

The University of Texas at Dallas

Home: A Storytelling App Exploring Hidden Youth Homelessness

Sumayah Abdulla

Senior Honors in Arts, Technology and Emerging Communication

Professor Christina Nielsen and Dr. Paul Martin Lester

December 3, 2020

One in ten young American adults between the ages of 18-25, over 3.5 million people, experience homelessness over the course of a year. For youth ages 13-17 the numbers are also high, with 700,000 (1 in 30) youth experiencing some form of homelessness each year in the United States (Morton, Dworsky, & Samuels, 2017). "Home" a web-based app prototype, shares stories of youth who are experiencing homelessness to bring awareness to the issue, along with resources for those facing homelessness or those who want to help others. "Home" teaches viewers about the seriousness of youth homelessness and promotes empathy and self-reflection through the use of research-backed stories, powerful imagery, and design elements such as colors, typography and interaction patterns. This research paper will cover the background, inspiration and purpose for the project, data and key information about youth homelessness, the design process for creating the app, and what the project accomplishes.

### **Project Background**

During my junior and senior years of high school, I volunteered at The Main Place (TMP). Based in Irving, Texas, TMP serves teens experiencing homelessness by providing them with a free shopping experience. Teens at TMP are fitted into new outfits for school graduations, job interviews and more with the help of a personal consultant. TMP also provides teens and their families with hygiene supplies, blankets and winter coats, as well as connecting them to resources for finding housing, jobs and other essential services. TMP is one of dozens of non-profits created to serve the homeless in Irving, Dallas and other surrounding areas of DFW (Allen, 2020). Sharon Johnston, founder of The Main Place, started this initiative in 2006 after learning that the city of Irving alone had over one thousand homeless teens that year (Johnston, 2020). Shocked and heartbroken at the numbers, she decided to put her background

in fashion retailing to use and created a “retail store without a cash register” to serve the homeless youth of Irving (“Our History,” 2020). Johnston also learned that homelessness is not always visible. While some homeless people live in public places and are visibly homeless, others are simply housing insecure. This means that they do not know where their next safe place will be, whether it is staying on a friend’s couch, sleeping in their car or spending a night at a shelter (Johnston, 2020). Because of housing insecurity, homelessness is often hidden and does not show up when government agencies record the numbers of homeless people in cities on a given night (Garnham, 2020). Shedding light on unseen homelessness is the focus for this project.

Storytelling can convince people to learn about topics they might otherwise not be interested in, as shown in the [Interactive Haiku](#) project (Roy, Tomassi & Musa, 2015). Home borrows elements from Interactive Haiku by using interactive stories paired with imagery to teach users new things. Interactive Haiku uses illustrations to convey the general concept and mood of a haiku, while Home uses real-life images to make the stories feel more real, concrete and personal. Home also uses a similar format to Interactive Haiku’s web-based stories which users can scroll through. The “random story” feature from Interactive Haiku was not used in Home because the goal was for users to deliberately pick which story to read based on what is most interesting or relatable to them personally. Interactive Haiku features twelve stories that were overseen by a board of directors. Each story was created through the collaboration of multiple writers, designers and animators (“National Film Board,” 2015). Since Home is an individual project and each story was designed and written by one person, a smaller selection of three stories was used.

The [Shelter - Hidden Homelessness](#) campaign created by Lydia Lanning shows average-looking teens and young adults with captions that let viewers know they are experiencing homelessness and need help (Lanning, 2020). Lanning's project breaks societal stereotypes that the homeless are criminals, panhandlers, mentally ill and dangerous to be around (Truong, 2012). Home uses this idea by the juxtaposition of seemingly average-looking youth with their stories about experiencing homelessness. This causes viewers to question the stereotypes and biases they hold, and change negative perceptions of homelessness to feelings of empathy and compassion. The Shelter Campaign aimed to reach young adults who were experiencing homelessness. In contrast, Home is aimed towards educating a general audience of young adults about homelessness whether they are at risk of experiencing homelessness or not, as well as providing resources that can be shared.

The stories used in Home are fictional, but are based on aggregated data of dozens of real experiences from homeless students shared by Sharon Johnston, Dustin Perkins (Senior Director of Clients and Solutions at the Austin Street Center), and personal accounts of youth who experienced homelessness that were discovered online on Centre Point UK, Our Calling and Reddit ("IAMA", 2012; "College student", 2018; Allen, 2020; Johnston, 2020; "The Hub", 2020). Mary Haskett's research on families experiencing homelessness and the factors that put someone at risk for experiencing homelessness informed what situations would be used in the stories, including abuse, race and ethnicity, financial resources and support networks (Haskett, Perlman & Cowan, 2014).

## Research

In the United States, 58,000 family households are identified as homelessness each year (United States Interagency, 2020). The National Alliance to End Homelessness reports an additional 150,630 households that utilize emergency or transitional housing each year (National Alliance to End Homelessness, 2019). When a family experiences homelessness, children experience traumas that can affect their mental and physical development. Longer periods of homelessness can negatively impact a child's ability to become a successful adult, which can keep families in a cycle of poverty and homelessness for generations (Baldari, 2016). Even one family experiencing homeless is too many, because of the lasting negative effects homelessness can have on generations of people. Families face a particularly difficult situation, since many shelters only serve single adults and few offer childcare or rides to and from school, preventing parents from working to support their family and recover from homelessness (United States Interagency, 2020). When people experience homelessness they are housed, given financial assistance, and paired with roommates with whom they share rent and living expenses. Since a family with children would need a larger space and more food and supplies, living expenses are higher than that of two single adults. The family would also miss the added benefit of more adults contributing income (Allen, 2020).

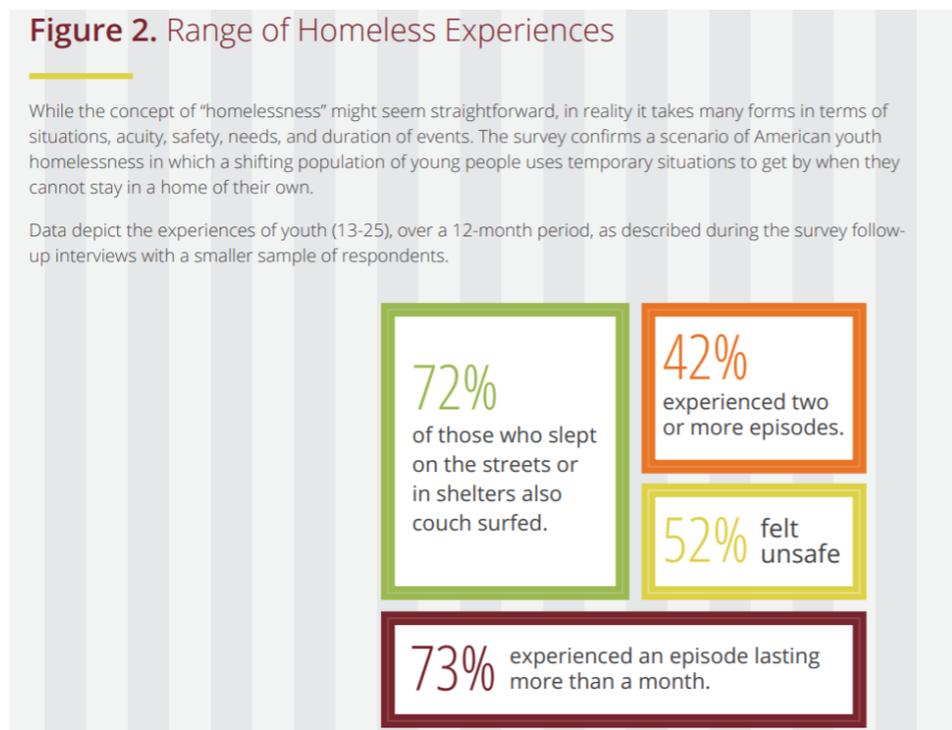
**“1 out of 3 pre-teens and teens is drawn into human trafficking and sexual or labor slavery within 48 hours of becoming homeless”**

(“The Main Place”, 2020).

In 1987, the McKinney-Vento Homeless Assistance Act defined the legal definition of homeless youths as “individuals who lack a fixed, regular, and adequate nighttime residence” (“McKinney-Vento Definition”, 2020). This description includes children or youth who are sharing someone else’s home due to a hardship, having a primary nighttime residence that is not designed to accommodate sleeping for human beings, living in cars, public spaces, bus or train stations, or abandoned buildings, and any migrant children who fit into one or more of these situations. This legal ruling opened the doors for non-profits to gain funding and support children and youth experiencing any of these situations, not just the stereotypical idea people have of a homeless person. This legal definition shows that youth experience “hidden homelessness” due to an unstable living situation, even if it is not obvious at first glance.

Engaging Homelessness, a four-week program led by Dustin Perkins, was a primary source for this project (Allen, 2020). Once a week for four weeks, experts in the non-profit industry who have served people experiencing homelessness for decades shared stories, statistics on homelessness, and effective ways to help someone get out of homelessness. In this program, Perkins shared the importance of using people-first language. Instead of calling an individual homeless, Perkins referred the people they serve as “client” and advocated the use of the phrase “person experiencing homeless” to encourage thinking of it as a person who is going through a hard time in their life and not defining them by the crises they are currently facing. Perkins shared the Homeless Equation:  $\text{Poverty} + \text{Crises} - \text{Support System} = \text{Homelessness}$  (Allen, 2020). This applies to most adults who experience homelessness. However, children and youth more commonly face homelessness due to parental neglect and abuse, and poverty is not always involved (Johnston, 2020). Although the Homeless Equation is

a general guideline to understand how homelessness can happen, a key point emphasized throughout the entire program is that every person who experiences homelessness has their own unique story, and even after dealing with thousands of homeless clients, Perkins and his colleagues were hesitant to generalize when it came to explaining why people experienced homelessness.



(Morton, Dworsky, & Samuels, 2017)

Although Perkins discouraged generalizations about *why* someone is homeless, there are a few key demographics that make a teen or young adult *more likely* to experience homelessness. Some of these factors include not graduating high school or having a GED, poverty, being Hispanic or non-white, being Black or African American, being LGBTQ+, and being a young, unmarried parent. (Morton, Dworsky, & Samuels, 2017). Forty percent of all homeless youth in the U.S. are LGBTQ+ (Allen, 2020). This population of youth in particular are

vulnerable to experiencing homelessness and need extra support. Experts from the Engaging Homelessness panel reported that young adult clients want to fit in more with their peers and are less likely to seek help from a shelter, soup kitchens or other resources. This makes serving youth clients challenging, since many youths face these battles silently and are hesitant to publicly seek help. However, serving this demographic is crucial because their shame of seeking help leads to more dire situations. These insights about youth show that teens and young adults experiencing homelessness need to be directed to resources that are discreet and can offer help without making them feel awkward or ashamed of their circumstances.

Homelessness has become more prevalent since the COVID-19 pandemic began. According to a study by CityLab University, COVID-19 could lead to a forty-five percent increase for homelessness in the U.S. within one year (Schneider, 2020). With the negative health implications of a pandemic on the rise, living on the streets has become more dangerous. In fact, studies show that the age-adjusted mortality rate for homeless New Yorkers is sixty-one percent higher than the general New York population (Schneider, 2020). The pandemic has had severe financial impacts, with many Americans losing their jobs and ability to pay rent or buy food. These impacts have been most prevalent in Black, Latino, Indigenous, and immigrant households, which are already some of the most at-risk groups for experiencing homelessness. All of this added stress caused by the pandemic will likely lead to a rise in homelessness in upcoming years (Center on Budget and Policy Priorities, 2020).

### **Design Process**

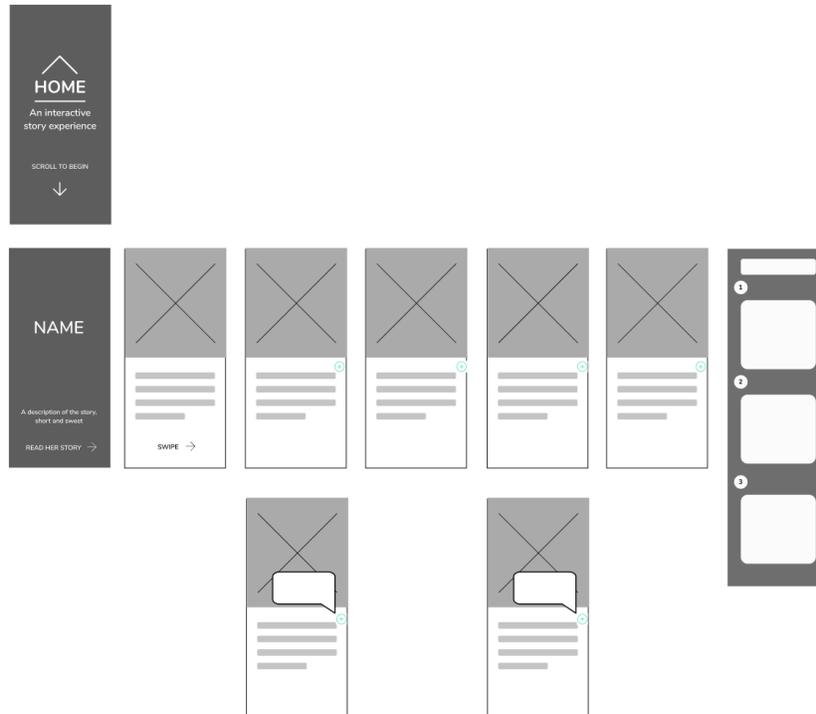
This project was created to use design for social good, combining user experience methods and a mobile app design to confront the issue of youth homelessness. In addition to

research mentioned above, the design part of the project followed a detailed process to bring the project idea to life in Figma, a collaborative design tool.

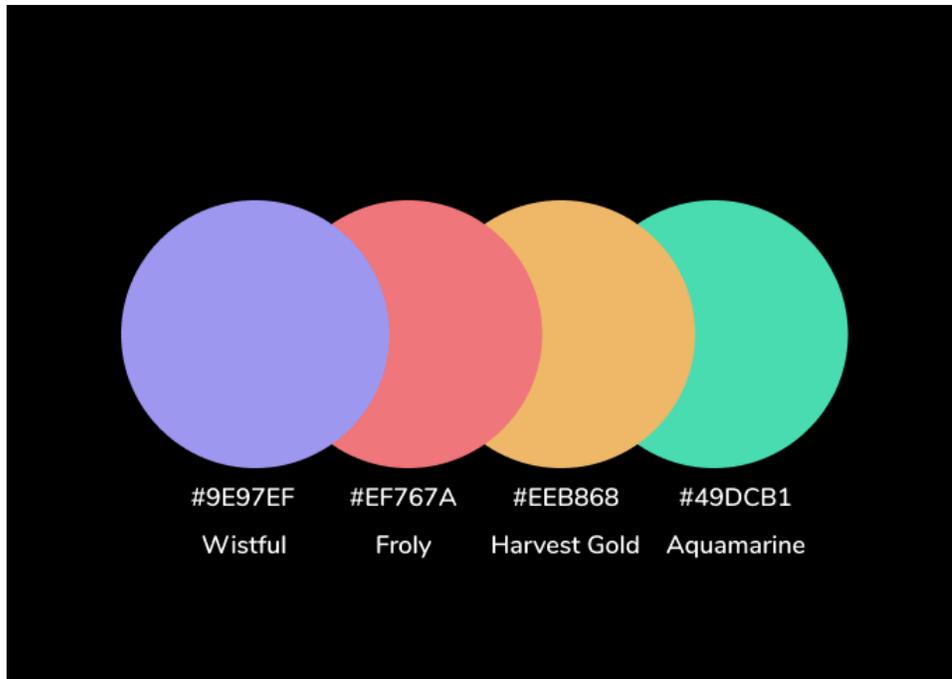
The first step was creating sketches to brainstorm the general layout of the app. The layout was designed to mimic a storybook to draw users into the stories and create change through empathy and self-reflection.



Next, wireframes were created to map out how the design would look in reality on Figma, and plan patterns of interaction such as entering the app, moving through each story page and discovering resources to help with youth homelessness.



A color scheme of mostly black was chosen to keep the focus on the images and story content, with small pops of color used to attract readers' eyes to desired locations at various decision points, like when the user is instructed to choose which story to enter. White text on a black background was used to keep the app in "night mode", making reading easier on the eyes and giving users the feeling of reading a story.



Multiple patterns of interaction were tried and tested. The original method of interaction between stories and story pages was a horizontal swipe, left to right. This was done to mimic reading through a physical book. However, when these interactions were tested with users, they commented that the horizontal swiping reminding them of “swiping left on Tinder.” That negative connotation resulted in changing the interaction to vertical swipes instead of horizontal. The vertical swipe and drag interaction also tested poorly with users because of how far users had to drag the finger from top-to-bottom of the screen. Ultimately a tap was used to navigate from page to page, which tested positively with users and was more intuitive.

The content of each of the three stories was chosen deliberately, to highlight specific elements of youth homelessness that are important for viewers to understand. Story one, Sarah, focuses on parental abuse and the struggles that come along with escaping an abusive environment. This was chosen because parental and family abuse is one of the leading contributing factors of youth homelessness (TMP). Story two, Ian, focused on poverty and

shows how the Homelessness Equation can affect a family when they face a crisis and do not have a support network. This was chosen to emphasize the intense difficulty families with children face when trying to recover from homelessness compared to single adults. Story three, Alex, focuses on a coming out story and rejection of LGBTQ+ youth from their family. Since forty percent of homeless youth are LGBTQ+, it was crucial to share a story showing how a young person can end up homeless and abandoned when their family or support system does not accept their identity. Since men are more likely to be unsheltered than women, two of the three stories follow the lives of young men (Moses & Jansko, 2019). Originally the project scheduled two weeks to create the story content. In reality, four weeks were spent on this portion of the project to ensure that the stories captured reality, shared clear messages and had a strong emotional impact on viewers.

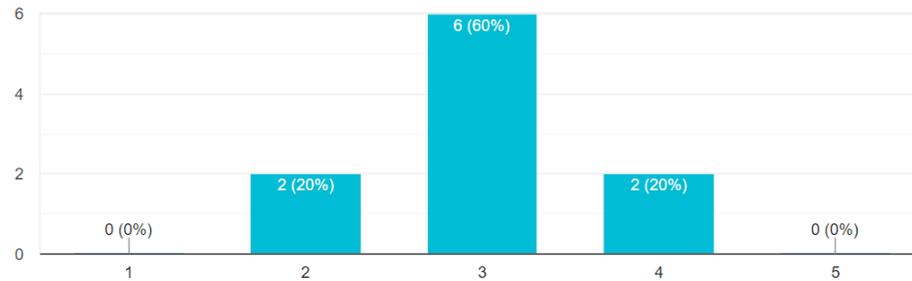
The initial design sketches included extra buttons and pop-up boxes to ask users questions at various points in the stories. As the project developed and the purpose of the app was refined, it became clear that having too many available interactions in the app would draw away attention from the stories, which were meant to be the main focus. To reduce noise and potential distractions for users, as well as to make up for the extra time spent on writing content and finding images for the three stories, unnecessary interactions were removed and the design was kept clean, simple and minimal.

User testing was conducted to test a first version of the app prototype. Ten users tried out the interactive Figma prototype and were given an anonymous Google form to share their experiences and offer constructive criticism and feedback. Sixty percent of users reported lower

levels of knowledge about youth homelessness prior to using the app, and higher levels of knowledge after using the app.

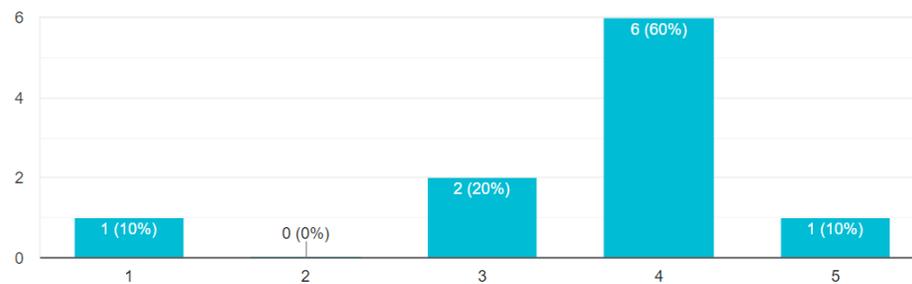
On a scale of 1-5, how much did you know about youth homelessness before using this app?

10 responses



On a scale of 1-5, how much do you feel you know about youth homelessness after using this app?

10 responses



This data showed that the stories effectively accomplished the desired effect of teaching people about youth homelessness and bringing awareness to the issue. Users were given the option to include what they liked best about the app prototype, and what they thought could be improved.

Positive comments included:

- Appreciation of the simplicity and darkness of the design which allowed them to focus on the stories

- Putting a name on the story made it feel more personal and impactful
- Appreciation of the straightforward instructions and simplicity of the navigation

Suggested areas for improvement included:

- Improve quality of images and consistency of characters used between images
- Make the story move automatically to the next page after enough time has passed to read the content
- Differentiate between the “next” and “back” interactions, since they were both the same just in different spots of the screen
- Make the colors brighter so they pop more on screen
- Overall polish and attention to detail such as typos and misalignment

Some users reported difficulty navigating through the stories from page to page due to the size of the screen on their device or occasional non-responsiveness from Figma. However, these problems occurred due to the nature of prototyping software and could only be improved by coding and producing a real app instead of a prototype, so these issues were not fixable within the scope of this project.

Feedback from users about visual design informed the decisions to keep the simple, dark layout, select higher quality images for the stories, and add a color tint to images from each story to make them feel more cohesive and connected. Feedback about navigating through the app informed the decisions to add an automatic timer between story pages and utilize different methods of interaction (taps, drags, scrolls) to differentiate between tasks instead of using the same vertical drag interaction for every task.

## Conclusion

Many people are not aware of unseen homelessness is, yet it affects over four million youth and young adults in the U.S. each year (Morton, Dworsky, & Samuels, 2017). Some youth face homelessness within a family unit and have difficulty maintaining a normal lifestyle while getting access to essential resources, while others face homelessness alone. With the current COVID-19 pandemic affecting the world, the problem of homelessness in the U.S. is likely to become worse before it becomes better (Center on Budget Policy and Priorities, 2020). Before youth homelessness can be solved, our communities need to be made aware that it exists, that it is an issue that deserves to be met with compassion and kindness, and that there are many resources and ways to help individuals experiencing homelessness.

Through design thinking and research, Home teaches viewers about hidden youth homelessness and encourages an empathetic view towards homelessness. Viewers reported higher levels of knowledge about youth homelessness after interacting with Home, and felt personal connections to the stories used in the app. Usability testing and user surveys showed that Home accomplished the target goals of teaching viewers about the seriousness of youth homelessness and promoting empathy and self-reflection.

## Sources

- Allen, S. (2020, October). Engaging Homelessness. Retrieved November 17, 2020, from <https://christchurchirving.com/get-connected/ministries/engaging-homelessness/>
- Baldari, C. (2016, November 02). Family Homelessness: More than Just an Issue of Housing Affordability. Retrieved November 27, 2020, from <https://firstfocus.org/blog/family-homelessness-more-than-just-an-issue-of-housing-affordability>
- Center on Budget and Policy Priorities. Tracking the COVID-19 Recession's Effects on Food, Housing, and Employment Hardships. (2020, November 20). Retrieved November 27, 2020, from <https://www.cbpp.org/research/poverty-and-inequality/tracking-the-covid-19-recessions-effects-on-food-housing-and>
- College student who's homeless for two months. Need some advice. (2018). Retrieved November 17, 2020, from [https://www.reddit.com/r/povertyfinance/comments/9555k3/college\\_student\\_whos\\_homeless\\_for\\_two\\_months\\_need/](https://www.reddit.com/r/povertyfinance/comments/9555k3/college_student_whos_homeless_for_two_months_need/)
- Garnham, J. (2020, January 24). Muddy shoes and difficult questions: How volunteers are counting the number of homeless Texans. Retrieved November 17, 2020, from <https://www.texastribune.org/2020/01/24/how-many-homeless-texans-are-there-2020-volunteers-are-counting/>
- Haskett, M. E., Perlman, S., & Cowan, B. A. (2014). *Supporting Families Experiencing Homelessness Current Practices and Future Directions*. New York, NY: Springer New York.
- Horvath, M. (2020, October). Changing the Story of Homelessness. Retrieved November 17, 2020, from <https://invisiblepeople.tv/>

Johnston, S. (2020, October 20). Personal interview [Personal interview].

The Hub. (2018, February 15). Retrieved November 17, 2020, from

<https://www.ourcalling.org/hub/>

IAMA homeless college student just making it by with the stuff on campus AMA. (2012).

Retrieved November 17, 2020, from

[https://www.reddit.com/r/IAMA/comments/p2cla/iama\\_homeless\\_college\\_student\\_just\\_making\\_it\\_by/](https://www.reddit.com/r/IAMA/comments/p2cla/iama_homeless_college_student_just_making_it_by/)

Lanning, L. (2020, July). *Hidden Homelessness Campaign* [Scholarly project]. In *Behance*.

Retrieved November 17, 2020, from

[https://www.behance.net/gallery/100060679/Hidden-Homelessness-Campaign?tracking\\_source=search\\_projects\\_recommended%7Chomelessness](https://www.behance.net/gallery/100060679/Hidden-Homelessness-Campaign?tracking_source=search_projects_recommended%7Chomelessness)

The Main Place Home Page. (2020). Retrieved November 17, 2020, from

<https://www.themainplaceirving.org/>

Truong, S. V. (2012). "Please Do Not Feed the Homeless:" The Role of Stereotyping and Media

Framing on the Criminalization of Homelessness. *UC Santa Cruz*. ProQuest ID:

Truong\_ucsc\_0036E\_10218. Merritt ID: ark:/13030/m5n29zm1. Retrieved November 27,

2020, from <https://escholarship.org/uc/item/9jv4v5nw>

McKinney-Vento Definition – National Center for Homeless Education. (2020). Retrieved

November 17, 2020, from <https://nche.ed.gov/mckinney-vento-definition/>

Morton, M., Dworsky, A., & Samuels, G. M. (2017, January). *Missed Opportunities: Youth*

*Homelessness in America* [Scholarly project]. In *Voices of Youth Count*. Retrieved

November 17, 2020, from <https://voicesofyouthcount.org/wp-content/uploads/2017/11/VoYC-National-Estimates-Brief-Chapin-Hall-2017.pdf>

Moses, J., & Janosko, J. (2019, September 27). *Demographic Data Project Part II: Gender and Individual Homelessness* [Scholarly project]. In *Endhomelessness.org*. Retrieved November 17, 2020, from <https://endhomelessness.org/wp-content/uploads/2019/09/DDP-Gender-brief-09272019-byline-single-pages.pdf>

National Alliance to End Homelessness. *Children and Families*. (2019, January) Retrieved November 27, 2020 from <https://endhomelessness.org/homelessness-in-america/who-experiences-homelessness/children-and-families/>

National Film Board of Canada. (2015). About: Interactive Haiku. Retrieved November 17, 2020, from [https://www.nfb.ca/interactive/interactive\\_haiku/](https://www.nfb.ca/interactive/interactive_haiku/)

Our History. (2020). Retrieved November 17, 2020, from <https://www.themainplaceirving.org/our-history>

Real stories of youth homelessness. (2020). Retrieved November 17, 2020, from <https://centrepoin.org.uk/youth-homelessness/real-stories>

Roy, N. S., Tomassi, G., & Moussa, R. (2015). Interactive Haiku – NFB and ARTE. Retrieved November 17, 2020, from <http://interactivehaiku.com/>

Schneider, B. (2020, July). CityLab University: Understanding Homelessness in America. Retrieved November 27, 2020, from <https://www.bloomberg.com/news/features/2020-07-06/why-is-homelessness-such-a-problem-in-u-s-cities>

United States Interagency Council on Homelessness. *Homelessness in America: Focus on Families with Children* [Scholarly project]. (2018, September). Retrieved November 17,

2020, from

[https://www.usich.gov/resources/uploads/asset\\_library/Homeslessness in America Families with Children.pdf](https://www.usich.gov/resources/uploads/asset_library/Homeslessness_in_America_Families_with_Children.pdf)