

Kronenberg, M.E., et al. (2010). Children of Katrina: Lessons learned about post-disaster symptoms and recovery patterns. *Child Development*, 81(4), 1241-1259.

Terranova, A.M., et al. (2009). Factors influencing the course of posttraumatic stress following a natural disaster: Children's reactions to Hurricane Katrina*. Journal of Applied Developmental Psychology*, 30(3), 344-355.

Corrarino, J.E. (2008). Disaster-related mental health needs of women and children. MCN: American *Journal of Maternal/Child Nursing*, 33(4), 242-248.

Burnham, J., et al. (2008). Examining children's fears in the aftermath of Hurricane Katrina. *Journal of Traumatic Stress*, 7(4), 253-275.

Curtis, T., et al. (2000). Changes in reports and incidence of child abuse following natural disasters*. Child Abuse & Neglect*, 24(9), 1151-1162.

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Swenson, C., et al. (1996). Impact of a natural disaster on preschool children: Adjustment 14 months after a hurricane. *American Journal of Orthopsychiatry*, 66(1), 122-130.

Hardin, S.B., et al. (1994). Psychological distress of adolescents exposed to Hurricane Hugo. *Journal of Traumatic Stress*, 7(3), 427-440.

Methodology

Green, G., et al. (2012). What can multiwave studies teach us about disaster research?: An analysis of low-income Hurricane Katrina survivors. *Journal of Traumatic Stress*, 25(3), 299-306.

Dass-Brailsford, P., & Thomley, R. (2012). An inventory of secondary trauma among mental health volunteers after Hurricane Katrina. *Journal of Systemic Therapies*, 31(3), 36-52.

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Business & Commerce

Liu, C., et al. (2012). Post-disaster coping and recovery: The role of perceived changes in the retail facilities. *Journal of Business R*esearch, 65(5), 641-647.

Linnenluecke, M.K., et al. (2012). Extreme weather events and the critical importance of anticipatory adaptation and organizational resilience in responding to impacts. *Business Strategy and the Environment*, 21(1), 17-32.

Corey, C.M., & Deitch, E.A. (2011). Factors affecting business recovery immediately after Hurricane Katrina. *Journal of Contingencies & Crisis Management*, 19(3), 169-181.

Germain, M.L. (2010). The role of human resource development in crisis situations: Lessons learned from Hurricane Katrina. *Advances in Developing Human Resources*, 12(5), 536-551.

Muller, A., & Whiteman, G. (2009). Exploring the geography of corporate philanthropic disaster response: A study of Fortune Global 500 firms. *Journal of Business Ethics*, 84(4), 589-603.

Hochwarter, W.A., et al. (2008). Board up the windows: The interaction effects of hurricane-induced job stress and perceived resources on work outcomes. *Journal of Management*, 34(2), 263-289.

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Sanchez, J., et al. (1995). Corporate support in the aftermath of a natural disaster: Effects on employee strains. *Academy of Management Journal*, 38(2), 504-521.

School Settings

Barrett, E.J., et al. (2012). The tempering effect of schools on students' experience of a life changing event: Teenagers and the Hurricane Katrina evacuation. *Urban Education*, 47(1), 7-31.

Nastasi, B.K., et al. (2011). School-based mental health services in post-disaster contexts: A public health framework. *School Psychology International*, 32(5), 533-552.

Watson, P.G., et al. (2011). When a natural disaster occurs: Lessons learned in meeting students' needs. *Journal of Professional Nursing*, 27(6), 362-369.

Overstreet, S., et al. (2010). A school-based assessment of secondary stressors and adolescent mental health 18 months post-Katrina. *Journal of School Psychology*, 48(5), 413-431.

Piotrowski, C., & Vodanovich, S. (2008). Hurricane Ivan: A case study of university faculty in crisis management. *Organization Development Journal*, 26(2), 25-31.

Health Issues

Tucker, P., et al. (2012). Emotional stress and heart rate variability measures associated with cardiovascular risk in relocated Katrina survivors. *Psychosomatic Medicine*, 74(2), 160-168.

Lu, A. (2011). Stress and physical health deterioration in the aftermath of Hurricane Katrina and Rita. *Sociological Perspectives*, 54(2), 229-250.

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Government

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Conclusions

Bibliometric research, based on a content analysis of the extant literature, can serve a pedagogic function in that key references on a specific issue can be presented in a typologic framework. The current analysis provides both scholars and policymakers a research compendium of articles that address major concerns in dealing with the individual and social aspects of hurricane impact on a populated region. In addition, the bibliography includes literature on the governmental response to recent hurricanes (see Piotrowski 2006; Piotrowski & Armstrong, 1998). At the same time, this study complements recent interest in how informetrics informs disaster science (Liu et al., 2012; Magnone, 2012). Future studies using content analysis methods applied to books on natural disasters could identify research areas of neglect in the field.

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