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Transportation and homelessness: a systematic review

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ABSTRACT

Transportation disadvantage can negatively impact access to employment and educational opportunities, healthcare, and social services. Cost of transportation, in particular, has been found to prevent individuals' upward mobility out of homelessness. Given the vulnerability of persons of color and those living below the poverty line and the negative implications of transportation disadvantage, the author undertook the current study to assess the extent to which scholars are analyzing transportation and its impact on adults experiencing homelessness. An exhaustive search yielded 3102 potentially relevant studies. Thirteen of these studies met the inclusion criteria for further analyses. A priori inclusion criteria included studies: (1) published between 1997 and December 2017 in refereed academic journals; (2) published in English; (3) sampling a population of adults who self-identify as currently or formerly homeless; (4) conducted using empirical quantitative or mixed methods (excluding purely qualitative, theoretical and policy analyses), and; (5) which analyzed transportation as a primary variable of interest. Findings of this research demonstrate that transportation is a critical, although under-researched, variable in the lives of individuals experiencing homelessness. Homelessness service providers, therefore, should work to shift the conversation from transportation as a privilege to transportation equity for all.

Introduction

Transportation disadvantage (TD), or difficulty accessing and maintaining adequate and reliable transportation, impacts a significant number of individuals worldwide (Currie et al., 2009; 2010; Currie, Stanley, & Stanley, 2007). Persons living below the poverty line (Boschmann, 2011; Henry, Watt, Rosenthal, & Shivj, 2016; Hill et al., 2003; McCray & Brais, 2007) and racial and ethnic minorities (Blumenberg, 2016; Shay et al., 2016) are particularly vulnerable to TD. Research indicates that TD can negatively impact access to employment and educational opportunities (Li, Raeside, Chen, & McQuaid, 2012; Shay et al., 2016; Transportation Research Board, 2002), healthcare (Nostikasari, 2015; Schulz, Williams, Israel, & Lempert, 2002; Shay et al., 2016), and social services (Currie et al., 2009; Lucas & Jones, 2012; Shay et al., 2016).

In the United States, public transportation users are disproportionately members of racial and ethnic minority groups (Sanchez, Stolz, & Ma, 2003). Less than 5% of non-Hispanic white Americans rely on public transportation as their primary means of travel, compared to 9% of Latinos, 10% of Asian Americans, and 12% of African Americans (Sanchez et al., 2003). This is likely due in part to the lower levels of automobile ownership by persons of color. Compared to non-Hispanic white households where less than 7% do not own a car, 13% of Asian American households, 17% of Latino households, and 24% of African American households do not own an automobile (Sanchez et al., 2003). It is also due in part to the disparities in income (Nicholson & Cooper, 2013; Sanchez et al., 2003). Nicholson and Cooper (2013) found that social exclusion and TD are "intricately related to poverty and deprivation" (p. 334). In the United States, nearly one-third of individuals who rely on public transportation have annual household incomes of less than \$15,000 (Sanchez et al., 2003).

Among individuals experiencing homelessness, transportation is an often-cited barrier to health management (Turnbull, Muckle, & Masters, 2007) and securing employment and permanent supportive housing (Nino, Loya, & Cuevas, 2009). In the United States, individuals in the lowest income quintile spend about 36% of their annual budgets on transportation alone and this proportion is projected to continue increasing over the next ten years (Bengston, Fletcher, & Nelson, 2004; Cornwell & Waite, 2009; Sanchez et al., 2003). Cost of transportation, in particular, has been found to prevent individuals' upward mobility out of homelessness by limiting employment opportunities, social inclusion, and access to social services (Gilderbloom, Squires, & Wuerstle, 2013; Hui & Habib, 2017).

Current study

As a population, individuals experiencing homelessness are overlooked in the extant transportation

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Homelessness; transportation; systematic review; cross-national research; poverty literature (Bassett, Tremoulet, & Moe, 2013; Potier-Brown & Pipkin, 2005; Tessler, Rosenheck, & Gamache, 2001). In the homelessness literature, research tends to focus on the pathways into homelessness (Anderson & Collins, 2014; Burt, 1991) and housing options for individuals experiencing homelessness (Bird, Rhoades, Lahey, Cederbaum, & Wenzel, 2017; Forenza & Lardier, 2017; Winetrobe et al., 2017), while largely ignoring transportation as a critical factor in both of those arenas (Bassett et al., 2013).

Given the vulnerability of persons of color and those living below the poverty line and the negative implications of TD, the author undertook the current study to assess the extent to which scholars are analyzing transportation among adults experiencing homelessness. This study has important policy and practice implications. To adequately address the precursors into and barriers out of homelessness, it is critical that researchers first work to better understand the issues impacting this population (Gaetz, Donaldson, Richter, & Gulliver, 2013; Henwood et al., 2015; Perry, 2016).

Methods

Design

The author relied on the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) protocol (Moher, Liberati, Tetzlaff, & Altman, 2009) and utilized a two-tiered search process for peer-reviewed articles published between January 1997 and December 2017 using the following ten databases: Academic Search Complete, CINAHL Complete, Criminal Justice Abstract Full Text, Information Science & Technology Abstracts, MEDLINE, PsycARTICLES, Psych Info, Science & Technology Collection, Social Work Abstracts, and Transportation Research Information Services. A search was completed using Boolean operators and various combinations of the following terms to capture the population (homeless*, rough sleep*, shelter*, street*, and unshelter*) and topic of interest (mobility, transit, transport*, and travel). The author also used a forward/backward citation search of eligible studies (Vom Brocke et al., 2009), whereby the author reviewed references of and sources that cited the articles from the keyword search. These studies were reviewed against the a priori inclusion criteria for eligibility in the study.

Inclusion and exclusion criteria

A priori inclusion criteria included studies: (1) published between January 1997 and December 2017 in refereed academic journals; (2) published in English; (3) sampling a population of adults who self-identify as currently or formerly homeless; (4) conducted using empirical quantitative or mixed methods (excluding purely qualitative, theoretical and policy analyses), and; (5) which analyzed transportation as a primary variable of interest. The author used Covidence, a web-based systematic review software system to facilitate screening, data extraction, and analyses (Babineau, 2014). The author used peer debriefing with a topic expert to come to consensus during the full text review process.

The aforementioned search resulted in 3102 references which were imported for title and abstract screening. Of these, 231 full-texts were screened for eligibility. Thirteen of these articles met all inclusion criteria for this study. Many of the excluded studies (38%) were not conducted using empirical quantitative or mixed methods. About one-third were excluded due to their samples: (1) including both homeless and stably housed individuals without differentiating between the two groups; (2) focusing on children experiencing homelessness, and; (3) deferring to the expertise of social service providers and other professionals, rather than the individuals experiencing the phenomenon directly. Others were excluded (24%) because, while included amongst a number of barriers, primarily in studies of healthcare access, transportation was not measured as a primary variable of interest. Few were excluded because they were not published in peerreviewed journals between January 1997 and December 2017 (4%). Figure 1 provides a detailed report of the search and study exclusion.

Rigor assessment

Included articles were assessed for rigor and overall quality based on six of the Effective Public Health Practice Project (EPHPP) established domains for assessing quantitative studies: (1) selection bias; (2) study design; (3) confounders; (4) blinding; (5) data collection methods, and; (6) withdrawals and dropouts (Armijo-Olivo, Stiles, Hagen, Biondo, & Cummings, 2012; Deeks et al., 2003; Thomas, Ciliska, Dobbins, & Micucci, 2004). Each study was assigned a rating of weak (1), moderate (2), or strong (3) across each of the six domains according to a priori criteria and then given a global rating based on those cumulative scores (Armijo-Olivo et al., 2012; Deeks et al., 2003; Thomas et al., 2004). Global ratings ranged from weak (less than 12) to moderate (between 12 and 14) to strong (15 or greater). Study quality was assessed by the author and an independent second reviewer, reaching consensus on all studies.

Data extraction and synthesis

Following the planning, search, mapping, and appraisal phases (Greenhalgh et al., 2005), including the assignment of a global rating, the author proceeded with data

Identification

Screening

Eligibility

Included



Figure 1. PRISMA flow diagram.

extraction and synthesis of the thirteen included studies according to the tenets of narrative synthesis for systematic reviews (Greenhalgh et al., 2005; Popay et al., 2006). Data extraction of variables outlined a priori was conducted by the single author while a topical expert verified all extractions to reduce bias and errors. Consensus was reached on all variables. After extracting the key variables and results, the author grouped comparable studies together. During the synthesis phase, the author identified the key dimensions of transportation and homelessness, across the included studies. The author then gave a narrative account of the variables and the contributions of the various studies toward the development of knowledge in these specific areas. Finally, through reflection of the narrative synthesis, the author summarized the overall findings of included studies and discussed implications and recommendations for future research.

Results

Overall, global ratings ranged from weak to strong, (mean = 13.9, SD = 1.9, median = 14.0). Most of the

included studies were considered to be moderate (n = 6, 46.2%), followed by strong (n = 5, 38.5%), and only two studies (15.4%) were rated as weak. See Table 1 for the breakdown of ratings across the six domains.

Samples

An overwhelming majority (n = 12, 92.3%) of the included studies sampled currently homeless adults. Only one study (7.7%; Chan, Gopal, & Helfrich, 2014) sampled formerly homeless, but currently housed, clients exclusively. Sample sizes ranged from 19 to 1017 (*mean* = 285.4, SD = 348.9, *median* = 111.0). Participants were recruited across the continental United States and Canada, including Massachusetts (Chan et al., 2014), Connecticut (Greysen, Allen, Lucas, Wang, & Rosenthal, 2012; Greysen, Allen, Rosenthal, Lucas, & Wang, 2013), California (Anderson & Collins, 2014; Ferguson, Bender, & Thompson, 2014; Ferguson, Helderop, Bender, & Grubesic, 2016; Nichols & Cazares, 2011), Texas (Ferguson et al., 2014; Ferguson et al., 2016; North et al., 2017), Colorado (Ferguson

Table 1. Rigor rating.

Author (publication year)	Selection bias	Study design	Confounders	Blinding	Data collection	Withdrawals	Global score	Global rating
Chan et al. (2014)	М	S	М	S	М	S	15	Strong
Ferguson et al. (2014)	М	S	М	S	S	S	16	Strong
Ferguson et al. (2016)	М	S	М	S	S	S	16	Strong
Greysen et al. (2012)	S	S	М	Μ	Μ	S	15	Strong
Greysen et al. (2013)	S	S	М	М	М	S	15	Strong
Hui and Habib (2014)	W	Μ	М	Μ	W	М	10	Weak
Hui and Habib (2016)	М	S	М	Μ	Μ	S	14	Moderate
Hui and Habib (2017)	М	S	М	М	Μ	S	14	Moderate
Jocoy and Del Casino (2010)	М	S	М	М	М	S	14	Moderate
Nichols and Cazares (2011)	М	М	W	М	М	М	11	Weak
North et al. (2017)	М	S	М	М	М	W	12	Moderate
Anderson and Collins (2014)	М	М	М	S	М	S	16	Moderate
Zlotnick and Zerger (2009)	S	S	М	W	М	М	13	Moderate

et al., 2014; Ferguson et al., 2016), and Ontario (Hui & Habib, 2014, 2016, 2017).

Most of the included studies sampled heterogeneous groups of individuals experiencing homelessness. Participants ranged in age from 18 to 73 years, with mean ages of samples ranging from 20.5–52.4 years, for those reporting mean age. All studies reporting gender of participants reported including both males and females. Female participants in the larger sample ranged from 12 to 68.4%. Studies reporting race included large proportions of minority representation, particularly among African American participants. African Americans composed between 25 and 73.7% of participants in studies reporting race. Time homeless ranged considerably, from one day to 47 years in the studies reporting this variable. Table 2 provides additional details of the included studies.

Data collection and measures

Nearly all of the studies (85%) were conducted using surveys and retrospective questionnaires (Chan et al., 2014; Ferguson et al., 2014; Ferguson et al., 2016; Greysen et al., 2012, 2013; Hui & Habib, 2014; 2016; 2017; Nichols & Cazares, 2011; Parker & Dykema, 2013; Zlotnick & Zerger, 2009), while others utilized travel diaries (Jocoy & Del Casino, 2010) and geospatial data (North et al., 2017). Even though 85% of the included studies utilized a survey design for their data collection, no two studies used the same instrument to capture transportation or TD. This is consistent with the majority of the academic literature on TD, regardless of population of interest (Delbosc & Currie, 2011).

Modes of transportation

Many of the included studies reported the participants' primary form(s) of transportation. The most commonly reported mode of transportation was public transit (Chan et al., 2014; Greysen et al., 2012; Hui & Habib, 2014; 2016; Jocoy & Del Casino, 2010; Nichols & Cazares, 2011; North et al., 2017; Zlotnick & Zerger,

2009). The second most commonly reported mode was walking (Chan et al., 2014; Hui & Habib, 2014; 2016; Jocoy & Del Casino, 2010; North et al., 2017; Zlotnick & Zerger, 2009). Bicycles (Hui & Habib, 2014; Jocoy & Del Casino, 2010) and cars (Chan et al., 2014; Hui & Habib, 2014; Jocoy & Del Casino, 2010) were reported less frequently.

Destinations

A majority of the included studies also inquired about participants' most important intended destinations. Three studies (23%; Chan et al., 2014; Hui & Habib, 2016; Jocoy & Del Casino, 2010) found that individuals experiencing homelessness reported medical services as their most important destinations. Two studies (15%; Greysen et al., 2012; Hui & Habib, 2014) found that participants valued visiting family and friends above all other destinations. Other reported destinations included food banks (Hui & Habib, 2014; 2016), shelters (Greysen et al., 2012; Hui & Habib, 2014, 2016), job interviews and job searches (Hui & Habib, 2014; Jocoy & Del Casino, 2010), and church (Jocoy & Del Casino, 2010).

Distance traveled

Only four studies (31%; Chan et al., 2014; Ferguson et al., 2016; Jocoy & Del Casino, 2010; North et al., 2017) reported on distance covered during the study periods. Distance traveled per day ranged from zero to about 60 miles, with average distances ranging from approximately nine to fourteen miles. Two studies (15%; Jocoy & Del Casino, 2010; North et al., 2017) reported the average number of daily trips taken, ranging from five to eight.

Some studies reported variables that were significantly associated, positively or negatively, with distances traveled. These variables included education, race, gender, length of time spent homeless, selfreliance scores, and distances to bus and rail stops. Regarding demographic variables, males and African Americans traveled shorter distances (Ferguson et al.,

	uded study characteristics.							
Author (publication year)	Title	Sample size	Data collection method(s)	Sample age, gender, race/ethnicity	Housing status	Time homeless	Recruitment location	Rigor rating
Chan et al. (2014)	Accessibility patterns and community integration among previously homeless adults: A geographic information systems (GIS) approach	37	Surveys	Range = 28–65 years, Mean = 52.4 years (<i>SD</i> = 7.8); 54.1% female, 45.9% male; 51.4% white, 43.2% African American, 5.4% other	Participants had a history of homelessness and were currently living in congregate or independent housing programs	Range = 6 months to 47 years, Mean = 8 years (<i>SD</i> = 11)	Greater Boston area, Massachusetts, USA	Strong
Ferguson et al. (2014)	Predictors of transience among homeless emerging adults	601	Retrospective questionnaires	Range = $18-24$ years, Mean = 20.5 years (<i>SD</i> = 1.6); 36% female, 64% male; 40% white, 25% African American, 18% Latino, 17% other	Participants had to have experienced homelessness for at least 2 weeks of the past month	Mean = 32.4 months (SD = 31.0)	Los Angeles, California, USA, Austin, Texas, USA, and Denver, Colorado, USA	Strong
Ferguson et al. (2016)	Predicting geographic transience in homeless young adults across three U.S. cities: Who are these frequent flyers and distance travelers?	601	Retrospective questionnaires	Range = $18-24$ years, Mean = 20.5 years (<i>SD</i> = 1.6); 36% female, 64% male; 40% white, 25% African American, 18% Latino, 17% other	Participants had to have experienced homelessness for at least 2 weeks of the past month	Mean = 32.4 months (SD = 31.0)	Los Angeles, California, USA, Austin, Texas, USA, and Denver, Colorado, USA	Strong
Greysen et al. (2012)	Understanding transitions in care from hospital to homeless shelter: A mixed-methods, community-based participatory approach	98	Surveys	Range = 18–65 years, Mean = 44 years; 20% female, 80% male; 41% white, 42% African American, 16% Latino	Current shelter clients	Mean = 2.8 years	New Haven, Connecticut, USA	Strong
Greysen et al. (2013)	Improving the quality of discharge care for the homeless: A patient-centered approach	98	Surveys	Mean = 44 years; 20% female, 80% male; 39% white, 40% African American, 15% Latino, 6% other	Current shelter clients	Mean = 2.8 years	New Haven, Connecticut, USA	Strong
Hui and Habib (2014)	An investigation of transport- related social exclusion of the at-risk community (homeless people) in Toronto	76	Surveys	Not reported	Currently homeless	Not reported	Toronto, Canada	Weak
Hui and Habib (2016)	Transportation related social exclusions and homelessness: What does the role of transportation play in improving the circumstances of homeless individuals?	159	Surveys	Range = 20–73 years, Mean = 45.9 years; 12% female, 87% male, 1% transgender; not reported	Currently homeless or experienced homelessness within the past 3 years	14% 1–60 days, 11% 61–120 days, 11% 121–240 days, 4% 241–360 days, 14% 361–720 days, 8% 721– 1080 days 11% 1081–1440 days, 11% 1441–2160 days, 17% more than 2161 days	Downtown Toronto, Canada	Moderate
Hui and Habib (2017)	Homelessness vis-à-vis transportation induced social exclusion	159	Surveys	Range = 20–73 years, Mean = 45.9 years; 12% female, 87% male, 1% transgender; not reported	Currently homeless or experienced homelessness within the past 3 years	14% 1–60 days, 11% 61–120 days, 11% 121–240 days, 4% 241–360 days, 14% 361–720 days, 8% 721– 1080 days 11% 1081–1440 days, 11% 1441–2160 days, 17% more than 2161 days	Downtown Toronto, Canada	Moderate

Table 2. Included study characteristics.

Jocoy and Del Casino (2010)	Homelessness, travel behavior, and the politics of transportation mobilities in Long Beach, California	124	Structured interviews and travel-diaries	Range = 20–73 years, Mean = 45 years; 37% female, 62% male, < 1% transgender; 31% white, 37% African American, 15% Latino, 12% multiracial, 6% other	Currently homeless or experienced homelessness within the past 3 years	Not reported	Long Beach, California, USA	Moderate
Nichols and Cazares (2011)	Homelessness and the mobile shelter system: Public transportation as shelter	49	Surveys	Range = 20–71 years, Mean = 47 years; 26.5% female, 73.5% male; 19.6% white, 41.3% African American, 15.2% Latino, 10.9% Asian/Pacific Islander, 4.3% American Indian, 8.7% other	Currently homeless	Not reported	Santa Clara County, California, USA	Weak
North et al. (2017)	A pilot study using mixed GPS/ narrative interview methods to understand geospatial behavior in homeless populations	19	Geospatial data and pre- and post- tracking interviews	Range = 20–59 years, Mean = 39.9 years (SD = 12.0); 68.4% female, 31.6% male; 26.3% white, 73.7% African American	Currently homeless	Not reported	Downtown Fort Worth, Texas, USA	Moderate
Anderson and Collins (2014)	The reality of homeless mobility and implications for improving care	674	Surveys	Median = 45.37 years; 19.61% female, 79.79% male; 31.60% white, 62.76% African American, 5.64% other	Currently homeless	18.25% one year or longer	Medium sized southern city, USA	Moderate
Zlotnick and Zerger (2009)	Survey findings on characteristics and health status of clients treated by the federally funded (US) health care for the homeless programs	1017	Surveys	13.6% between 18 and 19 years, 69.0% between 20 and 50 years, 17.4% 51 years of age and older; 42.1% female, 57.3% male, 0.6% transgender; 36.5% white, 38.3% African American, 20.5% Latino, 0.2% Asian, 4.5% American Indian/Alaskan	Currently homeless	25% one year or longer	30 healthcare centers across the continental USA	Moderate

2016), while individuals with higher education and longer episodes of homelessness traveled farther (Ferguson et al., 2014; Ferguson et al., 2016). Additionally, individuals who score higher on self-reliance scale scores tend to travel greater distances (Ferguson et al., 2014; Ferguson et al., 2016). Not surprisingly, distance traveled was negatively correlated with the distance to the nearest bus stop, suggesting that individuals nearer to bus stops travel greater distances (Chan et al., 2014). However, distance traveled was positively correlated with distance to the nearest rail stop, suggesting that individuals nearer to rail stops travel less distances (Chan et al., 2014).

Discussion and recommendations

This review clearly demonstrates the historical lack of attention that has been paid to transportation as a primary variable of interest in the homelessness literature. Not only is transportation largely overlooked in the homelessness literature, but research indicates that transportation planning and engineering continue to struggle to meet the needs of low-income communities at large (Mattingly et al., 2018).

One noteworthy finding of this review is that no two studies used the same measure to capture and analyze transportation as a variable of interest. The use of a single or several valid and reliable instruments would have allowed for meaningful comparisons across samples and geographic locations. However, there is little consistency of instruments measuring TD, both in this study and in the transportation and homelessness literature at large. Noting this gap in the extant body of research, Delbosc and Currie (2011) developed an 18-item measure that allows participants to rate the various aspects of transportation and travel attributes on a fivepoint rating scale. Principal component analysis has demonstrated this measure as having a four factor structure, which Delbosc and Currie (2011) have labeled as: (1) transport disadvantage; (2) transit disadvantage; (3) vulnerable/impaired, and; (4) rely on others. Future research should use this measure to capture the multi-dimensionality of TD among various environmental justice populations, including persons experiencing homelessness.

Another important consideration is the chosen methodology of the included studies. Existing studies examining the relationship between housing instability, homelessness, and transportation are hampered by methodological limitations and the limited scope inherent in the use of traditional surveys and travel diaries to capture the lived experience of transportation disadvantage (Axhausen, 2008; Preston & Raje, 2007). Most of the studies (n = 11, 84.6%) relied on surveys or retrospective questionnaires. While many of these were strong or moderately strong

studies, these methods may not be the best option to collect data on transportation disadvantage. Research demonstrates that the impact of transportation disadvantage may be un- or under-reported among marginalized populations retrospectively (Fields, Cronley, & Mattingly, 2018). Thus, some researchers have started to develop and utilize more novel approaches to data collection including geographic information systems (GIS; North et al., 2017) and ecological momentary assessment techniques (Fields et al., 2018; Mattingly et al., 2018). Ecological momentary assessment data collection allows for repeated measures in real-time, capturing more organic and accurate data, reducing recall bias and human errors in retrospective self-reporting (Mattingly et al., 2018; Wolf et al., 2014).

Though measured in different ways, the overall findings of these thirteen studies indicate that transportation is a necessary component in the lives of individuals experiencing homelessness. Participants reported relying on public transportation for health care access and social inclusion. By systematically analyzing these studies together, it is apparent that transportation is a basic need, similar to food and shelter. Therefore, policy makers, public planners, advocates, and researchers must work to shift the conversation and paradigm from transportation as a privilege to transportation equity for all.

Limitations

While attempts were made to include research from international perspectives, the author was unable to review research published in languages other than English. This may have contributed to the sample consisting only of research conducted in the United States and Canada. Secondly, the author chose to only include literature published in the last 20 years, thus excluding any articles published prior to January 1997. It is worth noting, however, that the trend toward measuring transportation as a primary variable of interest in the homelessness literature has gained popularity only in recent years, as indicated by the 2009-2017 publication date range of articles included in this study. Although the inclusion/exclusion criteria allowed for articles from the last 20 years, the most dated study was published in 2009.

Additionally, the author chose to focus on empirical studies published in refereed journals using quantitative and mixed methods, excluding theoretical applications, policy analyses, and purely qualitative research. By only including peer-reviewed publications, the author excluded grey, or unpublished, studies in this topic area. While grey literature can be used in systematic reviews and meta-analyses, "critics have questioned the validity of its data and the results of reviews that include it" (Conn, Valentine, Cooper, & Rantz, 2003, p. 256). After reviewing the literature and consulting with two colleagues with methodological and topical expertise, the author chose to only include studies that had undergone a peer-review process, to ensure the validity of the results of this systematic review. Other scholars have completed systematic reviews or meta-analyses of refereed literature and separately analyzed the grey literature in subsequent reviews (Batt, Fox-Rushby, & Castillo-Riquelme, 2004). Given the scant literature published on this topic, as evidenced by this systematic review, future research could evaluate the grey literature on transportation and homelessness.

Finally, one methodological limitation might be the author's exclusion of articles focusing on children experiencing homelessness. By definition, TD is difficulty accessing and maintaining adequate and reliable transportation (Currie et al., 2007; Currie et al., 2009; 2010). The author felt that comparing this phenomenon across children and adults would not have been comparable or synthesizable.

Conclusion

Practitioners, advocates, policy makers, city planners and researchers across a number of fields may benefit from the findings of this systematic review. While clearly demonstrating the need for future research (e.g. validating and utilizing reliable and valid scales to measure transportation disadvantage; validating these scales with environmental justice populations; creating and testing ecological momentary assessment collection tools), this review overwhelmingly reveals transportation to be a critical variable influencing numerous housing and non-housing outcomes among this population. By creating greater understanding of the impact of transportation and transportation disadvantage in the lives of those experiencing homelessness, the author hopes to spark the conversation toward more effective interventions, updated policies, and more inclusive city planning. Findings indicate the need to shift the conversation from transportation as a privilege to transportation equity for all.

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Disclosure statement

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Notes on contributor

Erin Roark Murphy, LMSW, is a doctoral student in the School of Social Work at the University of Texas at Arlington. Her research focuses on homelessness, with specific emphasis on the aging subpopulation, transportation disadvantage, and arts-based research methodologies and interventions.

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