



Healthy Liveable Cities (HLC) Literature Alert

Web of Science: January 2019

Record 1

Title: INTERACT: A comprehensive approach to assess urban form interventions through natural experiments

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Source: BMC PUBLIC HEALTH Volume: 19 Article Number: 51 DOI: 10.1186/s12889-018-6339-z
Published: JAN 10 2019 Document Type:Article

Abstract: BackgroundUrban form interventions can result in positive and negative impacts on physical activity, social participation, and well-being, and inequities in these outcomes. Natural experiment studies can advance our understanding of causal effects and processes related to urban form interventions. The INTERventions, Research, and Action in Cities Team (INTERACT) is a pan-Canadian collaboration of interdisciplinary scientists, urban planners, and public health decision makers advancing research on the design of healthy and sustainable cities for all. Our objectives are to use natural experiment studies to deliver timely evidence about how urban form interventions influence health, and to develop methods and tools to facilitate such studies going forward.MethodsINTERACT will evaluate natural experiments in four Canadian cities: the Arbutus Greenway in Vancouver, British Columbia; the All Ages and Abilities Cycling Network in Victoria, BC; a new Bus Rapid Transit system in Saskatoon, Saskatchewan; and components of the Sustainable Development Plan 2016-2020 in Montreal, Quebec, a plan that includes urban form changes initiated by the city and approximately 230 partnering organizations. We will recruit a cohort of between 300 and 3000 adult participants, age 18 or older, in each city and collect data at three time points. Participants will complete health and activity space surveys and provide sensor-based location and physical activity data. We will conduct qualitative interviews with a subsample of participants in each city. Our analysis methods will combine machine learning methods for detecting transportation mode use and physical activity, use temporal Geographic Information Systems to quantify changes to urban intervention exposure, and apply analytic methods for natural experiment studies including interrupted time series analysis.DiscussionINTERACT aims to advance the evidence base on population health intervention research and address challenges related to big data, knowledge mobilization and engagement, ethics, and causality. We will collect similar to 100TB of sensor data from participants over 5years. We will address these challenges using interdisciplinary partnerships, training of highly qualified personnel, and modern methodologies for using sensor-based data.

Record 2

Title: Urban morphology, outdoor thermal comfort and walkability in hot, dry cities: Case study in Sidi Okba, Algeria

Author(s): Mouada, N (Mouada, Nassima)[1] ; Zemmouri, N (Zemmouri, Noureddine)[1] ; Meziani, R (Meziani, Rim)[2]

Source: INTERNATIONAL REVIEW FOR SPATIAL PLANNING AND SUSTAINABLE DEVELOPMENT
Volume: 7 Issue: 1 Pages: 117-133 DOI: 10.14246/irspsda.7.1_117 Published: 2019 Document
Type:Article

Abstract: Urban morphology should carefully consider climatic and behavioural aspects for hot arid climates. To put these insights into practice, this study aims to investigate different urban environments in

the hot, dry city of Sidi Okba, Algeria (Biskra) during the summer season and defines the upper and lower limits of the thermal comfort range for the PET index. A second aim is to quantify the walkable environment and highlight the relationship between urban morphology and walking behaviour. The study was based on physical measurements combined with a questionnaire survey and a walking audit instrument. The findings from this research show that urban morphology, defined by building density, height/width (H/W) ratio and tree density, is significantly associated with the outdoor thermal conditions and potential pedestrians over short distances. The study also shows that in order to provide a comfortable climate and to increase pedestrian choice in the urban environment, the public space should include high building density, combined with deep streets with a high connection between them, and a large amount of vegetation along the lower parts of streets. This type of design has a positive effect on the walkability score of public spaces.

Record 3

Title: Moderating Effects of Components of Resilience on Obesity Across Income Strata in the National Survey of Children's Health

Author(s): Foster, BA (Foster, Byron A.); Weinstein, K (Weinstein, Kelsey)

Source: ACADEMIC PEDIATRICS Volume: 19 Issue: 1 Pages: 58-66 DOI: 10.1016/j.acap.2018.08.012
Published: JAN-FEB 2019 Document Type:Article

Abstract: OBJECTIVE: This study examined whether components of resilience at the family or child level are associated with a decreased risk of obesity in children after accounting for community-, family-, and individual-level stressors associated with an increased risk of obesity. METHODS: Data are from the 2016 National Survey of Children's Health, using the subset of children 10 to 17 years of age with weight data. We examined whether or not components of family- or child-level resilience were associated with weight status. Community-, family-, and individual-level risk factors for obesity were examined within each income stratum. We used multinomial logistic regression to evaluate if components of resilience are associated with lower overweight or obesity. RESULTS: The sample included 24,405 10- to 17-year-old children. Child-level but not family-level resilience components were associated with a decreased risk of child obesity across income strata. Food security and adverse childhood experiences (ACEs) were only associated with obesity within higher income strata; bullying was consistently associated across strata. Physical activity was strongly associated with increased emotional resilience. The association between higher emotional resilience and lower obesity remained after adjusting for community-level factors (parks), family-level factors (ACEs), and individual-level factors (bullying). Better maternal health was associated with increased emotional resilience and lower risk of obesity. CONCLUSIONS: Resilience, specifically emotional resilience, may be a protective factor against obesity in children regardless of income stratum. Physical activity of the child is associated with greater emotional resilience, and better maternal health may mediate the association between this component of resilience and weight.

Record 4

Title: Neighborhood Commute to Work Times and Self-Reported Caregiver Health Behaviors and Food Access

Author(s): White, MJ (White, Michelle J.)[1] ; Yin, HS (Yin, H. Shonna)[2,3] ; Rothman, RL (Rothman, Russell L.)[4] ; Sanders, LM (Sanders, Lee M.)[5] ; Delamater, A (Delamater, Alan)[6] ; Flower, K (Flower, Kori)[1] ; Perrin, EM (Perrin, Eliana M.)[7,8]

Source: ACADEMIC PEDIATRICS Volume: 19 Issue: 1 Pages: 74-79 DOI: 10.1016/j.acap.2018.07.005
Published: JAN-FEB 2019 Document Type:Article

Abstract: OBJECTIVE: Time spent commuting is associated with obesity. The objective of this study was to assess the relationship between neighborhood-level commute to work (CTW) times and self-reported health behaviors and food access. METHODS: We conducted a cross-sectional analysis of care-givers with infants as part of the Greenlight Study, a multisite obesity trial in Chapel Hill, New York City, Nashville, and Miami. ZIP code based commuting estimates were determined using the US Census American Community

Survey. Self-reported health behaviors and food access data were collected by directed interview. Logistic and linear regression models were used to determine associations between neighborhood CTW times and health behaviors and food access. RESULTS: The average neighborhood CTW time for all ZIP codes was 29 minutes (n = 846). Caregivers in longer CTW time neighborhoods were more likely to endorse fewer food choices (adjusted odds ratio [AOR], 1.39; 95% confidence interval [CI], 1.15-1.69; P = .001) and difficulty accessing markets with fresh produce (AOR, 1.51; 95% CI, 1.02-2.25; P = .04). Neighborhood CTW time > 30 minutes was associated with less caregiver physical activity (AOR, 0.58; 95% CI, 0.34-0.98; P = .044). Neighborhood CTW time was inversely related to infant television time (adjusted mean, 399 minutes/day for <= 30 minutes and 256 minutes/day for > 30 minutes; P = .025). New York families in longer CTW neighborhoods were more likely to report difficulty accessing markets with fresh produce (AOR, 1.80; 95% CI, 1.03-3.14; P = .039). CONCLUSIONS: Neighborhood CTW time is associated with several self-reported health behaviors and perceived food access among caregivers with children. Neighborhood CTW times may represent city-specific features, including transportation infrastructure, which may impact the health of families.

Record 5

Title: Parental Perceptions of Child's Medical Care and Neighborhood and Child's Behavioral Risk Factors for Obesity in US Children by Body Mass Index Classification

Author(s): Vaccaro, JA (Vaccaro, Joan A.)[1] ; Zarini, GG (Zarini, Gustavo G.)[1] ; Huffman, FG (Huffman, Fatma G.)[1]

Source: JOURNAL OF ENVIRONMENTAL AND PUBLIC HEALTH Article Number: 3737194 DOI: 10.1155/2019/3737194 Published: 2019 Document Type:Article

Abstract: Environmental factors, preventive medical care, and behaviors play a role in childhood obesity. This study used the National Survey of Children's Health, 2011-2012, for 42,828 children, ages 10-17 years. Greater percent of children in the overweight/obese category performed no moderate-to-vigorous physical activity: 11.9 (10.6, 13.3) as compared to children in the underweight/normal weight category: 9.7 (8.9, 10.6). No moderate-to-vigorous physical activity was associated with no preventive medical care, inadequate or no health care, parents reporting higher percent of no parks or playgrounds, and unsafe and unsupportive neighborhoods. Odds ratios of overweight/obesity were higher for males [OR = 2.06 (1.64, 2.60)], Hispanics [OR = 1.49 (1.17, 1.90)], non-Hispanic Black females [OR = 1.59 (1.20, 2.08)], younger females [OR10-12yrs. = 1.35 (1.03, 1.79) and OR13-15yrs. = 1.4 (1.06, 1.89) vs. OR = 1.00(16-17yrs.)], children with high television viewing [OR0-1hr./day = 0.72 (0.61, 0.86); OR>1 to <4hrs./day 0.84 (0.72, 0.99) = vs. OR = 1.00 (4hrs./day),] and lower categories of physical activity [OR (0 days/wk.) = 1.38 (1.13, 1.62); OR1-3 days/wk. = 1.14 (1.22, 1.62) vs. OR7 days/wk. = 1.00], higher poverty, smoke exposure, and parental perception of their neighborhood as unsupportive. Promoting preventive medical care and neighborhood cooperation may have potential to lower childhood obesity.

Record 6

Title: Changes in workplace car parking and commute mode: a natural experimental study

Author(s): Knott, CS (Knott, Craig S.)[1] ; Sharp, SJ (Sharp, Stephen J.)[1] ; Mytton, OT (Mytton, Oliver T.)[1] ; Ogilvie, D (Ogilvie, David)[1] ; Panter, J (Panter, Jenna)[1]

Source: JOURNAL OF EPIDEMIOLOGY AND COMMUNITY HEALTH Volume: 73 Issue: 1 Pages: 42-49 DOI: 10.1136/jech-2018-210983 Published: JAN 2019 Document Type:Article

Abstract: Background The use of private motor vehicles places a considerable burden on public health. Changes in workplace car parking policies may be effective in shifting behaviour. We use a natural experimental design to assess whether changes in policy were associated with differences in commute mode. Methods We used cohort data from participants working in Cambridge (2009-2012). Commuters reported their trips and travel modes to work over the last week, workplace car parking policy and socioeconomic, environmental and health characteristics. Changes in policy were defined between phases

(1608 transition periods; 884 participants). Using generalised estimating equations, we estimated associations between changes in parking policy and the proportion of trips that (i) were exclusively by motor vehicle, (ii) involved walking or cycling and (iii) involved public transport at follow-up. Results 25.1% of trips were made by motor vehicle, 54.6% involved walking or cycling and 11.7% involved public transport. The introduction of free or paid workplace parking was associated with higher proportions of motor vehicle trips (11.4%, 95% CI (6.4 to 16.3)) and lower proportions involving walking or cycling (-13.3%, 95% CI (-20.2 to -6.4)) and public transport (-5.8%, 95% CI (-10.6 to -0.9)) compared with those with no workplace parking. Restrictive changes in policy were associated with shifts in the expected direction but these were not statistically significant. Conclusion Relaxation of parking policy was associated with higher proportions of trips made by motor vehicle. Further longitudinal and intervention research is required to assess generalisability of these findings.

Record 7

Title: Characteristics of the environment and physical activity in midlife: Findings from UK Biobank

Author(s): Smith, L (Smith, Lindsey)[1] ; Panter, J (Panter, Jenna); Ogilvie, D (Ogilvie, David)

Source: PREVENTIVE MEDICINE Volume: 118 Pages: 150-158 DOI: 10.1016/j.ypmed.2018.10.024

Published: JAN 2019 Document Type:Article

Abstract: Characteristics of the environment influence health and may promote physical activity. We explored the associations between neighborhood environmental characteristics grouped within five facets (spaces for physical activity, walkability, disturbance, natural environment, and the sociodemographic environment) and objective ('recorded') and self-reported ('reported') physical activity in adults from UK Biobank. Recorded activity was assessed using wrist-worn accelerometers (2013-2015, n = 65,967) and time spent in moderate-to-vigorous physical activity (MVPA), walking, and walking for pleasure was self-reported (2006-2010, n = 337,822). Associations were assessed using linear and multinomial logistic regression models and data were analyzed in 2017. We found participants living in areas with higher concentrations of air pollution recorded and reported lower levels of physical activity and those in rural areas and more walkable areas had higher levels of both recorded and reported activity. Some associations varied according to the specificity of the outcome, for example, those living in the most deprived areas were less likely to record higher levels of MVPA (upper tertile: RRR: 0.80 95% CI: 0.74, 0.86) but were more likely to report higher levels of walking (upper tertile: RRR: 1.09, 95% CI: 1.06, 1.13). Environmental characteristics have the potential to contribute to different physical activities but interventions which focus on a single environmental attribute or physical activity outcome may not have the greatest benefits.

Record 8

Title: Network influences on the development and implementation of active transportation policies in six US cities

Author(s): Zwald, ML (Zwald, Marissa L.)[1] ; Eyler, AA (Eyler, Amy A.)[1,2] ; Haire-Joshu, D (Haire-Joshu, Debra)[2] ; Handy, SL (Handy, Susan L.)[3] ; Harris, JK (Harris, Jenine K.)[2] ; Moreland-Russell, S (Moreland-Russell, Sarah)[1,2] ; Brownson, RC (Brownson, Ross C.)[1,2,4,5]

Source: PREVENTIVE MEDICINE Volume: 118 Pages: 176-183 DOI: 10.1016/j.ypmed.2018.10.026

Published: JAN 2019 Document Type:Article

Abstract: Many communities have prioritized policy and built environment changes to promote active transportation (AT). However, limited information exists on the partnerships and processes necessary to develop and implement such policy and environmental changes, particularly among organizations in non-health sectors. Within the transportation sector, metropolitan planning organizations (MPOs) are increasingly recognized as organizations that can support AT policies. This study examined inter-organizational relationships among MPOs and their partners working to advance AT policies in six U.S. cities. In fall 2015, an average of 22 organizations in each city participated in an online survey about

partnerships with MPOs and other organizations developing and implementing AT policies. Measures included organizational characteristics and relational attributes including: level of AT policy collaboration, information transmission, resource sharing, and perceived decisional power. Descriptive network analysis and exponential random graph modeling were used to examine organizational attributes and relational predictors associated with inter-organizational collaboration in each network. MPOs served as collaborative intermediaries, connecting other organizations around AT policies, in half of the cities examined. Organizations in each city were more likely to collaborate around AT policies when partners communicated at least quarterly. In half of the cities, the probability of AT policy collaboration was higher when two agencies exchanged resources and when organizations had perceived decisional authority. Network analysis helped identify factors likely to improve partnerships around AT policies. Results may contribute to best practices for collaboration among researchers, practitioners, policymakers, and advocates across diverse sectors seeking to promote population-level physical activity.

Record 9

Title: Characterizing Nature and Participant Experience in Studies of Nature Exposure for Positive Mental Health: An Integrative Review

Author(s): Barnes, MR (Barnes, Michael R.)[1] ; Donahue, ML (Donahue, Marie L.)[2] ; Keeler, BL (Keeler, Bonnie L.)[3] ; Shorb, CM (Shorb, Cameron M.)[4] ; Mohtadi, TZ (Mohtadi, Tara Z.)[5] ; Shelby, LJ (Shelby, Lacy J.)[6]

Source: FRONTIERS IN PSYCHOLOGY Volume: 9 Article Number: 2617 DOI: 10.3389/fpsyg.2018.02617
Published: JAN 4 2019 Document Type:Review

Abstract: A growing number of studies demonstrate significant associations between nature experiences and positive mental health outcomes (e.g., improved mood, decreased stress). However, implementation of this research by practitioners in fields such as urban design or public health has been limited. One reason for this is that it remains unclear what elements of nature and types of participant experience are consistently associated with mental health benefits. As a result, decision-makers who aim to enhance mental health in cities have little guidance about which elements of nature and types of experiences in natural areas may lead to positive mental health outcomes. We reviewed 30 studies with 41 distinct exposures in nature that elicited positive mental health benefits and characterized the elements of nature found at these sites, as well as aspects of participants' experience. Elements of natural areas considered include: forest, managed grass, and water as dominant land cover types, specific water features (e.g., small ponds, fountains) and built features (e.g., trails, paths). The majority of the studies we reviewed assessed the experiences of individuals (vs. in groups) participating in walks during warmer seasons. Most studies did not describe the "nature of the nature" associated with positive mental health outcomes. We contacted authors and used Google Earth imagery to reconstruct the specific natural elements, landscape typology, and site adjacencies present in past studies. We recommend specific ways researchers could better and more transparently document important elements of nature and participant experience in study design and reporting that will enhance the planning and design relevance of their work.

Record 10

Title: The phenomenon of walking: diverse and dynamic

Author(s): Rybraten, S (Rybraten, Stine)[1] ; Skar, M (Skar, Margrete)[1] ; Nordh, H (Nordh, Helena)[2]

Source: LANDSCAPE RESEARCH Volume: 44 Issue: 1 Pages: 62-74 DOI:
10.1080/01426397.2017.1400527 Published: JAN 2 2019 Document Type:Article

Abstract: Everyday walking is a far-reaching activity with the potential to increase health and well-being in the general public. From a phenomenological perspective, walking can be seen as a function of being-in-the-world, where the landscape, a sense of place, and the moment are closely entwined with the walker's own lived experiences. Using interviews with 73 walkers in a medium-sized town in Norway, this article explores the phenomenon of everyday walking. The data illustrate the multiple ways in which people

emphasise well-being and ascribe meaning to their walking experiences, and how these ways may vary significantly during a life course, from day to day, and even within a single walk. Insights from this study may prove useful to policy-makers and administrative bodies in acknowledging people's various needs and gains related to everyday walking, and hence for promoting a diversified management of walking within the field of health policy, as well as in urban planning for walkable cities.

Record 11

Title: Solar irradiance simulation for evaluating thermal comfort in urban environment

Author(s): Wang, BF (Wang, Binfang)[1] ; Png, CE (Png, Ching Eng)[1]

Source: ARCHITECTURAL SCIENCE REVIEW Volume: 62 Issue: 1 Pages: 14-25 Special Issue: SI DOI: 10.1080/00038628.2018.1535421 Published: JAN 2 2019 Document Type:Article; Proceedings Paper Conference Conference: 4th International Conference on Countermeasures to Urban Heat Island (UHI) Location: Natl Univ Singapore, Singapore, SINGAPORE Date: MAY 30-JUN 01, 2016

Abstract: Urbanization has led to high-density living in many large modern cities like Singapore, which creates the challenge of reducing the Urban Heat Island effect (UHI) and to achieve higher liveability in residential towns. In order to study thermal comfort in residential areas, a method that uses solar irradiance as the criterion to investigate thermal comfort is proposed. In this method, surface temperatures in urban areas are measured and the amount of solar irradiance reaching urban surfaces is predicted, and hence a correlation between incident solar irradiance on a surface and surface temperature may be made. Solar radiation exposure for four different neighbourhood designs in a given residential area is evaluated thereafter. Both solar short-wave and long-wave radiation in pedestrian areas for these designs are then predicted and used as the criteria to assess thermal comfort in these areas. UHI effects are also analysed based on the surface temperatures measured.

Record 12

Title: Children's independence and affordances experienced in the context of public open spaces: a study of diverse inner-city and suburban neighbourhoods in Auckland, New Zealand

Author(s): Chaudhury, M (Chaudhury, M.)[1] ; Hinckson, E (Hinckson, E.)[2] ; Badland, H (Badland, H.)[3] ; Oliver, M (Oliver, M.)[4]

Source: CHILDRENS GEOGRAPHIES Volume: 17 Issue: 1 Pages: 49-63 Special Issue: SI DOI: 10.1080/14733285.2017.1390546 Published: JAN 2 2019 Document Type:Article

Abstract: Public open spaces (POS) are key neighbourhood destinations for children, providing opportunities for meaningful experiences (i.e. affordances) and independence. This study aimed to explore children's experiences and perceptions of neighbourhood POS in order to understand POS affordances for children's independent mobility (CIM). This study utilised go-along (walking) and home interviews with 140 children aged 9-13 years living in nine diverse neighbourhoods across Auckland, New Zealand. Interviews were recorded and transcripts analysed using deductive thematic analysis. Themes explored were: (1) CIM and factors influencing CIM (i.e. parental licence, use of mobile phone technology, safety of POS and geographical relocation) and (2) affordances of POS (including actualising affordances for play). Key findings indicate that POS were preferred local neighbourhood destinations and play was the main affordance experienced in POS. Parental restrictions were the greatest influence on whether a child could make independent trips to the POS. Mobile technologies may be useful for facilitating independence in the neighbourhood.

Record 13

Title: Comparative evaluation of the level of Transport-Oriented Development (DOT) around transport hubs of large cities: complementary methods of decision support

Author(s): Campos-Sanchez, FS (Campos-Sanchez, Francisco-Sergio)[1] ; Abarca-Alvarez, FJ (Abarca-Alvarez, Francisco-Javier)[1] ; Serra-Coch, G (Serra-Coch, Gloria)[2] ; Chastel, C (Chastel, Charlotte)[3]

Source: EURE-REVISTA LATINOAMERICANA DE ESTUDIOS URBANO REGIONALES Volume: 45 Issue: 134 Pages: 5-29 Published: JAN 2019 Document Type:Article

Abstract: Transit Oriented Development (TOD) is a planning approach that promotes sustainable development of an urban area. Assessing the levels of TOD may allow determining the appropriateness of urban development in this regard, as well as its potential for improvement. The purpose of this work is to assess the levels of TOD using two different methods: Global Index and Multivariate Analysis based on Artificial Neural Networks. The methods contrast each other, clarifying both their limits and complementarity degree. Additionally, the results are verified through GIS spatial analysis applied on a case study. According to the results, the Global Index Assessment is limited; the multivariable analysis shows profiles of similar urban areas, regardless of their global indexes; the spatial analysis details the average values obtained. These methods provide knowledge in their respective fields. If used in a complementary way, they improve their effectiveness as useful analysis tool for urban planning

Record 14

Title: Factors that influence the choice of route by cyclists

Author(s): de Sousa, ICN (de Sousa, Isabel-Cristina Nunes); da Penha-Sanches, S (da Penha-Sanches, Suely)[1]

Source: EURE-REVISTA LATINOAMERICANA DE ESTUDIOS URBANO REGIONALES Volume: 45 Issue: 134 Pages: 31-52 Published: JAN 2019 Document Type:Article

Abstract: For the determination of the most relevant aspects of Bicycle-Network Planning, a questionnaire regarding utilitarian trips (work and/or study related reasons) was answered by cyclists in the City of Sao Jose dos Campos. For the processing of responses, descriptive statistical analyses were conducted to represent sociodemographic profiles and posterior comparisons with the sample of cyclists from the Origin-Destination research held in 2011 for the same city. A hypothesis testing (inferential statistics) was also completed to verify the existence of significant opinion differences, due to the characteristics of the identified profiles, and a confrontation between the final results and the information gathered during the bibliographic review. The priority of the cyclists from the sample is to arrive as soon as possible to their destination through illuminated and safe paths, alongside pedaling the necessary minimum, preferably on streets with good pavement conditions.

Record 15

Title: Green and blue spaces and physical functioning in older adults: Longitudinal analyses of the Whitehall II study

Author(s): de Keijzer, C (de Keijzer, Carmen)[1,2,3] ; Tonne, C (Tonne, Cathryn)[1,2,3] ; Sabia, S (Sabia, Severine)[4,5] ; Basagana, X (Basagana, Xavier)[1,2,3] ; Valentin, A (Valentin, Antonia)[1,2,3] ; Singh-Manoux, A (Singh-Manoux, Archana)[4,5] ; Anto, JM (Maria Anto, Josep)[1,2,3] ; Alonso, J (Alonso, Jordi)[2,3,6] ; Nieuwenhuijsen, MJ (Nieuwenhuijsen, Mark J.)([1,2,3] ; Sunyer, J (Sunyer, Jordi)[1,2,3] ; Dadvand, P (Dadvand, Payam)[1,2,3]

Source: ENVIRONMENT INTERNATIONAL Volume: 122 Pages: 346-356 DOI: 10.1016/j.envint.2018.11.046 Published: JAN 2019 Document Type:Article

Abstract: There is increasing evidence of the health benefits of exposure to natural environments, including green and blue spaces. The association with physical functioning and its decline at older age remains to be explored. The aim of the present study was to investigate the longitudinal association between the natural environment and the decline in physical functioning in older adults. We based our analyses on three follow-ups (2002-2013) of the Whitehall II study, including 5759 participants (aged 50 to 74 years at baseline) in

the UK. Exposure to natural environments was assessed at each follow-up as (1) residential surrounding greenness across buffers of 500 and 1000 m around the participants' address using satellite-based indices of greenness (Enhanced Vegetation Index (EVI) and Normalized Difference Vegetation Index (NDVI)) and (2) the distance from home to the nearest natural environment, separately for green and blue spaces, using a land cover map. Physical functioning was characterized by walking speed, measured three times, and grip strength, measured twice. Linear mixed effects models were used to quantify the impact of green and blue space on physical functioning trajectories, controlled for relevant covariates. We found higher residential surrounding greenness (EVI and NDVI) to be associated with slower 10-year decline in walking speed. Furthermore, proximity to natural environments (green and blue spaces combined) was associated with slower decline in walking speed and grip strength. We observed stronger associations between distance to natural environments and decline in physical functioning in areas with higher compared to lower area-level deprivation. However, no association was observed with distance to green or blue spaces separately. The associations with decline in physical functioning were partially mediated by social functioning and mental health. Our results suggest that higher residential surrounding greenness and living closer to natural environments contribute to better physical functioning at older ages.

Record 16

Title: Geospatial Analysis of Birth Records to Target Programming for Mothers With Gestational Diabetes Mellitus in Michigan, 2013

Author(s): MacQuillan, E (MacQuillan, Elizabeth)[1] ; Curtis, A (Curtis, Amy)[2] ; Baker, K (Baker, Kathleen)[2] ; Paul, R (Paul, Rajib)[2]

Source: PUBLIC HEALTH REPORTS Volume: 134 Issue: 1 Pages: 27-35 DOI: 10.1177/0033354918815183 Published: JAN-FEB 2019 Document Type:Article

Abstract: Objectives: The incidence of gestational diabetes mellitus (GDM) in the United States has increased during the past several decades. The objective of this study was to use birth records and a combination of statistical and geographic information system (GIS) analyses to evaluate GDM rates among subgroups of pregnant women in Michigan. Materials and Methods: We obtained data on maternal demographic and health-related characteristics and regions of residence from 2013 Michigan birth records. We geocoded (ie, matched to maternal residence) the birth data, calculated proportions of births to women with GDM, and used logistic regression models to determine predictors of GDM. We calculated odds ratios (ORs) from the exponentiated beta statistic of the logistic regression test. We also used kernel density estimations and local indicators of spatial association (LISA) analyses to determine GDM rates in regions in the state and identify GDM hot spots (ie, areas with a high GDM rate surrounded by areas with a high GDM rate). Results: We successfully geocoded 104 419 of 109 168 (95.6%) births in Michigan in 2013. Of the geocoded births, 5185 (5.0%) were to mothers diagnosed with GDM. LISA maps showed a hot spot of 8 adjacent counties with high GDM rates in southwest Michigan. Of 11 064 births in the Southwest region, 829 (7.5%) were to mothers diagnosed with GDM, the highest rate in the state and a result confirmed by geospatial analyses. Practice Applications: Birth data and GIS analyses may be used to measure statewide pregnancy-associated disease risk and identify populations and geographic regions in need of targeted public health and maternal-child health interventions.

Record 17

Title: Testing the Importance of Geographic Distance for Social Capital Resources

Author(s): Foster, KA (Foster, Kirk A.)[1] ; Smith, RJ (Smith, Richard J.)[4] ; Bell, BA (Bell, Bethany A.); Shaw, TC (Shaw, Todd C.)[2,3]

Source: URBAN AFFAIRS REVIEW Volume: 55 Issue: 1 Pages: 231-256 DOI: 10.1177/1078087417714895 Published: JAN 2019 Document Type:Article

Abstract: This study tests the importance of spatial distance from social capital resources for the number of resources accessed. We examine the relationship between the distance to work, religious congregations,

and organizations on the level of social capital. Theory posits that increased time spent commuting decreases social capital; we posit that increased distance traveled to sites of social capital generation limits neighborhood social capital but increases capital access at generation sites. We measured social capital with the Resource Generator-United States and used negative binomial regression to estimate the association between distance and number of resources accessed. Social capital resource access is higher with increased distance traveled to civic organizations. Distance from work and religious congregations does not affect social capital; distance to work erodes neighborhood social capital. These findings are counter to current theory and suggest that people are willing to travel to organizations where social capital is built.

Record 18

Title: Civic Life in the Divided Metropolis: Social Capital, Collective Action, and Residential Income Segregation

Author(s): Wichowsky, A (Wichowsky, Amber)[1]

Source: URBAN AFFAIRS REVIEW Volume: 55 Issue: 1 Pages: 257-287 DOI: 10.1177/1078087416688097 Published: JAN 2019 Document Type:Article

Abstract: Social capital is presumed to help individuals who lack financial or human capital achieve collective action through their social ties and networks of relationships. But does it help individuals overcome their socioeconomic disadvantages relative to their wealthier neighbors, or does the accumulation of social capital merely reproduce socioeconomic disparities, particularly in economically segregated places? Leveraging data from the Current Population Survey, I test whether residential income segregation is associated with larger income differences in social capital investments and collective action. I find that in more economically segregated places, wealthier residents are more likely to be members of neighborhood organizations and report working with other community members to address local issues. These results are robust to the inclusion of other potential confounders, including income inequality, racial context, and racial residential segregation. This research has implications for policy makers and stakeholders interested in building a more inclusive civic arena.

Record 19

Title: Urban Redevelopment with Justice Implications: The Role of Social Justice and Social Capital in Residential Relocation Decisions

Author(s): Kim, H (Kim, Hyun)[1] ; Marcouiller, DW (Marcouiller, David W.)[2] ; Choi, Y (Choi, Yeol)[3]

Source: URBAN AFFAIRS REVIEW Volume: 55 Issue: 1 Pages: 288-320 DOI: 10.1177/1078087418759605 Published: JAN 2019 Document Type:Article

Abstract: Using recent residential redevelopment projects in South Korea, relocation decisions were investigated with respect to social justice, social capital, and various urban spatial attributes at individual, neighborhood, and community levels. Drawing on previous social justice theory, a spatial multilevel analysis using both primary and secondary data was employed to measure community attributes that reflected social justice, social capital, social services, environmental, and economic characteristics. Results suggest that relationships with neighbors in the redevelopment project lead to a lower likelihood of relocation. These empirical findings are intended to inform policy makers interested in the perspectives of residents who are potentially displaced by public and private redevelopment efforts.

Record

Title: Results from the Chinese Taipei (Taiwan) 2018 Report Card on physical activity for children and youth

Author(s): Wu, CL (Wu, Ching-Lin)[1] ; Chang, CK (Chang, Chen-Kang)[2]

Source: JOURNAL OF EXERCISE SCIENCE & FITNESS Volume: 17 Issue: 1 Pages: 8-13 Special Issue: SI DOI: 10.1016/j.jesf.2018.10.005 Published: JAN 2019 Document Type:Article

Abstract: Background/Objective: Taiwan is facing a high prevalence of physical inactivity in children and adolescents, which has led to rising obesity and morbidity levels in young people. Chinese Taipei (Taiwan) joined the Global Matrix 3.0 to share the local information on childhood physical activity and related factors with the international community. This study reports the grades for 10 indicators endorsed by the Global Matrix 3.0. Methods: The local data for school-aged children and youth (similar to 5-17 year-olds) from 2010 to 2018 were used to determine the grades. The highest priority was given to the national survey data released by the government or academic institutions, followed by academic publications using nationally representative samples. Government or academic publications relying on only regional samples were excluded. Results: The data showed very poor Overall Physical Activity and Organized Sport Participation (F and D-, respectively). The grades for Active Transportation and Sedentary Behavior were C-. Low physical activity levels and high screen time may have led to sub-optimal Physical Fitness levels (B-). The central and local governments have recognized the importance of physical activity by creating related policy and improving facilities. Therefore, School, Community and the Built Environment, and Government Strategies and Investments all received the grade of B+. Active Play and Family and Peers received INC for a lack of sufficient data. Conclusions: Despite great effort by the governments and schools, physical activity and fitness levels are low while sedentary behavior is prevalent in Taiwanese children and youth.

Record 20

Title: Understanding livable dense urban form for shaping the landscape of community facilities in Hong Kong using fine-scale measurements

Author(s): Lang, W (Lang, Wei)[1,2] ; Chen, TT (Chen, Tingting)[1,2] ; Chan, EHW (Chan, Edwin H. W.)[3,4] ; Yung, EHK (Yung, Esther H. K.)[3,4] ; Lee, TCF (Lee, Tunney C. F.)[5]

Source: CITIES Volume: 84 Pages: 34-45 DOI: 10.1016/j.cities.2018.07.003 Published: JAN 2019 Document Type:Article

Abstract: Highly dense cities' livability has long been debated in the urban planning field, particularly regarding vibrancy, walkability, and day-to-day service access. However, studies on density's effects on the provision of neighborhood community amenities and services are limited. In addition, urban form's effects on community facility distribution patterns under the constraints of pedestrian access to urban road networks remain poorly understood. Hong Kong, with an average population density of 68,500 persons/km², has one of the world's densest urban environments. This study investigated community facility distribution through a comprehensive network analysis using fine-scale dataset. Results showed that highly dense urban form ensured access to certain facilities and services and that daily service and amenities provision was positively correlated to building density and performance of community spatial characteristics. The findings provide insights for planning and designing to provide better facility services to meet people's daily needs regarding amenities and services and for the configuration of a dense urban form.

Record 21

Title: Homeownership, family composition and subjective wellbeing

Author(s): Wu, WJ (Wu, Wenjie)[1] ; Stephens, M (Stephens, Mark)[2] ; Du, MZ (Du, Minzhe)[1] ; Wang, B (Wang, Bing)[1]

Source: CITIES Volume: 84 Pages: 46-55 DOI: 10.1016/j.cities.2018.07.004 Published: JAN 2019 Document Type:Article

Abstract: While a central insight of existing literature is that homeownership contributes to subjective wellbeing, little attention has been paid to the influence of family composition on this relationship. Using a large scale cross-sectional survey in metropolitan Beijing, our results clarify the important roles of family

composition such as the presence of children, marital status in moderating the effects of homeownership on subjective wellbeing. We find that the relationship between homeownership and subjective wellbeing is varied across commodity housing, affordable housing and other housing types. Findings of this study indicate that socio-spatial contextualized nature of subjective wellbeing is dependent upon not just family composition but also other individuals' socioeconomic characteristics and neighborhood built environment.

Record 22

Title: Use of parks by older persons and perceived health benefits: A developing country context

Author(s): Gaikwad, A (Gaikwad, Archana)[1] ; Shinde, K (Shinde, Kiran)[2]

Source: CITIES Volume: 84 Pages: 134-142 DOI: 10.1016/j.cities.2018.08.001 Published: JAN 2019
Document Type:Article

Abstract: This paper seeks to contribute to the growing literature on how neighborhood amenities such as parks relate with active ageing. It draws attention to this relationship in the context of developing country - India where with changing demographics, population ageing is emerging as a major challenge. It builds on empirical evidences from a neighborhood park in the city of Pune - a metropolis of 3.5 million people in western India. Employing a mixed research approach, the paper explains how a neighborhood park plays a significant role in promoting healthy living among older persons by offering various perceived health benefits. Although various physical characteristics of park encourage physical activities, it is found that social connections such as groups formed in the park encourage regular participation in physical activities and thereby provide psychological health benefits and social support for older users. The paper argues for considering the important role of parks in fostering social participation critical for active ageing while designing cities that are friendly and supportive to ageing populations.

Record 23

Title: Neighbourhood social conduits and resident social cohesion

Author(s): Wickes, R (Wickes, Rebecca)[1] ; Zahnow, R (Zahnow, Renee)[2] ; Corcoran, J (Corcoran, Jonathan)[3] ; Hipp, JR (Hipp, John R.)[4]

Source: URBAN STUDIES Volume: 56 Issue: 1 Pages: 226-248 DOI: 10.1177/0042098018780617
Published: JAN 2019 Document Type:Article

Abstract: Given the importance of the neighbourhood context for residents' social cohesion, the current study examines the association between types of social and non-social places on three indicators of social cohesion: neighbour networks, social cohesion and neighbourhood attachment. We spatially integrate data from the census, topographic databases and a 2012 survey of 4132 residents from 148 neighbourhoods in Brisbane, Australia, and employ multilevel models to assess whether the variation in resident reports of social cohesion is attributable to land uses that function as neighbourhood social conduits. We also consider the degree to which neighbourhood fragmentation affects our indicators of social cohesion. Our findings reveal that even after controlling for the socio-demographic context of the neighbourhood and a range of individual and household control variables, residents' reports of social cohesion are significantly associated with the types of social conduits, the diversity of land use and the degree of neighbourhood fragmentation.

Record 24

Title: Use of green spaces, self-satisfaction and social contacts in adolescents: A population-based CASPIAN-V study

Author(s): Dadvand, P (Dadvand, Payam)[1,2,3] ; Hariri, S (Hariri, Sanam)[4] ; Abbasi, B (Abbasi, Behzad)[4] ; Heshmat, R (Heshmat, Ramin)[5] ; Qorbani, M (Qorbani, Mostafa)[6] ; Motlagh, ME (Motlagh, Mohammad Esmail)[7] ; Basagana, X (Basagana, Xavier)[1,2,3] ; Kelishadi, R (Kelishadi, Roya)[8]

Source: ENVIRONMENTAL RESEARCH Volume: 168 Pages: 171-177 DOI: 10.1016/j.envres.2018.09.033
Published: JAN 2019 Document Type:Article

Abstract: Background. A growing body of evidence has associated contact with green spaces with improved mental health and wellbeing in adults. Social contacts has been postulated as a potential mechanism underlying such effects. However, the available evidence on the association between green spaces and self-satisfaction and also the mediatory role of social contacts in health benefits of green spaces in adolescents is still very scarce. We aimed to evaluate the association of time spent in different types of green spaces with self-satisfaction and social contacts in adolescents. We also investigated the mediatory role of social contacts in the association of green space use and self-satisfaction. Methods: This cross-sectional study was based on a population-representative sample of 10,856 adolescents (10-18 years old) living in urban and rural districts across 30 provinces of Iran (2015). Data on the time spent in green spaces (separately for parks, forests and private gardens), self-satisfaction, social contacts (number of friends and time spent with friends), and socio-demographic characteristics were obtained through questionnaires from parents and children. Logistic mixed effects models with recruitment centre as the random effect were developed to estimate associations adjusted for relevant covariates. Results: More time spent in green spaces was associated with improved self-satisfaction and social contacts. While for the self-satisfaction, there was no indication for effect modification by sex, socioeconomic status (SES), and urbanity, we observed stronger associations for older adolescents (> 14 years old). For social contacts, we found indications for stronger associations for boys, older adolescents, those residing in rural areas, and those from lowest and highest SES groups. Social contacts could explain more than half of the association between green spaces use and self-satisfaction. Conclusions: Our observed enhanced self-satisfaction and social contacts associated with more time spent in green spaces could provide policymakers with measures to improve mental wellbeing of adolescents. Further studies are required to replicate our findings in other populations with different climates, cultures and lifestyles.

Record 25

Title: Responsive environments: An outline of a method for determining context sensitive planning interventions to enhance health and wellbeing

Author(s): Lennon, M (Lennon, Mick)[1] ; Douglas, O (Douglas, Owen)[1] ; Scott, M (Scott, Mark)[1]

Source: LAND USE POLICY Volume: 80 Pages: 68-78 DOI: 10.1016/j.landusepol.2018.09.037 Published: JAN 2019 Document Type:Article

Abstract: Much thinking in planning for health and wellbeing is guided by a focus on the fair distribution of 'goods', such as proximity to accessible green space or the provision of facilities like outdoor gym equipment, cycleways and playgrounds. Less attention is focused on the aspirations which people seek these 'goods' to help realise. Hence, this paper presents and discusses an exploratory approach aimed at helping planning support user desires. It does so by advancing a method informed through the integration of the 'Capability Approach' and 'Affordances Theory'. The paper first identifies and summarises deficiencies in the prevailing approach to planning for health and wellbeing. The primary elements of the Capability Approach and Affordances Theory are then outlined and discussed as correctives to these deficiencies. How these inform the development of a method for planning more responsive environments is outlined and a description of this method is provided. The advantages of this method are subsequently illustrated through a review of its application to three exploratory case studies. The paper closes with some summary conclusions on the benefit of this approach in the context of the critique provided at the beginning of the paper, with specific reference to how it may complement rather than challenge the prevailing approach to planning for health and wellbeing.

Record 26

Title: Walking behavior in the old downtown Beijing: The impact of perceptions and attitudes and social variations

Author(s): Li, SX (Li, Shengxiao)[1] ; Zhao, PJ (Zhao, Pengjun)[1] ; Zhang, H (Zhang, He)[1] ; Quan, J (Quan, Jing)[1]

Source: TRANSPORT POLICY Volume: 73 Pages: 1-11 DOI: 10.1016/j.tranpol.2018.10.005 Published: JAN 2019 Document Type:Article

Abstract: Walkable neighborhoods are promoted by urban planners and public health scholars as a way to encourage physical activity. This study explores the impact of perceptions and attitudes on walking in the historical neighborhood in downtown Beijing. It also examines how socioeconomic variations affect perceptions and attitudes. The study found that residents' perceptions and attitudes toward their built and social environment vary according to income, age, and employment status, and that they have significant effects on walking frequency. Sense of community was negatively correlated with recreational walking and positively correlated with walking as a means of transportation. Favorable perceptions of the built environment and community participation both had a positive effect on recreational walking. Perceived health also influenced walking behavior. Younger, employed, and higher-income people were found to walk less than their counterparts. To promote a walkable and healthy community, city design factors and various strategies aimed at enhancing social cohesion among mixed socioeconomic groups should be taken into account.

Record 27

Title: Subjective well-being among left-behind children in rural China: The role of ecological assets and individual strength

Author(s): Chai, XY (Chai, Xiaoyun)[1] ; Li, XY (Li, Xiaoyan)[1] ; Ye, Z (Ye, Zhi)[1] ; Li, YX (Li, Yuxuan)[1] ; Lin, DH (Lin, Danhua)[1]

Source: CHILD CARE HEALTH AND DEVELOPMENT Volume: 45 Issue: 1 Pages: 63-70 DOI: 10.1111/cch.12630 Published: JAN 2019 Document Type:Article

Abstract: Background The plight of left-behind children affected by parental migration has aroused widespread public concern in China. However, limited research has been conducted on the positive aspects of the development (e.g., subjective well-being) among left-behind children. Recently, a new means to investigating the mechanisms of positive development in left-behind children emerged from the positive youth development (PYD) approach. Grounded in the framework of PYD, this study was designed to examine how ecological assets (i.e., neighbourhood social cohesion and trusting relationships with caregivers) and individual strength (i.e., resilience) predict subjective well-being among left-behind children. Methods Altogether, 1,449 left-behind children (50.70% boys; M-age = 12.11 years, SD = 1.84) were recruited to complete questionnaires designed to assess perceived neighbourhood social cohesion, trusting relationships with caregivers, resilience, and subjective well-being. Results The results show that neighbourhood social cohesion and trusting relationships with caregivers positively predicted left-behind children's subjective well-being. Moreover, structural equation modelling results reveal that resilience partially mediated the effect of neighbourhood social cohesion and trusting relationships with caregivers on subjective well-being. Conclusions In this research, we identified key contextual and personal enablers for subjective well-being among left-behind children. The results provide some important implications regarding the manner in which subjective well-being can be promoted among left-behind children by increasing neighbourhood and family ecological assets and enhancing resilience.

Record 28

Title: Exploring the disparities in park access through mobile phone data: Evidence from Shanghai, China

Author(s): Xiao, Y (Xiao, Yang)[1] ; Wang, D (Wang, De)[1] ; Fang, J (Fang, Jia)[1]

Source: LANDSCAPE AND URBAN PLANNING Volume: 181 Pages: 80-91 DOI: 10.1016/j.landurbplan.2018.09.013 Published: JAN 2019 Document Type:Article

Abstract: The benefits that urban green resources bring to humanity have received increasing attention, with the evidence from recent studies into public service provision specifically regarding access to green space being rather mixed. Despite a growing literature base, there is no consensus among scholars on how to measure green space access properly. The traditional GIS-based approach is criticized for inappropriately specifying geographic units and threshold distances, and for ignoring people's self-movement. This research proposes a novel approach, emphasizing the actual park users' activities, both spatially and temporally. We took advantage of the large dataset available from mobile phones to analyze billions of anonymized data samples in order to characterize the behavioral patterns of millions of people who accessed green space in an experimental procedure. We chose Shanghai as the case study because residential segregation had occurred expected to be accompanied by issues of environmental justice. The results found that social equity could be achieved, even where territorial inequity was manifest in a high-population-density context that is undergoing rapid urban growth and transition. Shanghai's vulnerable groups are not found to be unequally treated at present, but there are warning signs that market mechanisms may worsen the uneven development. Therefore, the local municipalities are required to rethink how to provide green infrastructure to different social groups, responding to the inequality and uneven development that capital can bring.

Record 29

Title: Analysis of factors affecting urban park service area in Beijing: Perspectives from multi-source geographic data

Author(s): Guo, SH (Guo, Sihui)[1,2] ; Yang, GG (Yang, Gege)[1,2] ; Pei, T (Pei, Tao)[1,2,3] ; Ma, T (Ma, Ting)[1,2] ; Song, C (Song, Ci)[1,2] ; Shu, H (Shu, Hua)[1,2] ; Du, YY (Du, Yunyan)[1,2] ; Zhou, CH (Zhou, Chenghu)[1,2]

Source: LANDSCAPE AND URBAN PLANNING Volume: 181 Pages: 103-117 DOI: 10.1016/j.landurbplan.2018.09.016 Published: JAN 2019 Document Type:Article

Abstract: The rapid process of urbanization aggravates the imbalance between the supply and demand of urban public services. Urban parks are among the most important urban public services, and their use efficiency has been an important index for urban planning. Therefore, it is essential to estimate well their service area and influencing factors. Traditional survey data used to analyze the characteristics of urban park services are limited by small samples and high cost. Owing to thriving information communication technologies, vast amounts of human activity data have become available that enable understanding of human travel behavior. In this study, we analyzed a park service area, which is defined as the zone of influence of individual parks, in Beijing, and the factors that influence the service area. First, the service area was estimated using 1-SDE based on mobile phone signaling data. A multiple linear regression model was then used to analyze the influence of factors on the park service area. The results show that (1) external factors including population density, the number of commercial facilities, and traffic convenience have significant influences on the park service area; (2) employment places positively influence the park service area on the weekday; and (3) other factors such as park design and park reputation had inconsistent effects on the park service area, in either sign or significance, regarding the weekday and the weekend. The findings of this study will be of practical value when designing parks or undertaking city planning in the future.

Record 30

Title: Economic impacts of a linear urban park on local businesses: The case of Gyeongui Line Forest Park in Seoul

Author(s): Park, J (Park, Juhyeon)[1] ; Kim, J (Kim, Jeongseob)[1]

Source: LANDSCAPE AND URBAN PLANNING Volume: 181 Pages: 139-147 DOI: 10.1016/j.landurbplan.2018.10.001 Published: JAN 2019 Document Type:Article

Abstract: This study aims to explore the economic impacts of urban open spaces using the sales data of local small businesses. A new urban park could attract more visitors and lead to neighborhood revitalization, especially in distressed neighborhoods. In order to explore this mechanism, this study analyzes the case of the Gyeongui Line Forest Park, a previously underutilized railroad that was converted to a linear urban park. A difference-in-difference approach was applied to evaluate the change in the sales of local businesses before and after the park's opening using credit card and cash sales data provided by the Seoul Metropolitan Government's Big Data Campus. The results showed that urban linear parks could have positive effects that lead to the neighborhoods' economic vitality. However, the economic impacts could vary depending on neighborhood contexts. Specifically, economically distressed neighborhoods could benefit more from the opening of a park. This study directly captured the revitalization impact of the Gyeongui Line Forest Park using actual sales data instead of analyzing indirect outcomes such as property values, thereby providing an alternative approach to measure the economic impacts of parks.

Record 31

Title: Estimating a Toronto pedestrian route choice model using smartphone GPS data

Author(s): Lue, G (Lue, Gregory)[1] ; Miller, EJ (Miller, Eric J.)[2]

Source: TRAVEL BEHAVIOUR AND SOCIETY Volume: 14 Pages: 34-42 DOI: 10.1016/j.tbs.2018.09.008
Published: JAN 2019 Document Type:Article

Abstract: This study examines the feasibility of using revealed preference GPS data collected through a smartphone-based travel survey and discrete choice modeling techniques to determine pedestrians' preferences towards street infrastructure, built environment, and land use. Smartphone GPS points were collected after 50 m of travel and had a horizontal spatial accuracy of 30 m or less. A path size logit model with stochastic route choice generation choice set was used for this model. The results of the model showed that distance, the number of turns, the number of signalized intersections, and distance along links with sidewalks on both sides of the street were significant variables in the route choice model. Turns are found to be equivalent to an additional 32 m, signalized intersections are equivalent to a reduction of 34 m, and travel along streets with sidewalks on both sides of the road is evaluated as 33% shorter than streets with other sidewalk conditions. While the dataset used for this study was relatively small (776 trip observations), these results are consistent with other pedestrian route choice studies which support the viability of using smartphone GPS data for future pedestrian route choice studies.