# DETERMINANTS OF HOUSING INSECURITY IN A LOW INCOME SOUTH AFRICAN TOWNSHIP

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─Abstract ─

The campaign to end poverty by 2030, as advocated by the World Bank, has multifaceted components. Food security and abject poverty have received more attention; however, little attention has been focused on housing insecurity. This is important, especially given the fact that it is widely acknowledged that housing satiates an essential human need for physical security, dignity and prosperity, among other things. Housing, for some time, has been observed as crucial to individual and family functioning. As indicated by organisations such as the United Nations Habitat, the importance of appropriate housing is explained by the fact that safe housing is seen as a basic need among other needs such as food, all of which are regarded as central components of the security of ordinary households, particularly in developing countries. In 2015, more than 1.5 billion people in the world were living in housing that was unsafe and inadequate, while in the meantime, millions experienced eviction from their homes every year, with at least 100 million people becoming homeless on any given day. Therefore, it is pertinent to understand what determines housing insecurity. The study aims to investigate factors that determines housing insecurity. Using data collected from Sharpeville and Bophelong, two low income townships in South Africa that are particularly vulnerable to housing insecurity, the study employs a multinomial logistic regression to investigate the effects of head of household and the general household characteristics on housing insecurity. The results of the regression analysis show that income, gender, number of people in the household and the amount paid to bond or rent are significant predictors of housing insecurity. Contentious issues like access to land and job opportunities are areas of further study in understanding the multifaceted phenomenon of housing insecurity.

**Key Words:** Housing insecurity, Determinants, Low income, Households, South Africa
**JEL Classification:** I31, I39

## 1. INTRODUCTION

It is acknowledged widely that housing satiates an essential human need for physical security, dignity and prosperity among other things. The significance of housing stems from the fact that adequate housing forms part of essential human needs as indicated by Maslow's basic needs hierarchy (Wahba & Bridwell, 1976). Despite the fact that adequate housing supports the achievement of sustainable development goals (UN-HABITAT, 2016), little attention has been focused on housing insecurity. Cutts, Meyers, Black and Frank (2011) argue that policies that could decrease housing insecurity could also promote the health of children; a factor that links to the first three sustainable development goals. Be that as it may, according to the UN-HABITAT (2016), 1.5 billion people in the world in 2015 were living in inadequate and unsafe housing. At the same time, more than 100 million people globally become homeless daily, while millions are forced to leave their homes due to factors such as failing to pay rent or home loan repayments (UN-HABITAT, 2016; OHCHR, 2012). Compelling evidence by the UN-HABITAT (2003) indicates that of all human rights, the right to adequate and safe housing continues to be the most dishonored. This makes housing a serious concern as the absence of housing influences not just the wellbeing and development of families but also individual security and dignity (Ling, 2008; UN-HABITAT, 2003). Thus, the compromise of secure housing has the ability to harmfully impact economic and personal prosperity, making it more difficult for households to escape poverty affecting every aspect of their lives and those of communities (Tshitereke, 2008).

This study investigates the determinants of housing insecurity in two South African townships, namely Sharpeville and Bophelong. The purpose of the study is therefore to understand household characteristics that are associated with housing insecurity. Some of the household characteristics to be considered include the gender of the head of household, the size of the household, employment status of the head of household among other things. The rest of the paper is organised as follows: Section 2 reviews the literature on housing insecurity in general. In particular, the focus is on explaining housing insecurity and discussing factors that determine it. Section 3 presents the methods used in the data collection process and data analysis. The multinomial logistic regression used to investigate the determinants of housing insecurity is also specified in this section. Section 4 presents the results and discussion and the study is concluded in Section 5.

## 2. LITERATURE REVIEW

### 2.1 Background and definitions of housing insecurity

Housing insecurity is a multidimensional concept, which concerns more than just providing shelter (Bailey, Cook, De Cuba, Casey & Fran, 2016). Hartman (1998) argues that housing is considered adequate if it is secure, affordable and habitable. According to Herbert, Morenoff and Harding (2015) and Johnson and Meckstroth (1998), housing insecurity is perceived as a wide-ranging extent of perilous and dangerous housing situations, which may involve being homeless, living in overcrowded homes, poor, unsafe and situated in unstable neighborhoods. Even households that are burdened by high housing costs such as rent in proportion to their income are regarded as experiencing housing insecurity since their continued residence is threatened by the high probability of eviction (Geller & Curtis, 2011). Johnson and Meckstroth (1998) maintain that living in circumstances of poor quality, insecure neighborhoods, overcrowded housing, or being homeless all add to housing insecurity. Wong, Elliot, Reed and Ross (2009) define housing insecurity as the absence of a settled, steady and adequate nighttime home or sharing housing with others because of the loss of previous shelter.

As indicated by Hulse and Saugeres (2008), the multifaceted nature of housing insecurity demonstrates that there is more to housing than just having a shelter. They describe housing insecurity as instability in people's living arrangements coupled with threatened continued residence, a lack of personal security and safety, at times lacking a sense of belonging due to feeling socially left out from neighborhoods where one lives and living in housing of poor quality, which unfavorably impacts on overall wellbeing and prosperity

The previously mentioned factors all demonstrate that many components frame into housing insecurity from not being housed physically to living in unsuitable conditions and that often makes it difficult to have a standard definition of what is housing insecurity. This shows also that less serious forms of housing insecurity, such as a delayed rent payments or moving because of high housing costs can pave the way for more serious occasions such as forced eviction and homelessness (Kim, Burgard & Seefeldt, 2017). This, therefore, makes housing insecurity extremely multidimensional since it is vulnerable to sudden change.

### 2.2 Empirical review of the determinants of housing insecurity

The multidimensional nature of housing insecurity implies that many factors can cause it. Some of the predictors of housing insecurity range from demographic characteristics to housing conditions (Shinn, Weitzman, Stojanovix, Knickman,

Jumenez, Duchon, James & Kratz, 1998). Several studies have connected many issues to housing insecurity. Goldrick-Rab, Broton and Eisenberg (2015) investigated the relationship between food and housing insecurity among ten community college graduates from seven states of the United States and their findings reveal that students who experienced food insecurity tended to be compromised by inadequate living conditions and *vice versa*. This suggests that those affected by poverty or food insecurity are most likely to face housing insecurity and *vice versa*. The effects of these are even worse, as lacking adequate housing such as being homeless while at the same struggling to access nutritious food may consequently result in poor mental and physical health (Schure, Katon, Wong & Liu, 2016). These findings mirror those of a study by Cohen, Wardrip and Williams (2010) who found that households that spend a greater part of their income on housing (i.e. more than 50 percent) in 2005 were additionally more prone to struggle buying food than households who spend less than 30 percent of their income on housing.

Another study by Desmond and Gershenson (2016) explored the role of housing insecurity in triggering job insecurity amongst the working poor and revealed that the odds of losing one's job or facing retrenchment is between 11 and 22 percent higher for workers who encountered forced evictions, in comparison to their counterparts who did not. This just shows that housing insecurity is deeply rooted and it affects not only current wellbeing but also future living prospects. Housing insecurity additionally was found to be a threat to child wellbeing (Bailey et al., 2016; Briggs, 2013; Cutts et al., 2011; Evans 2006). According to Briggs (2013), children from insecurely housed families will probably experience the ill-effects of constant illness, hunger and ailing health than children with homes. Evans (2006) investigated the relationship between child development and the physical environment and found that children who live in crowded housing may have poorer intellectual development or be more apprehensive, socially withdrawn, stressed or destructive and violent. These findings also mirror those of Gilman, Kawachi, Fitsmaurice and Buka (2003) and Harker (2006) who found that characteristics of the physical environment such as crowding, housing and neighborhood quality influence child development. Irrespective of the social class, parents are less responsive to young children in crowded homes (Evans, Maxwell & Hart, 1999).

Housing insecurity situations are not challenges only facing children; another issue is the gender of head of households. Overall, women remain the most insecurely housed. Empirical studies (Sharam, 2017; Desmond, 2015; Diette &

Ribar, 2015; Mcferran, 2010) have also analysed the link between housing insecurity and gender. In trying to understand the connection between being older, single, poor and female, Mcferran (2010) found that single older women in Australia were most vulnerable to housing insecurity as well as homelessness. Housing insecurity additionally detriments individuals already economically inferior (Patillo, 2013). This was also confirmed by Desmond (2015), who found that poor single mothers and young women, especially African Americans, were at a high risk of eviction. Sharam (2017) argues that education and employment serve as the essential means by which resources can be gained and security acquired, which means that if one lacks education and a job, chances of being insecurely housed are much higher.

A study exploring the experiences of newcomer women with insecure housing in Canada by Walsh, Hanley, Ives and Hordyk (2016) found the essential driver of housing insecurity among these women to be insufficient income, despite increasing housing costs. Their investigation additionally uncovered that in their quest to avoiding homelessness most of the women who participated in the study were constrained into inadequate and vulnerable housing such as staying with relatives and shared rooms or apartments. Some of these living arrangements are frequently challenging due to the prevalence of crowded conditions, relational conflicts and financial reliance, which often threatens continued residence (Walsh et al., 2016). Many of these women face violence, which may force them to abandon their homes, consequently, resulting in homelessness (Baker, Billhardt, Warren, Rollins & Glass, 2010; Jasinski, Wesely, Mustaine & Wright, 2005). On the other hand, some studies (Goldrick-Rab et al. 2015; Geller & Curtis, 2011) found men to be more vulnerable to housing insecurity, especially certain groups of men. In their study, which investigated incarceration and the house security of urban men, Geller and Curtis (2011) found that men who have been imprisoned at some point in their lives face higher chances of housing insecurity that are almost two times as high as those encountered by men never imprisoned.

Other studies (Silva, Kleinert, Sheppard, Cantrell, Freeman-Coppadge, Tsoy, Roberts & Pearow, 2015) linked housing insecurity to tertiary educational performance and found that college students that reported to have been insecurely housed had their class attendance, academic performance and the ability to continue with university negatively affected.

On the relationship between housing insecurity and health, some studies Logie, Jekinson, Earnshaw, Tharao and Loufty (2016), Stahre, Van Eenwyk, Siegel and Njai (2015) and Pollack, Egerter, Sadegh-Nobari, Dekker and Braveman (2008)

noted that housing insecurity is associated with postponed medical care, medications and increased emergency department visits, which may be explained by issues such as psychological distress that comes with being homeless or even struggling to pay rent. A study by Logie et al. (2016), which aimed to test various factors connecting HIV-related stigma, racial discrimination, housing insecurity and wellbeing among African and Caribbean Black women in Canada found that housing insecurity had direct effects that were significant on wellbeing, in particular depression. Therefore, this shows that there is more to housing than just a shelter or a physical building.

## 3. METHODOLOGY AND DATA SOURCES

The issue of housing insecurity, with some considerable attention, especially in the western world ( Walsh et al. 2016; Cutts et al. 2011; Geller & Curtis 2011;), still has no clear definitions and measures (Tyler, Chwalek, Hughes, Karabanow & Kidd, 2010). Most of the studies have tried to explain the multidimensionality and complexity of housing insecurity, making mention that it goes beyond looking at a roof over the head but rather to the security and stability. It remains uncertain as to what would entail a measure of housing insecurity. The issue of housing insecurity is a very noticeable phenomenon in South Africa, especially in the townships where houses that people live in, especially in the informal settlements, provide a clear picture of the situation being experienced. To know that there exists a problem, one does not necessarily need to ask the households. However, to attain a deeper understanding of the characteristics of the households that are experiencing housing insecurity and how it can be further analysed, a survey was conducted in two low income townships of Bophelong and Sharpeville in the Vaal Triangle.

### 3.1 Data

The survey was conducted in 2015 and only heads of households were involved in the survey. The household determined who the head of the household was. The population from which the sample was drawn comprised the aforementioned two low income townships of Bophelong and Sharpeville. These are both situated in the Vaal region of the Gauteng province and are under the municipal jurisdiction of the Emfuleni Municipality. For the study, 300 households were drawn from each of the two townships, making the total sample size 600 households. This sample size was similar or more than the sizes that were used in similar studies (Silva et al. 2015; Turnbull, Loptson & Muhajarine 2014; Shinn et al. 1998). A household questionnaire was developed and piloted and after ascertaining the appropriateness of the question; it was used to collect data from the heads of

households in the two townships. A simple random sampling method was used to select the households to be involved in the survey. After data cleaning, 580 questionnaires remained to be analysed and the other 20 were considered void. This questionnaire has been used in other papers by the authors and the validity of the data has been confirmed in all the cases (Dunga & Makhalima 2016; Grobler & Dunga 2016).

## 3.2 Model specification

The data analysis employs a multinomial logistic regression. The regression is used to analyse the household characteristics that predict the probability of a household being insecure in terms of housing. A multinomial regression is used because housing insecurity has been categorised into four categories, namely housing secure, mildly insecure, moderately insecure and severely insecure. If two categories were used, a binary logistic regression would have been appropriate. However, with more than two categories in the dependent variable, the appropriate model is the multinomial one. The model, therefore, is specified as follows:

$$P_{ij} \frac{\exp(\beta_j X_i)}{1 + \sum_{j=1}^{4} \exp \beta} \text{ For j} = 1, 2, 3, 4 \qquad (1)$$

Where $X_i$ is a vector of contextual socio-economic characteristics of the $i^{th}$ household, $\beta_j$ is a vector of regression parameter estimates associated with alternative j and 1-4 is the status of housing security levels in the household. The coefficients of explanatory variables on the omitted or base category are assumed to be zero. The probability that a base category will be chosen is calculated as:

$$P_i = 1|X_i = \frac{1}{1 + \sum_{j=1}^{4} \exp(\beta_j X_i)} \qquad (2)$$

The probabilities of the household being in the other three categories (j = 2, 3 or 4) can be estimated

$$P_i = (j = m|x_i) = \frac{\exp(\beta_j X_i)}{1 + \sum_{j=1}^{4} \exp(\beta_j X_i)} \text{ where } m > 1 \qquad (3)$$

Finally, the multinomial regression model to estimate the determinants housing insecurity levels in the four categories or groups is specified as follows:

$$P_{ij} = In(P_j/P_i) = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} \dots \dots \beta_n X_{ni} + \varepsilon_i \qquad (4)$$

Where the parameter estimated $P_{ij}$ is the probability of households falling into any of the four categories of the housing insecurity level, which are housing secure, mildly insecure, moderately insecure and severely insecure.

## 3.3 Measuring household housing insecurity

The literature on housing insecurity is based mostly on qualitative descriptions of household experiences of instability, overcrowding and unsafe and insecure housing (Tyler et al., 2010; Johnson & Meckstroth, 1998). There is still no clear definition or quantitative measure of housing insecurity; if it exists, it is still not found easily in the literature. Therefore, this paper is the first step of developing a quantitative scale of measuring housing insecurity. Just like food security and other complex social issues, housing insecurity is multidimensional and its measure needs to take into account enough aspects of the households in order to have an accurate determination of the housing security status. This paper has used material used in the construction of the dwelling, the number of people in the household and the percentage spent on housing as a share of the total household income to determine the insecurity status of the household. The percentage spent on housing was not as useful based on the sample used since most of these households are informal and as a result, most households own them. Based on the above characteristics, households were then categorised as secure, mildly insecure, moderately insecure and severely insecure following the categorisation that is used in similar phenomenon like food security. The housing insecurity scale is then categorised into 1=secure, 2=mildly insecure, 3=moderately insecure and 4=severely insecure.

The frequency of materials used is presented in Table 1 to present a picture of the mostly used materials in the sampled areas. Table 2 presents the distribution of the household sizes in the sample. The sizes were categorised into four categories: category (1) was for those with one to three members, category (2) was for those with four to five members, category (3) six to seven household members and category (4) was those with eight or more household members.

**Table 1: Materials used for the Construction of the Dwelling**

|  |  | Frequency | Percent | Valid percent | Cumulative percent |
|---|---|---|---|---|---|
| **Valid** | Brick | 478 | 10.1 | 83.6 | 83.6 |
|  | Concrete | 3 | .1 | .5 | 84.1 |
|  | Thatching | 6 | .1 | 1.0 | 85.1 |
|  | Corrugated, wood, plastic, cardboard | 85 | 1.8 | 14.9 | 100.0 |
|  | Total | 572 | 12.1 | 100.0 |  |
| **Total** |  | 572 | 100.0 |  |  |

*Source:* Survey data: 2015.

The percentages in the type of material used and the number of people in the household were used to come up with the category of housing insecurity.

**Table 2: Number of People in the Household**

|  |  | Frequency | Percent | Valid percent | Cumulative percent |
|---|---|---|---|---|---|
| **Valid** | 1 to 3 people | 175 | 3.7 | 31.9 | 31.9 |
|  | 4 to 5 people | 271 | 5.7 | 49.4 | 81.2 |
|  | 6 to 7 people | 80 | 1.7 | 14.6 | 95.8 |
|  | 8 or more people | 23 | .5 | 4.2 | 100.0 |
|  | Total | 549 | 11.6 | 100.0 |  |
| **Total** |  | 549 | 100.0 |  |  |

*Source:* Survey data: 2015.

The results of the household housing insecurity scale (HHIS) are presented and discussed in the subsequent section of results and discussion. The multinomial logistic regression results are also presented to show which household characteristics are associated with the higher probability of being housing insecure and which ones reduced the probability of housing insecurity.

## 4. RESULTS AND DISCUSSION

Table 3 presents the frequency distribution of the household housing insecurity scale as calculated based on the four categories discussed in the preceding section. The results show that 41 percent of the sample were housing secure, 35.5 percent were mildly insecure, 8.4 percent of the households were moderately insecure and 15 percent were severely insecure.

**Table 3: Frequency Distribution of HHIS**

|  |  | Frequency | Percent | Valid percent | Cumulative percent |
|---|---|---|---|---|---|
| **Valid** | Secure | 238 | 5.0 | 41.0 | 41.0 |
|  | Mildly insecure | 206 | 4.4 | 35.5 | 76.6 |
|  | Moderately insecure | 49 | 1.0 | 8.4 | 85.0 |
|  | Severely insecure | 87 | 1.8 | 15.0 | 100.0 |
|  | Total | 580 | 12.3 | 100.0 |  |
| **Total** |  | 580 | 100.0 |  |  |

*Source:* Survey data: 2015.

The regression model, as discussed in the methodology section, was used to assess which household characteristics are significant in predicting the probability of a household falling into any of the four categories of housing insecurity. Table 4 presents the results of the multinomial logistic regression. The results show that among the variables included in the model, number of people in the household, log of income, amount of money spent on the bond or renting the house and gender of the household were all in overall terms significant at 5 percent significance level. Only the age of the head of household was not significant in the model. The benchmark model was set to be the severely insecure category of the HHIS. A multinomial logistic model estimates models that are n-1, where n is the number of categories in the dependent variable. Thus, the $n^{th}$ becomes the reference model to which all the estimated n-1 models are compared. In this case, the models for secure, mildly insecure and moderately insecure are compared to the severely insecure.

The coefficient for the number of people in the house is negative, indicating that the probability of being secure, mildly or moderately insecure is reduced as the number of people increases, meaning there is a higher probability of falling in the severely housing insecure category associated with the probability of being housing secure. This suggests that larger household sizes are more prone being severely insecure in terms of housing (Herbert et al., 2015; Johnson & Meckstroth, 1998). The p-value of the number of people was significant at 1 percent for the first model, 5 percent for the second model and 1 percent for the third model.

**Table 4: Multinomial Logistic Regression Results**

| Household housing insecurity scale (HHIS) | | B | Std. Error | Wald | df | Sig. |
|---|---|---|---|---|---|---|
| **Secure** | Intercept | -6.852 | 1.453 | 22.245 | 1 | .000 |
| | Number of people | -.299 | .069 | 18.614 | 1 | .000 |
| | Ln income | .980 | .179 | 30.054 | 1 | .000 |
| | Age of head of household | .014 | .009 | 2.480 | 1 | .115 |
| | Rent bond maintenance | .000 | .001 | .031 | 1 | .860 |
| | [Gender=Male] | .491 | .294 | 2.786 | 1 | .095 |
| **Mildly insecure** | Intercept | -6.415 | 1.494 | 18.432 | 1 | .000 |
| | Number of people | .127 | .062 | 4.211 | 1 | .040 |
| | Ln income | .704 | .181 | 15.130 | 1 | .000 |
| | Age of head of household | .011 | .009 | 1.454 | 1 | .228 |
| | Rent bond maintenance | -.001 | .001 | 5.314 | 1 | .021 |
| | [Gender=Male] | .756 | .296 | 6.509 | 1 | .011 |
| **Moderately insecure** | Intercept | -5.446 | 2.302 | 5.596 | 1 | .018 |
| | Number of people | .274 | .080 | 11.642 | 1 | .001 |
| | Ln income | .174 | .270 | .416 | 1 | .519 |
| | Age of head of household | .015 | .014 | 1.085 | 1 | .298 |
| | Rent bond maintenance | -.002 | .001 | 2.395 | 1 | .122 |
| | [Gender=Male] | 1.917 | .503 | 14.514 | 1 | .000 |
| *a. The reference category is severely insecure* | | | | | | |

*Source:* Survey data: 2015

Income of the household was considered very important in determining the household housing insecurity. The income was entered as a natural log in the model. The expectation was that the higher the income the higher the probability of a household being housing secure. The results in Table 4 show a verification of the *a priori* expectation. The coefficient was positive in all three models, showing that there was a higher probability of a household falling in secure, moderately insecure or mildly insecure than in severely insecure, as the income increases. As indicated by Tunstall, Bevan and Bradshaw (2013) and Ling (2008) in many economies inadequate incomes inhibits access to numerous potential housing alternatives, or makes it difficult to attain one. Income therefore functions as the basic means by which assets can be gained and security procured, which would clarify why households with high incomes would have less odds of being

insecurely household. The p-values for the household income were significant at 1 percent significance level for all the three models.

The amount the household spends of paying the housing bond or rent was also included in the model. The literature (*e.g.* Herbert et al. 2015) indicates that if a higher percentage of the household income goes to paying for the housing, the household would be a risk of being insecurely housed. The overall p-value for amount paid on bond or rent was 0.023, which is significant at 5 percent significance level. For the individual models, the p-values were 0.857 for the first model, which is not significant, 0.02 for the second model, which is significant at 5 percent significance level and 0.128 for the third model, which is not significant at any level. However, the dominant sign for this variable was negative, showing that the higher the amount of money paid to the bond and rent the more likely the household was to fall in the reference category of severely housing insecure. At times, these kinds of households are then left with nothing in order to attend to other life necessities, thereby becoming more prone to the probability of forsaking their homes, being evicted or forced to abandon their homes, perpetuating the possibility of being insecurely housed and even being in poverty (Kirkpatrick & Tarasuk, 2011; Cohen et al., 2010).

The last coefficient was on gender of head of household. Gender was in overall terms significant at 1 percent significance level. The dummy for gender was defined as one for male and zero for female in the model; hence, the coefficient represented males. The coefficients were positive in the three models, indicating that being male reduced the probability of being severely insecure, and being female had a higher probability of falling into the reference category of severely housing insecure. These findings mirror those of Sharam (2017), Desmond (2015) and Mcferran (2010) that despite the fact that women are important for family stability, they are however also more vulnerable to a number of social ills including many chauvinistic tendencies which tend to leave them behind as societies develop.

## 5. CONCLUSION

The results herald a significant step in the research of housing insecurity. First, the attempt to come up with a measure of housing insecurity is just a first step in a series of papers and surveys that intends to come up with a proper scale that can be used in measuring housing insecurity. The issue of housing insecurity is very important in dealing with poverty. It remains to be factored properly in the poverty discourse by assigning proper responsibilities to who is responsible for providing housing and how it is linked to household characteristics. In the

regression analysis it has come out clearly as to how income, gender, number of people in the household and the amount paid to bond or rent may be predictors of housing insecurity. There is more that needs to be researched, especially on housing characteristics and how these may affect the insecurity of the household, the channels through which these mechanism link and how policies can be enacted to assist in preventing the perseverance of housing insecurity. Other contentious issues like access to land and job opportunities are areas of further study in understanding this multifaceted phenomenon of housing insecurity.

## REFERENCES

Bailey, K., Cook, J., De Cuba, S., Casey, P...& Frank, D. (2016). Development of an index of subsidized housing availability and its relationship to housing insecurity. *Housing Policy Debate*, 26(1),172–187.

Baker, C., Billhardt, K., Warren, J., Rollins, C. & Glass, N. (2010). Domestic violence, housing instability, and homelessness: A review of housing policies and program practices for meeting the needs of survivors. *Aggression and Violent Behavior*, 15(6), 430–439.

Briggs, M. (2013). Providing care for children and adolescents facing homelessness and housing insecurity abstract. *American Academy of Pediatrics*, 131(6), 1206–1210.

Cohen, R., Wardrip, K. & Williams, L. (2010). *Rental housing affordability - a review of current research*. http://www.nhc.org/media/files/RentalHousing.pdf. Accessed 2017/06/28.

Cutts, D., Meyers, A., Black, M. & Frank, D. (2011). US housing insecurity and the health of very young children. *American Journal of Public Health*, 101(8), 1508–1514.

Desmond, M. (2015). Unaffordable America: Poverty, housing, and eviction. *Fast Focus: Institute for Research on Poverty*, 22(22), 1–6.

Desmond, M. & Gershenson, C. (2016). Housing and employment insecurity among the working poor. *Social Problems*, 63(1), 46–67.

Diette, T.M. & Ribar, D.C. (2015). A longitudinal analysis of violence and housing insecurity. *IZA Discussion Ppae No 9452*. German: Institute for the Study of Labor.

Dunga, S. H. & Makhalima, J. L. (2016). Perceptions of household heads on the causes of child poverty in Boipatong Township. *International Journal of Social*

*Sciences and Humanity Studies*, 8(2), 18–34.

Evans,G., Maxwell, L. & Hart, B. (1999). Parental language and verbal responsiveness to children in crowded homes. *Dev Psychol*, 35, 1020–23.

Evans, G. (2006). Child development and the physical environment. *Annu Rev Psychol*, 57,423–451.

Geller, A. & Curtis, M.A. (2011). A sort of homecoming: Incarceration and the housing security of urban men. *Social Science Research*, 40(4), 1196–1213.

Gilman, S., Kawach, I., Fitzmaurice, G. & Buka, S. (2003). Socio-economic status, family disruption and residential stability in childhood: Relation to onset, recurrence and remission of major depression. *Psychological Medicine*, 33(8), 1341–1355.

Goldrick-Rab, S., Broton, K. & Eisenberg, D. (2015). *Hungry to learn: Addressing food and housing insecurity among undergraduates.* http://wihopelab.com/publications/Wisconsin_HOPE_Lab_Hungry_To_Learn.pdf Accessed 2017/06/18.

Grobler, W. & Dunga, S. (2016). The relationship between perceptions of the causes of poverty and household characteristics. *International journal of economics and finance studies*, 8(2), 129–146.

Harker, L. (2006). *More than one million children in England live in bad housing*https://england.shelter.org.uk/__data/assets/pdf_file/0016/39202/Chance_ of_a_Lifetime.pdf. Accessed 2017/07/02.

Hartman, C. (1998). The case for a right to housing. *Housing Policy Debate*, 9(2), 223–246.

Herbert, C., Morenoff, J. & Harding, D. (2015). Homelessness and housing insecurity among former prisoners. *The Russell Sage Foundation Journal of the Social Sciences*, 1(2), 44–79.

Hulse, K. & Saugeres, L. (2008). Housing insecurity and precarious living: An Australian exploration. *AHURI Final Report No. 124*. Australia: Australian Housing and Urban Research Insitute.

Jasinski, J.L., Wesely, J.K., Mustaine, E. & Wright, J.D. (2005). *The experience of violence in the lives of homeless women: A research report.* https://www.ncjrs.gov/pdffiles1/nij/grants/211976.pdf. Accessed 2017/06/25.

Johnson, A. & Meckstroth, A. (1998). Ancillary services to support welfare to

work, Available at http://aspe.hhs.gov/hsp/isp/ancillary/front.htm Accessed 2017/05/21.

Kim, H., Burgard, S.A. & Seefeldt, K.S. (2017). Housing assistance and housing insecurity: A study of renters in southeastern Michigan in the wake of the great recession. *Social Service Review*, 91(1), 41–70.

Kirkpatrick, S.I. & Tarasuk, V. (2011). Housing circumstances are associated with household food access among low-income urban families. *Journal of Urban Health,* 88(2): 284-296.

Ling, T. (2008). *Housing insecurity: The face of poverty*. http://cpj.ca/content/housing-insecurity-face-poverty Accessed 2017/10/11.

Logie, C.H., Jenkinson, J., Earnshaw, V., Tharao, W. & Loufty, M. (2016). A structural equation model of HIV-related stigma, racial discrimination, housing insecurity and wellbeing among African and Caribbean Black women living with HIV in Ontario, Canada. *PLoS ONE*, 11(9), 1–20.

Mcferran, L. (2010). *It could be you: female, single, older and homeless.* https://www.parliament.nsw.gov.au/committees/DBAssets/InquiryOther/Transcript/9970/Tabled document - Mary O%27Sullivan - It could be you female%2C single%2C older and homeless.pdf. Accessed 2017/06/01.

OHCHR (Office of the High Commissioner for Human Rights). (2012. *Women and the right to adequate housing. An introduction to central issues*. http://www.ohchr.org/Documents/Publications/WomenHousing_HR.PUB.11.2.pdf. Accessed 2017/07/10.

Patillo, M. (2013). Housing: Commodity versus Right. *Annual Review of Sociology*, (39), 509-31.

Pollack, C., Egerter, S., Sadegh-Nobari, T., Dekker, M. & Braveman, P. (2008). Where we live matters for our health: The links between housing and health. *Commission to Build a Healthier America Issue No 2.* http://www.rwjf.org/files/research/commissionhousing102008.pdf. Accessed 2017/05/20.

Schure, M.B., Katon, J.G., Wong, E. & Liu, C. (2016). Food and housing insecurity and health status among U.S. adults with and without prior military service. *Population Health*, 2, 244–248.

Sharam, A. (2017). The voices of midlife women facing housing insecurity. *Social Policy & Society*, 16(1),49–63.

Shinn, M., Weitzman, B., Stojanovic, D., Knickman, J., Jimenez, L., Duchon, L., James, S. & Krantz, D. (1998). Predictors of homelessness among families in New York City: From shelter request to housing stability. *American Journal of Public Health*, 88(11), 1651–1657.

Silva, M., Kleinert, W., Sheppard, A., Cantrell, K., Freeman-Coppadge, D., Tsoy E., Roberts, T. & Pearrow, M. (2015). The relationship between food security, housing stability, and school performance among college students in an urban university. *Journal of College Student Retention: Research, Theory & Practice,* 0(0), 1-16.

Stahre, M., VanEenwyk, J., Siegel, P. & Njai, R. (2015). Housing Insecurity and the Association With Health Outcomes and Unhealthy Behaviors, Washington State, 2011. *Preventing chronic disease*, 12(7), E109. Tshitereke, C. (2008). The importance of adequate housing, *Mail & Guardian*,10 Oct. http://mg.co.za/article/2008-10-10-the-importance-of-adequate-housing Accessed 2017/07/18.

Tunstall, R., Bevan, M. & Bradshaw, J. (2013). *The links between housing and poverty: An evidence review.* https://www.york.ac.uk/media/chp/documents/2013/poverty-housing-options-full.pdf Accessed 2017/10/11.

Turnbull, H., Loptson, K. & Muhajarine, N. (2014). Experiences of housing insecurity among participants of an early childhood intervention programme. *Child: Care, Health and Development*, 40(3), 435–440.

Tyler, F. J., Chwalek, M., Hughes, J., Karabanow, & Kidd, S. (2010). How stable is stable? Defining and measuring housing stability. *Journal of Community Psychology*, *38*(5), 607–621.

UN-HABITAT (United Nations Centre for Human Settlements). (2003). Monitoring housing rights: Background paper for the 2003 Expert Group Meeting. (1), p.88.

UN-HABITAT (United Nations Centre for Human Settlements). (2016). Policy Paper Framework 10 – Housing Policies. http://habitat3.org/wp-content/uploads/PU10-HABITAT-III-POLICY-PAPER.pdf. Accessed 2017/06/20.

Wahba, M.A. & Bridwell, L.G. (1976). Maslow reconsidered: A review of research on the need hierarchy theory. *Organizational Behaviour and Human Performance*, 15(2), 212-240.

Walsh, C., Hanley, J., Ives, N. & Hordyk, S. (2016). Exploring the experiences of newcomer women with insecure housing in Montréal Canada. *Journal of International Migration and Integration*, 17(3), 887–904.

Wong, J., Elliot, L., Reed, S., Ross, W., McGuirk, P. & Chouinard, K. (2009). McKinney-Vento Homeless Assistance Act Subtitle B - Education for homeless children and youths program: Turning good law into effective education 2008 update. *Georgetown Journal on Poverty, Law & Policy*, 16(1), 53–115.