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Post-Pandemic Rental Housing Affordability Economics in the U.S., U.K., & Canada

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ABSTRACT

Rental unaffordability is defined as spending more than 30% of a household's gross income on rent. Post-pandemic inflation and interest rate increases have intensified rental unaffordability. This research examines rental affordability in the U.S., the U.K., and Canada. It also explores the effect of renters' "affordability knowledge" – defined as the expertise tenants have and use to make economical rental housing choices – on rent expenditure and affordability positioning and compares personal finances, economic perspectives, and demographics based on renters in affordable and unaffordable situations. The results show that nearly two-thirds of the renters studied are in unaffordable rental situations. Interestingly, affordability knowledge was found to reduce rent spent and increase affordability situations. Significant demographic differences were found between those in affordable and unaffordable rental situations, including rent spending, food spending, transportation spending, savings, perceived homeownership likelihood, and age. The research offers important insight into current rental affordability economics, recommendations for policymakers, and opportunities for real estate organizations.

KEYWORDS

Affordability; Rental housing; Rental economics

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1. Introduction

Experts and policymakers define affordability as rent payments that do not exceed 30% of a household's gross monthly income (Canadian Mortgage & Housing Corporation, 2018; Gabriel & Painter, 2020; Newman & Holupka, 2015; Newman & Holupka, 2016). The affordability threshold suggests that those spending more than 30% experience a "rent burden" (Gabriel & Painter, 2020). Gabriel and Painter (2020) showed that rent burdens are associated with "adverse consequences" for individuals, families, and communities. Specifically, unaffordable housing has been linked to negative health outcomes (Pollack et al., 2010; Mason et al., 2013; Meltzer & Schwartz, 2016), increased crime (Gabriel & Painter, 2020; Kirkpatrick & Tarasuk, 2007; Kirkpatrick & Tarasuk, 2011), homelessness (Moore & Skaburskis, 2004), lower childhood cognitive achievement (Newman & Holupka, 2015; Newman & Holupka, 2016), and stifled economic growth (Du & Zheng, 2020; Kacher & Petach, 2021; Szumilo & Vanino, 2021). Given these negative externalities, the rent burden issue and lack of affordable rental housing were salient economic concerns before the COVID-19 pandemic (Colburn & Allen, 2018; Fernald, 2015; Fernald, 2016; Kabundu et al., 2022).

In times of economic crisis, households have effectively prioritized rental payments by reducing spending in other areas such as food, education, and health care (Kirkpatrick & Tarasuk, 2007; Kirkpatrick & Tarasuk, 2011; Newman & Holupka, 2016). Sultana (2002) showed that many individuals move to lower-quality housing to improve affordability when faced with job loss or financial difficulties. More generally, individuals prioritize needs (food, shelter, clothing, etc.) over wants (travel, entertainment, designer clothing, etc.) when faced with economic hardship (Ganong & Noel, 2019; Reed & Crawford, 2014; Starr, 2011). These solutions, aimed at improving affordability, are effective in addressing immediate financial challenges but some have lasting negative externalities.

Post-pandemic inflation and interest rate increases have intensified rent burdens and economic concerns. According to Malpezzi (2022), the pandemic created several economic and housing-related crises that require further research inquiry. Specifically, the pandemic "only exacerbated the concern, and more to the point, exacerbated the underlying problem" of housing affordability (Malpezzi, 2022, p. 18). Due to the economic impacts and affordability concerns, Anderson et al. (2022) showed that consumer spending at the onset of the pandemic decreased dramatically. Specifically, in the United States (U.S.) (Baker et al., 2020; Cox et al., 2020) and the United Kingdom (U.K.) (Chronopoulos et al., 2020; Surico et al., 2021), spending dropped more significantly "than typical consumer responses to idiosyncratic shocks such as unemployment" (Anderson et al., 2022, p. 907). Despite these spending changes, new research (Andres Fernandez & Martin, 2022) has shown that rent has surged as a result of the pandemic, leaving many in unaffordable rental situations (Wilson et al. 2023a; 2023b). Wilson et al. (2023a; 2023b) as well as Nagarjun and Sridhar (2023) emphasized the need for post-pandemic rental affordability research.

This research responds directly to this call for more research in several ways. First, it examines rental affordability in the U.S., the U.K., and Canada. Second, it explores the effect of renters' "affordability knowledge" – defined as the expertise tenants have and use to make economical rental housing choices – on rent expenditure and affordability positioning. Finally, it compares personal finances, economic perspectives, and demographics based on renters in affordable and unaffordable situations.

2. Methods

The international survey panel Prolific was used to recruit research participants. Prolific is commonly used to obtain insight from individuals for business, economics, psychology, and most recently real estate research (Callan et al., 2017; Marreiros et al., 2017; Mosleh et al., 2021; Palan & Schitter, 2018; Wilson et al., 2023a; Wilson et al., 2023b). At the time of data collection, Prolific had an active participant pool of roughly 19,500 people who were over the age of 18 and living in a "privately rented accommodation" in the U.S., the U.K., or Canada. For this study, all of these individuals were eligible to participate. Therefore, this study was a convenience sample of renters in the U.S., the U.K., and Canada, as any registered Prolific participant who met the study's criteria could complete the questionnaire. The online Qualtrics questionnaire was designed to take five minutes or less with the equivalent compensation of $15.56 per hour upon completion.

Individuals were asked a series of questions that asked what percentage of their gross income they spent on 1) rent, 2) food, 3) transportation, 4) clothing/merchandise, and 5) leisure/travel. Items were assessed via a nine-point Likert scale from "less than 5%" to "more than 40%." A dichotomous affordable/unaffordable variable was created based on those who spent less/more than 30% of their gross income on rent. Affordability knowledge was self-assessed on a five-point Likert scale ranging from "to no extent" to "a great extent" based on the questions 1) "to what extent do you understand what it means to be in an affordable rental situation?" and "to what extent do you understand your government's housing affordability programming?" These two items were averaged to create an overall affordability knowledge score. Individuals were asked to indicate how much they have in savings and credit card debt based on a six-point Likert scale ranging from "less than $10,000" to "more than $50,000." Media influence on financial decision-making and understanding of government policy were measured by single items on a five-point Likert scale ranging from "no extent" to "a great extent." A five-point Likert scale was also used to assess their perceived future economic outlook, ranging from "extremely negative" to "extremely positive." The likelihood of homeownership in one year and five years were measured with single items on a five-point Likert scale ranging from "extremely unlikely" to extremely likely." Individuals were asked to indicate their age and their education level. Education was a categorical variable with seven options ranging from "less than high school" to "doctoral degree."

3. Results

At the end of data collection, there were 1,003 usable responses. Of these responses, 506 (50.4%) were female, 492 (49.1%) were male, and five (0.5%) preferred not to say. Participants ranged from 18 to 85 years old with an average age of 36.2. In terms of employment status, 643 (64.1%) worked full-time, 196 (19.5%) worked part-time, and 164 (16.4%) were unemployed. In terms of country of residence, 435 (43.4%) were from the U.S., 506 (50.4%) were from the U.K., and 62 (6.2%) were from Canada. Income levels ranged from less than $10,000 per year to $150,000 or more. Figure 1 shows the distribution of responses based on income categories, indicating that 75.3% of respondents made less than $70,000 per year.

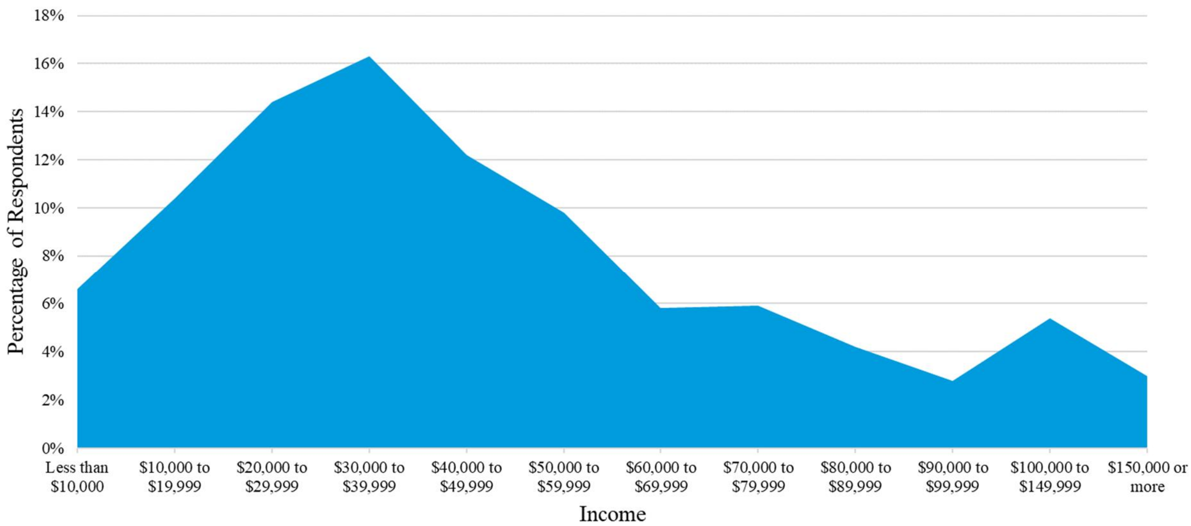

Figure 1. Percentage of responses by income level.

Using the previously defined housing affordability threshold, those who indicated they spent more than 30% of their gross income on rent were categorized as "unaffordable" while those indicating they spent less than 40% of their gross income on rent were categorized as "affordable." Based on this categorization, 371 (37%) were in affordable, and 632 (63%) were in unaffordable, rental situations. Examined by country, 285 (65.5%) of renters in the U.S., 308 (60.9%) renters in the U.K., and 40 (64.5%) of renters in Canada were in unaffordable rental situations. An analysis of variance (ANOVA) showed that there was no significant difference between the percentage of renters living in unaffordable housing situations among the three countries ($F = 1.112$, $p = 0.329$), suggesting that unaffordable is a large issue among U.S., U.K., and Canadian renters.

The first regression analysis showed that affordability knowledge and rent spend were negatively correlated ($\beta = -0.852$, $p < 0.001$), such that as affordability knowledge increases, individuals' rent expenditure decreases (Figure 1). The second regression analysis showed that affordability knowledge and housing affordability were positively correlated ($\beta = 0.081$, $p = 0.010$), meaning as affordability knowledge increases, individuals' housing affordability increases (Figure 2).

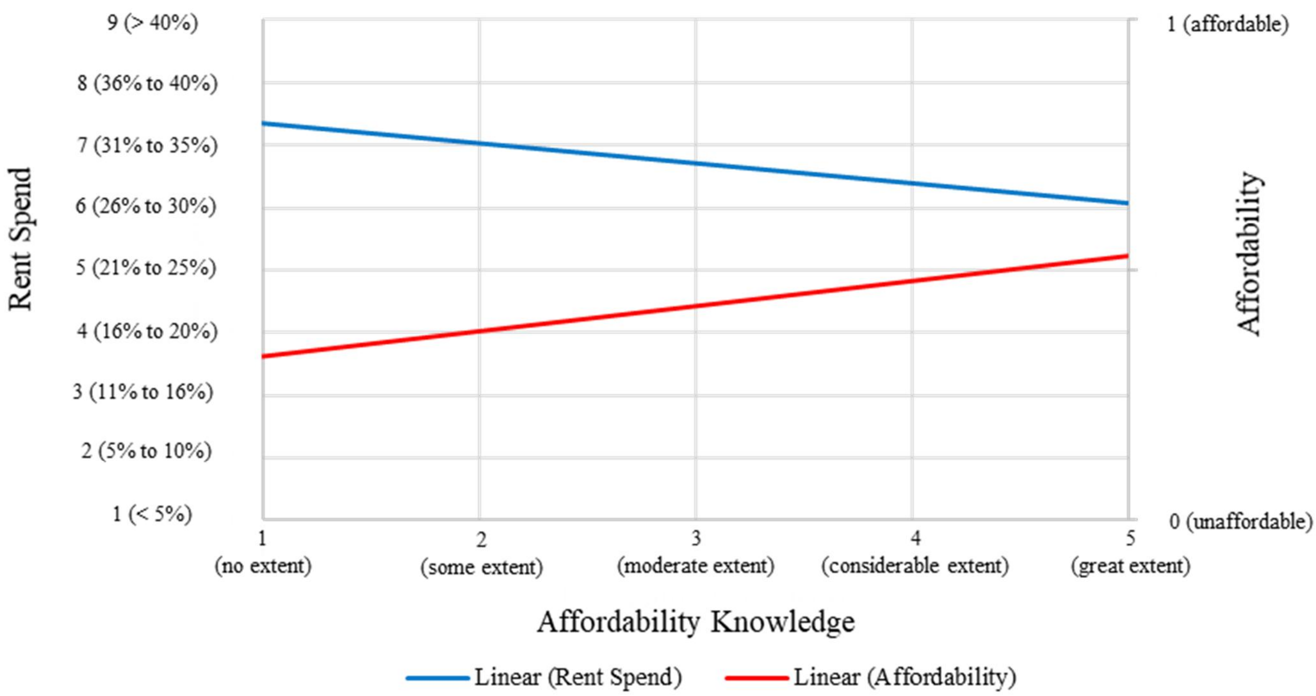

Figure 2. Affordability knowledge effects on rent spend and housing affordability.

A series of independent samples t-tests were performed comparing the differences in various personal finance measures, economic perspectives, and demographics based on rental affordability (Table 1). The percentage of income spent on rent, food, and transportation was significantly higher among those in the unaffordable group. The percentage of income spent on clothing/merchandise and leisure/travel did not differ between the affordable and unaffordable groups. Credit card debt, media influence on financial decisions, understanding of government policy, and future economic outlook did not differ between the affordable and unaffordable groups. Those in the unaffordable group had significantly less in savings and were less likely to see themselves entering homeownership within the next year. However, the perceived likelihood of homeownership in five years did not significantly differ between the affordable and unaffordable groups. Individuals in the unaffordable group were significantly older but education level did not differ between the affordable and unaffordable groups.

Table 1. Differences in personal finances, economic perspectives, and demographics based on rental affordability.

Variable	Affordable	Unaffordable	*F*	*p*-value
Rent spend*	4.78	8.46	64.984	0.000
Food spend*	3.32	3.95	14.658	0.000
Transportation spend*	2.03	2.16	5.647	0.018
Clothing/merchandise spend	1.59	1.58	3.637	0.057
Leisure/travel spend	1.83	1.57	0.831	0.362
Credit card debt	1.97	1.98	0.004	0.949
Savings*	2.54	1.98	22.185	0.000
Media influence	1.98	1.86	1.991	0.159
Government policy understanding	2.73	2.56	0.264	0.607
Economic outlook	2.37	2.08	3.580	0.059
Homeownership likelihood (1 year)*	2.03	1.55	10.328	0.001
Homeownership likelihood (5 years)	3.51	2.80	0.948	0.331
Age*	3.63	3.70	4.796	0.029
Education	4.37	4.14	0.409	0.523

4. Discussion

Roughly two-thirds (63%) of the renters in the study were "rent burdened," by spending more than 30% of their gross income on rent. Similar to previous research (Colburn & Allen, 2018; Fernald, 2015; Fernald, 2016; Kabundu et al., 2022), this result underscored the current and future need for affordable rental housing in all three countries. The finding supports Wilson et al.'s (2023a; 2023b) work that indicates rental unaffordability in the U.S., the U.K., and Canada has increased as a result of the COVID-19 pandemic. Given the negative impacts of lasting unaffordability (Pollack et al., 2010; Mason et al., 2013; Gabriel & Painter, 2020; Kirkpatrick & Tarasuk, 2007; Kirkpatrick & Tarasuk, 2011; Moore & Skaburskis, 2004; Newman & Holupka, 2015; Newman & Holupka, 2016; Du & Zheng, 2020; Kacher & Petach, 2021; Szumilo & Vanino, 2021), affordability programming should be a top priority for policymakers. Although policymakers have focused on increasing financial literacy, most programming and research are focused on investment decisions, retirement planning, debt minimization, and overall financial well-being as opposed to housing affordability. In terms of real estate organizations, the demand for affordable rental housing suggests acquiring or developing such properties could be a lucrative and competitive strategy.

The results showed that affordability knowledge influenced both the percentage of income spent on rent and affordability. Specifically, affordability knowledge was negatively correlated with rent spend, suggesting that rent expenditure decreases as affordability knowledge increases. Affordability knowledge and affordability were positively correlated, suggesting that affordability – being in an affordable situation – improves as affordability knowledge increases. Based on the shifts in spending and the prioritization of needs over wants during the COVID-19 pandemic (Anderson et al. 2022; Baker et al., 2020; Chronopoulos et al., 2020; Cox et al., 2020; Surico et al., 2021), it is clear that renters are faced with basic financial trade-offs and some may understand the importance of rental affordability. Although affordability knowledge influenced both rent spend and affordability positioning, only approximately one-third (37%) of the renters were in affordable situations, emphasizing the need for further affordability resources such as education (Brennan et al., 2014). However, education is only a small piece of the affordable housing puzzle, as renters require affordable rental options in the form of housing supply to put their knowledge to work.

Further evidence of the prioritization of needs over wants was found when comparing renters in affordable and unaffordable situations. Specifically, renters in the unaffordable group, as compared to the affordable group, dedicated more of their gross monthly incomes to rent, food, and transportation. These results can be interpreted as households with financial constraints 1) prioritizing rent payments, 2) ensuring that food is on their tables, and 3) getting themselves to work to meet their financial obligations. In contrast, the percentage of gross monthly income spent on clothing/merchandise and leisure/travel did not differ from the affordable to unaffordable group. This aligns with previous work that shows consumer spending drops and remains low during economic hardship (Anderson et al. 2022; Ganong & Noel, 2019; Reed & Crawford, 2014; Starr, 2011).

The amount of savings significantly differed between the affordable and unaffordable groups, such that the unaffordable group had less. This is not surprising and suggests that those in the unaffordable group can save less – by virtue of being in an unaffordable situation – and/or may use savings to assist with rent payments (Hanna, 1984). Conversely, those in affordable housing situations are likely able to save more as a result of the lower expenditure on housing. Interestingly, credit card debt did not differ between the affordable and unaffordable groups. This may be a result of everyone, those in affordable and unaffordable situations, having high levels of credit card debt. This is supported by recent data from the Federal Reserve Bank of New York (2020) that showed U.S. credit card debt is at an all-time high of $930 billion and the Bank of Canada (2023) indicating increasing concerns for household debt.

Media influence on financial decisions, government policy understanding, and economic outlook did not differ between the affordable and unaffordable groups. The overall low influence of media on financial decisions suggests that this is not the most effective method for enhancing affordability knowledge going forward and may be a result of media distrust (Ternullo, 2022; Markov & Min, 2022). In the same context, government policy understanding was low among those in the affordable and unaffordable groups, further pointing to the need for policy and economic education among renters. Economic outlook assessments were "somewhat negative" for both the affordable and unaffordable groups. The likelihood of homeownership in the next year was significantly lower among those in the unaffordable group as compared to the affordable group. This was also not surprising, given the increasing financial barriers to homeownership and "the deferred American dream" (Xu et al., 2015, p. 201). Although, when examining the likelihood of homeownership in the next five years, perceptions did not significantly differ between the two groups. On average, both groups assessed homeownership in the next five years as "somewhat likely" to "likely," indicating homeownership is a desired end goal (Goodman & Mayer, 2018).

In contrast to previous research (Eichholtz & Lindenthal, 2014), individuals were significantly older in the unaffordable group, and education did not differ between groups. The age difference may be due to returning renters. According to Wilson and Giuffre (2022), returning renters have purchased a home but as they age they "return to the rental market due to financial, marital, employment, or health reasons" (p. 150). It may be that these factors make renting less affordable as individuals age. Alternatively, it is just as likely that the older renters have never entered homeownership and renting becomes more difficult financially due to retirement and other income reductions. This data contrasted Wilson and Giuffre's (2022) argument that suggested as education increases, affordability "becomes less of an issue" (p. 141). A reason for this may be individual preferences. Lifestyle renters, defined as those who rent by choice, view homeownership as limiting and renting as more flexible (Morris et al., 2020).

Many have described young adults who have been priced out of the housing market as "generation rent" (McKee et al., 2020). These young people, typically identified as ages 18 to 40, live in the rental sector for longer periods of time with declining access to home ownership in addition to student loan burdens and low wage growth, among other factors (McKee, 2019). The precariousness of such situations may have lasting impacts such as unstable employment, delaying the process of "settling down" and even impacting the transition to adulthood (Hoolachan et al., 2017).

Finally, the aforementioned externalities of a "rent burden" may include broader macroeconomic effects on entrepreneurship and general economic development. Housing affordability affects location decisions by both labor and employers where a job-housing mismatch undermines new business creation (Miller et. al., 2021). Agglomeration economies — whereby employees and firms co-locate geographically — generate sharing, matching, and learning mechanisms that impact, and are impacted by, the availability of affordable housing (Bolter & Robey, 2020; Du & Zheng, 2020).

5. Conclusion

While the clearest path to housing affordability certainly rests with supply solutions regarding increased options for renters, a holistic approach is more nuanced. It requires augmenting the knowledge capabilities on the demand side with associated civic policies and planning. Affordability knowledge paired with incentivized and strategic housing units supports long-term socioeconomic and public health.

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Conflict of interest

The authors claim that the manuscript is completely original. Grant Alexander Wilson has consulted for, and Jason Jogia is an executive at, Avenue Living (residential real estate owner/operator).

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