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# The Survey of Attitudes Toward Homeless People: The Validation of a New Instrument Assessing Negative Attitudes Toward Homeless People

Nyssa L. Snow-Hill

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The Survey of Attitudes toward Homeless People: The validation of a new instrument  
assessing negative attitudes toward homeless people

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## **DEDICATION**

I would like to dedicate this dissertation to my family. I know that you all have made sacrifices while supporting me on this journey. To my husband Jeremy, you have always provided me with unwavering support and have been more than willing to put my career first. The belief that you have in me and my success has helped keep me motivated even in those moments of distress. Your constant willingness to follow alongside me has helped turn this process into an adventure.

To my parents, thank you for raising me to be someone who fights for her dreams and for teaching me the value of hard work. Mom, you set an example everyday of perseverance and love. You have continuously supported me through your love, prayers, and nightly phone calls. Dad, I can feel you smiling down on me and know that you would be bragging about this to all of your buddies at work if you were here with us today.

To my sister Tegan, you have always reminded me of how monumental my accomplishment of this dream is. You have exuded pride in my work and perseverance and have reminded me to feel pride in all that I have done.

To my husband's family, you all have welcomed me into your family as if I have always been a part of it. You have encouraged me throughout this process and have been willing to endure sacrifices of time spent with your son as he has faithfully walked this path with me.

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## **ABSTRACT**

Homeless individuals are often the targets of negative stereotypes and significant stigmatization, which can contribute to restrictive and punitive approaches to ending homelessness. Many researchers and policymakers have sought to understand and change attitudes toward the homeless to allow for consideration of a broader range of responses to addressing homelessness. Despite attention paid to understanding attitudes, a lack of reliable and valid measurement creates methodological barriers to assessing people's attitudes and comparing those attitudes across studies and populations.

Attitudes toward homeless persons have been demonstrated to be quite complex, which has likely impeded the development of valid and reliable measurement tools. There is a need to identify those elements of psychological theory that can best represent people's complex attitudes toward homeless individuals. This dissertation proposed a new theoretical framework for understanding attitudes toward homeless people by integrating four theories: stereotype content model, dehumanization, attribution theory, and integrated threat theory. This model was used to inform item development for an assessment tool that reliably measures attitudes toward homeless persons.

This dissertation aimed to develop a valid and reliable measure of cognitive attitudes toward homeless people that clarifies the complexities of attitudes toward the homeless. It was conducted in three studies. Study 1 included a factor analysis of a large dataset ( $n = 899$ ) from community random digit dial surveys to examine the psychometric properties of the most commonly used measure of attitudes toward homelessness, the

Attitudes toward Homelessness Inventory (Kingree & Daves, 1997). Study 2 developed and tested a large item pool based on the constructs proposed in the theoretical framework. The item pool was pilot tested online ( $n = 2105$ ). The best performing items were selected to create the one-factor Survey of Attitudes toward Homeless People (SAHP). In Study 3, confirmatory factor analysis was used to verify the one-factor structure and item fit in a new online sample ( $n = 824$ ). In addition, construct validity and test-retest reliability was examined to establish the SAHP's nomological network and to examine stability. The final 9-item measure demonstrated excellent internal consistency, strong test-retest reliability at 9 months, and strong construct validity (i.e., strong associations with intergroup disgust sensitivity, intergroup anxiety, blame, anger, pity, help, danger, fear, avoidance, segregation, coercion, past contact with homeless individuals, and germ aversion). The new measure offers a more reliable and more theoretically-based assessment of attitudes toward homeless individuals, which may afford greater personalization of interventions targeting public attitude change.



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## **CHAPTER 1: INTRODUCTION**

### **The Survey of Attitudes toward Homeless People**

Homelessness is a major social issue in the United States. On a single night in January 2018, the point in time count conducted by the U.S. Department of Housing and Urban Development (HUD) classified 552,830 people as homeless (The U.S. Department of Housing and Urban Development, 2018), which is likely an undercount. Moreover, a phone survey conducted within one county in the Southeastern United States found that 8% of a representative sample indicated that they had been homeless at some point in their lives (Snow-Hill, Kloos, Chavis, & Byrd, 2015). As a point of comparison, approximately 9% of the United States population has a diagnosis of diabetes (Center for Disease Control and Prevention, 2017). While there have been many efforts working to eliminate homelessness, homelessness is a problem that many people recognize but disagree on how to define and address. Further, homelessness is generally regarded as socially undesirable and is attached to many negative attitudes (Link et al., 1995; Bhui, Shanahan, & Harding, 2006). This difficulty understanding homelessness along with the stigmatizing attitudes and behaviors directed toward homeless individuals impedes progress toward implementing less punitive and more effective interventions to eliminate homelessness.

A significant amount of research has been conducted on understanding attitudes toward stigmatized groups and understanding the effects of stigmatization. Stigmatization can have impacts at the individual level with those oppressed reporting effects on their

psychological well-being (e.g., lower self-esteem, greater depression) and ability to function in social relationships (Wahl, 1999; Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001; Corrigan & Kleinlein, 2005). In addition, stigma also impacts the homeless population at the community and policy level by impacting which policies or services are supported by the public (Henig, 1994). Given the impacts of stigmatization at multiple levels, it is important to identify and understand these negative attitudes so that those attitudes may eventually be changed such that the public may support less punitive and more effective policies and programs to address homelessness.

The extensive research on understanding the stigmatization of other outgroups (i.e., groups of people excluded from or not belonging to one's own group) is helpful for conceptualizing attitudes toward homeless persons. Research on attitudes toward oppressed groups, such as Black Americans, Muslim immigrants, people with physical disabilities, and many other groups (e.g., Stephan et al., 1998; Stephan, Ybarra & Bachman, 1999; Stephan et al., 2002; Vedder, Wenink, & van Geel, 2016; Bustillos & Silvan-Ferrero, 2013) has resulted in a variety of theories focused on understanding attitudes toward outgroups. While some of these theories have been applied to understanding attitudes toward the homeless, other theories have yet to be explicitly applied to the homeless as a social group. It is important to consider theories that have been used to help understand attitudes toward other stigmatized groups, such as with racial and ethnic groups, when attempting to understand attitudes toward homeless individuals. However, many of these theories have been formulated separately from one another and seem to explain only portions of the public's attitudes toward the homeless, often oversimplifying the rationale behind people's negative and complex attitudes.

Researchers have found it difficult to measure and track attitudes toward homeless people across studies and populations (e.g., Aberson & McVean, 2008; Chancellor 2010; Ruggiero, 2015; Tompsett et al., 2006). Measurement of attitudes has been inconsistent across studies, and there is debate whether the tools being used are capturing the information needed to accurately assess attitudes toward homeless people. Appropriate and psychometrically sound measurement based on more comprehensive theory is needed to better communicate across the studies being conducted such that there can be greater success in understanding and changing attitudes that may be affecting the well-being of homeless individuals and the implementation of successful interventions.

The purpose of this dissertation is to review the most widely used measure of attitudes towards homelessness (i.e., Attitudes Toward Homelessness Inventory; Kingree & Daves, 1997) and examine whether a newly developed instrument can improve on how attitudes toward persons who are homeless are measured. This introduction begins with a broad overview of homelessness and why it has remained a significant social issue in the United States. Next, a general overview of attitudes toward stigmatized groups is provided, followed by a review of reported attitudes toward homeless persons and how stereotypes and stigma influence those attitudes. Finally, a review of current and past measures of attitudes toward homeless persons is provided and an overview of psychometric properties for a measure is reviewed.

### **The State of Homelessness**

One of the major difficulties in describing the state of homelessness is that there are a number of ways to define it. Different definitions include or exclude varying types of homelessness. HUD (2011a) defines homelessness using the following definition:



*An individual or family who lacks a fixed, regular, and adequate nighttime residence, meaning:*

- (a) An individual or family with a primary nighttime residence that is a public or private place not designed for or ordinarily used as a regular sleeping accommodation for human beings, including a car, park, abandoned building, bus or train station, airport, or camping ground;*
- (b) An individual or family living in a supervised publicly or privately operated shelter designated to provide temporary living arrangements (including congregate shelters, transitional housing, and hotels and motels paid for by charitable organizations or by federal, state, or local government programs for low-income individuals); or*
- (c) An individual who is exiting an institution where he or she resided for 90 days or less and who resided in an emergency shelter or place not meant for human habitation immediately before entering that institution (HUD, 2011a).*

The problem with this definition is that it leaves out types of homelessness that other definitions include. For example, many homeless families and unaccompanied youth live “doubled up” or “couch surf”; that is, they are temporarily living with others rather than going to a shelter or living on the street (National Center for Homeless Education, 2016). Living doubled up generally does not meet the federal definition of homelessness and as a result, are not included in many counts of homelessness. On the other hand, the Department of Education defines homeless children and youth based on the McKinney-Vento Act, which is a federal law that was passed nearly 15 years ago to help those experiencing homelessness. This law has a broader definition of homelessness and

includes youth living doubled up or couch surfing, which allows for identification of youth at-risk for homelessness.

Because most services are funded and regulated by HUD, most communities utilize the HUD definition of homelessness. Thus, this definition is used in the primary count of homeless persons every year through the Point-in-time (PIT) count, which is a comprehensive one-day count of all sheltered and unsheltered persons across the United States. It serves to provide a snapshot of the current homeless landscape at a specific time. Given the widespread use of this definition in research and public policy, homeless persons will be defined using the HUD definition with the understanding that this results in a narrow definition excluding individuals who may be in a state of or at risk of homelessness.

The most recent PIT count identified 552,830 people experiencing homelessness on a single night in January 2018, which is a 0.16% decline from 2017 (HUD, 2018). Most (65%) were sheltered in emergency shelters, transitional housing programs, or safe havens, while 35% were living unsheltered. About two thirds of people counted as experiencing homelessness were in households without children or households with no adults while 33% of people experiencing homelessness were part of a family. When examining homeless persons by age, 71% were over the age of 24, 20% under the age of 18, and 9% between the ages of 18 and 24. Men comprised 60% of the population, women comprised 39%, and those identifying as transgender or gender non-conforming comprised less than 1%. With regard to race, 49% were White, 40% African American, 22% Hispanic or Latino, 6% multiracial, 3% Native American, 2% Pacific Islander, and 1% Asian. It is important to note that these findings are likely to be an undercount. Many

individuals and families living unsheltered are difficult to include in the count because unlike the census, there is not a specific address to interview people. In addition, as noted above, those living doubled up or are couch surfing are not included in the PIT count.

Although there was a slight decline in the overall number of individuals experiencing homelessness, many communities identify solving homelessness as a major priority. When trying to identify ways to solve homelessness, people make assumptions about the contributing factors. Most people list characteristics of homeless individuals, such as substance use, mental illness, domestic violence, etc. While these indeed can be contributing factors, they cannot cause homelessness by themselves (Shinn, Baumohl, & Hopper, 2001; Shinn, 2009). The most important contributing factor to the state of homelessness is the lack of affordable housing in communities across the United States. By definition, all those who are homeless share this circumstance. Further, the best predictor of the rate of homelessness for a given location is the ratio of available, affordable housing units to the number of persons and families seeking them (Shinn et al., 2001; Shinn, 2009).

The deficit ratio of affordable housing units to number of persons has long been demonstrated through viewing homelessness as a game of musical chairs (McChesney, 1990). In the game of musical chairs, there are a finite number of chairs (affordable housing units) and more people than there are available chairs (housing units). While individual variables may determine who becomes “chairless” (homeless), the fact of the game is that there are simply not enough chairs (affordable homes) for everyone to have. Thus, no matter how the game is structured from the beginning, someone will always be left without a chair (home).

Just by this brief introduction, it is apparent that homelessness is difficult to define and understand. Thus, people often seem to rely on stereotypes for defining and understanding homelessness, which leads to viewing this population as a homogeneous group from an individualistic perspective. While people typically think of a middle-aged, single man who suffers from substance abuse or mental illness when thinking about homelessness (Kuhn & Culhane, 1998), homelessness is much more complex than one prototype (HUD, 2018). However, these stereotypes, along with other stereotypes, provide the building blocks for people's attitudes toward homeless individuals and the issue of homelessness. Thus, the next section will provide a review of a theoretical understanding of the structure of attitudes.

### **The Psychological Study of Attitudes**

At the most basic level, an attitude is an evaluation of an object of thought with some degree of favor or disfavor (Bohner & Dickel, 2011). An object of thought may be anything that someone can hold in their mind, including people, groups, ideas, etc. (Bohner & Dickel, 2011). A distinction should be made between *implicit and explicit attitudes*. Both implicit and explicit attitudes refer to positive and negative feelings towards people or objects. The primary difference between these two constructs is related to conscious awareness of the particular attitude and how the attitude is expressed. Implicit attitudes occur outside of conscious awareness and control while explicit attitudes are conscious beliefs and attitudes (Gawronski & Bodenhausen, 2006). The proposed measure will focus on those attitudes that are considered explicit attitudes.

## **Attitude Structure**

Beyond the basic definition provided above, researchers differ on further conceptualizations of the construct. Some researchers posit that attitudes are stable entities stored in memory (e.g., Fazio, 2007; Petty et al., 2007) while others theorize that attitudes are temporarily constructed based on the information obtained in that moment (Gawronski & Bodenhausen, 2007). This paper will focus on the associative-propositional evaluation (APE) model (Gawronski & Bodenhausen, 2007) given that it seems to best fit people's attitudes toward homeless people.

The APE model views attitudes as being situationally and temporarily constructed. These attitudes are not everlasting but are constructed in a particular situation based on the available information (Schwartz, 2007). The APE model suggests two mental processes that lead to evaluative judgments: associative and propositional processes (Gawronski & Bodenhausen, 2007). Associative processes build the basis for implicit attitudes and can be characterized as automatic affective reactions that occur as a result of the activation of associations when encountering an attitude target. For example, people often experience an automatic affective reaction of disgust when seeing a stereotypical image of a homeless person (Harris & Fiske, 2006). This particular process does not take a lot of cognitive capacity and can occur regardless of whether the person views these affective evaluations as accurate.

The second process that leads to evaluative judgments in the APE model comes from propositional processes, which is related to explicit attitudes. People form evaluative judgments based on logical inferences and will determine whether their affective reaction is consistent with their logical inference (Gawronski & Bodenhausen,

2007). For example, when seeing a stereotypical homeless person, people may form an attitude based on cognitive evaluations related to cleanliness and contamination (Haslam, 2006) and then will determine whether those cognitive evaluations are consistent with their feelings of disgust. Thus, the APE model implies that both affective and cognitive evaluations must be considered for understanding a comprehensive view of attitudes toward homeless people.

The APE model suggests that attitude structure (i.e., affective and cognitive responses) must be considered when identifying ways to measure attitudes toward homeless people. To expand on this view, behavioral evaluations can also be made about stigmatized groups. Thus, attitude evaluations can be identified on three dimensions: cognitively, affectively, and behaviorally (Fiske, 2014).

**Cognitive responses.** Cognitive responses refer to the beliefs people have about the target group. In regards to cognitive attitudes about homeless people, these beliefs are often ingrained in people at an early age and then perpetuated by the media. Examples of cognitive responses toward homeless persons include describing homeless people as lazy, dangerous, dirty, mentally ill, alcoholics, and incompetent. Research has suggested that cognitive mechanisms are necessary to change already existing attitudes (Crano & Prislin, 2006)). However, it is important to understand that cognitive and affective responses exist simultaneously.

**Affective responses.** Affective responses involve more of the emotional response one has in response to a target group. People may possess feelings of admiration or appreciation for the homeless experience and for perceived resiliency, or they may experience feelings of contempt or disgust when imagining or encountering a

stereotypical homeless person. Research has suggested that the affective component of attitude structure has primacy in responses to attitude objects. That is, emotional associations to an attitude object are activated more rapidly than cognitive associations. However, there is agreement that affective mechanisms of attitude change help determine the origins of attitudes while cognitive mechanisms are necessary for changing existing attitudes (Crano & Prislin, 2006).

**Behavioral responses.** Behavioral responses refer to what people say they do, plan to do, or would do if or when they interact with a member of the targeted group or when they are confronted with issues related to the targeted group. For example, people may avoid making eye contact or speaking to a person seeming homeless on the street. In contrast, people may volunteer at local homeless shelters or soup kitchens or may donate to agencies serving individuals experiencing homelessness. Evoking attitude change may be more difficult to elicit based on altering one's behavior alone as strong attitudes have been shown to remain stable irrespective of the behavior exhibited (Crano & Prislin, 2006).

Although Fiske (2014) suggests that these cognitive, affective, and behavioral responses occur on a continuum and can be blurry, considering their distinctness may help provide greater understanding of the complexity of attitudes toward homeless people. Developing a model that specifically identifies distinct cognitive, affective, and behavioral evaluations would also better inform measurement given the basic differences across the three attitude structures. Current measures appear to consequently lump cognitive, affective, and behavioral attitudes into one measure defined as one factor.

However, this seems to be undermining the differences between the structures and may preclude proper measurement of attitudes toward homeless people.

Thus, it would be helpful to develop a model based on these attitude structures followed by ways to measure each of those structures. It is beyond the scope of this paper to develop ways to measure all aspects of attitudes toward homeless people. Therefore, a comprehensive model will be reviewed and the development of a measure focused on cognitive evaluations of homeless people will be established. Given that the ultimate goal of attitude research is to improve negative attitudes toward homeless people, cognitive mechanisms of attitude change are necessary for changing existing attitudes (Crano and Prislin, 2006). Consequently, it seems reasonable to start by assessing and measuring people's cognitive responses to the homeless.

### **Stigmatization**

The APE model suggests the underlying mechanisms, or the automatic negative evaluations, that lead to the stigmatization of outgroups. Goffman (1963) defined stigma as the social judgment and discrimination that most people place on outgroup members who possess marks or attributes considered deviant or immoral. Goffman emphasized that stigma is an “attribute that is deeply discrediting” and that diminishes the holder “from a whole and usual person to a tainted discounted one” (Goffman, 1963, p. 3). Goffman (1963) initially suggested that stigma is the relationship between an attribute and a stereotype.

Corrigan and colleagues (2003) expanded on this conceptualization and suggested that stigma consists of three major components: stereotypes, prejudice, and discrimination. Stereotypes refer to collectively agreed upon opinions that are held about



social groups (e.g., all homeless people are too lazy to find jobs). While stereotypes tend to have a negative connotation, people use stereotypes because they are an efficient way of categorizing information about people and for generating expectations for a person of a particular group (Corrigan et al., 2003). However, stereotypes can often lead to an outgroup homogeneity effect where all members of an outgroup are perceived similarly and as completely different from the ingroup. While they can be efficient, stereotypes do not always accurately reflect the most prominent characteristics of a group and may unfairly portray a group in a negative light. For example, many people stereotype homeless persons as being criminals, which perpetuates the view that homeless peoples are dangerous (Tompsett et al., 2006). However, most homeless persons do not have a criminal record, and if they do, it is typically for nonviolent crimes (Greenberg & Rosenheck, 2008; Metraux & Culhane, 2006). Stereotypes are part of the cognitive component of attitude structure.

People who endorse negative stereotypes may become prejudiced. In other words, they may have castigating emotional reactions attached to these stereotypes, which can be mapped onto the affective component of attitude structure. Many people report feeling disgust when thinking about homeless people (Fiske et al., 2002). When people experience prejudice, they may exhibit behavioral responses toward the stereotyped group referred to as discrimination. Discriminatory behaviors, part of the behavioral component of attitude structure, can include segregation, coercion, withholding help, avoidance, and other hostile behaviors (Corrigan et al., 2003; Hinshaw & Stier, 2008). With regard to those who are homeless, people may support the desire to segregate homeless persons by having the shelter miles outside of the city.

## **Unique characteristics of homelessness**

There are a number of considerations to make when developing theoretically-based measures of attitudes toward homeless people, which seem to be missing from available measures and may explain why previous research on attitudes have been complicated or unclear. While there is a plethora of research examining attitudes toward outgroups (e.g., Corrigan et al., 2003; Harris & Fiske, 2006; Goff, Eberhardt, Williams, & Jackson, 2008; Croucher, 2013; Vedder et al., 2016), many of these theories have been developed to specifically explain negative attitudes toward ethnic and racial groups. Special attention must be paid to applying these theories to the homeless as this group contains unique characteristics compared to other outgroups. One of the primary differences between the homeless and ethnic/racial groups is that group boundaries are permeable between the housed and homeless groups (Aberson & McVean, 2008). Homeless individuals can become domiciled and housed individuals can become homeless. In addition, there are direct efforts by the government to change group membership (i.e., to change homeless membership to housed membership). Thus, there are opportunities to leave this category after gaining membership (Aberson & McVean, 2008).

Past stigma reduction campaigns have hoped to use this permeable group boundary as a way to improve attitudes toward homeless people. Many community organizations attempting to change attitudes toward homelessness often use an education strategy (Corrigan & O'Shaughnessy, 2007) to dispel myths and to demonstrate how easily housed people can become homeless. The hope for these campaigns is to see the similarities across the group and to move feelings of disgust to feelings of pity. However,

this notion can result in a variety of negative thoughts, such as “I’m barely making ends meet too, but you don’t see me on the streets” or “If they worked harder like me, they wouldn’t be homeless”. While the hope may be to elicit pity from seeing the similarities across groups, this ability to move from being a member of the housed group to the homeless group can elicit fear. As a result, people may cast further blame on homeless individuals in order to distinguish themselves from the homeless group to alleviate their fears about their own vulnerability.

Attitudes toward the homeless seem to be similarly unique, such that people tend to evoke both strong positive and negative attitudes. For example, while homeless people are typically attributed negative qualities and evoke negative emotions, people also have strong attitudes supporting aid and housing for the homeless (Lee, Jones, & Lewis, 1990; Link et al., 1995; Toro & McDonell, 1992). People are more likely to want to find some way to help the homeless while still carrying strong negative emotions and beliefs (Arumi, Yarrow, Ott, & Rochkind, 2007). Thus, people may carry negative cognitive and affective evaluations but may engage in some level of positive behavioral evaluations when considering homeless people.

There is also a difference between the consideration of attitudes toward those experiencing homelessness and attitudes toward the issue of homelessness itself. Many other outgroups do not have a similar distinction. Past research and past measures have obscured the difference between people’s attitudes toward homeless individuals (i.e., stereotypes of personal characteristics) and attitudes toward homelessness (i.e., attitudes toward programming for ending homelessness). Shinn (1992) argues that focusing on the individual problems of homeless people is quite different from analyzing the structural

determinants of homelessness, poverty, and loss of affordable housing. An issue might be seen as deserving of attention and resources when considered hypothetically, but an individual might be seen as undeserving based upon personal characteristics they have been attributed. Attitudes about persons will inevitably be different than attitudes about structural determinants and society's role in addressing them. Consequently, measures of attitudes should consider these attitudes separately for more accurate measurement.

### **Review of the current understanding of attitudes toward the homeless and homelessness**

A review of the available research on the content of attitudes toward homeless persons can help inform the development of a comprehensive model by emphasizing those evaluations people often endorse when considering homeless people (e.g., Arumi et al., 2007; Kingree & Daves, 1997; Lee et al., 1990; Link et al., 1995; Tompsett, Toro, Guzicki, Manrique, & Zatakia, 2006). These studies have demonstrated the complexity and variability in people's views of homeless persons and homelessness over time.

Research has found that people will express some positive attitudes towards addressing homelessness as a social issue and endorse a willingness to provide distal help to addressing the issue. People tend to have compassion for addressing the issue of homelessness and believe that it should be a top priority for the government. The majority of people state that they are willing to pay more taxes to go toward addressing homelessness and are in favor of federal intervention and spending for treatments and housing programs (Arumi et al., 2007; Link et al., 1995; Tompsett et al., 2006). This suggests that people have some understanding of the role that society may have in the perpetuation and solution of homelessness. These types of attitudes (i.e., those attitudes

towards the issue of homelessness) seem to represent behavioral evaluations. More specifically, there represent behaviors that people often are willing to engage in with regards to homelessness. However, these behavioral responses occur from a distance with little direct contact with homeless individuals themselves.

While people seem to support societal mechanisms for addressing homelessness, it is common to attribute personal causes or responsibility for an individual's homeless situation. For instance, a large number of people who have been surveyed have suggested that there are jobs available for people who really want to work and that homeless people tend to be lazy (Link et al., 1995). These statements suggest stereotypes, or cognitive evaluations, of blame and laziness and suggest laziness as a cause of homelessness.

People have also endorsed other negative behavioral reactions, such as their desire for separation from homeless individuals. For instance, Link and colleagues (1995) found that the majority of respondents felt that homeless people make neighborhoods worse, spoil parks for families and children, and should not be allowed to panhandle or beg in public places or be allowed to construct temporary shelter in public parks. Beliefs such as these imply that people feel threatened by homeless people being in their proximity and feel that homeless people impede on their way of life, which suggest both cognitive evaluations of threat and behavioral evaluations of separation from having direct contact. This desire for separation is often discussed related to the "Not In My Back Yard" (NIMBY) phenomenon. For example, people may express concern for homeless individuals but campaign against the development of a homeless shelter near their neighborhood (Somerman, 1993).

In addition, the public seems to attach many other stigmatizing labels to homeless individuals, suggesting that the public has a limited understanding of the variability within the homeless population. Some cognitive evaluations that people endorse may actually be an overestimation of the representation in the population. For instance, substance abuse, criminality, and mental illness are frequently associated with homelessness (Arumi et al., 2007; Burt, Aron, Lee, & Valente, 2001; Link et al., 1995; Tompsett et al., 2006). HUD (2011b) found that 26.2% of homeless persons had a serious mental illness diagnosis. In contrast, 66% of 1,002 New Yorkers frequently or almost always thought of serious mental illness when thinking of homelessness (Arumi et al., 2007).

Substance abuse and criminality are two other characteristics that are frequently associated with homeless individuals (Link et al., 1995). Arumi and colleagues (2007) found that 95% of community members endorsed drug and alcohol abuse as being a causal factor in homeless episodes, and 67% of respondents frequently or almost always thought of alcoholics and drug addicts when thinking of homelessness. However, according to HUD (2011a), only 34% of the homeless population has chronic substance use problems.

Similarly, Link and colleagues (1995) found that the average respondent estimated that 45% of homeless persons have a criminal record, and about 27% believed that homeless people are likely to commit violent crimes. Tompsett and colleagues (2006) found that 43% of respondents endorsed criminality as a personal characteristic of homeless people. Inmates who reported having a homeless episode in the past year make up approximately 15.3% of current jail inmates. Compared to other inmates, homeless

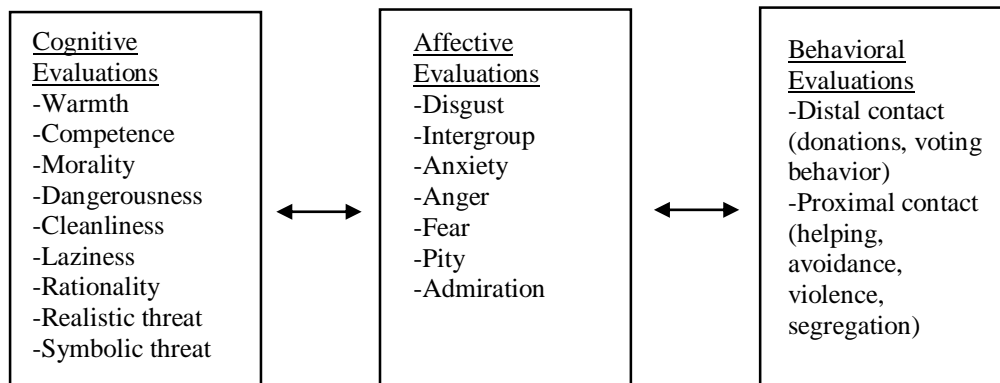
inmates were more likely to currently be incarcerated for property crimes and less likely to be currently incarcerated for a violent crime (Greenberg & Rosenheck, 2008).

According to a study examining 7,022 persons staying in public shelters in New York City, only 23.1% were found to have a history of incarceration within the previous two years (Metraux & Culhane, 2006). The actual statistics on substance abuse and criminality demonstrate that the public overestimates the extent to which homelessness is associated with substance abuse and criminality, similar to the public's overestimation of the association between homelessness and mental illness. These characteristics also tend to be considered quite stigmatizing conditions. Consequently, they likely contribute to the stigmatization that homeless individuals experience (Snow & Reeb, 2013).

Shinn (1992) argued that only examining homeless individuals through "within person" factors prevents a sufficient understanding of the causes of homeless episodes. This narrow view perpetuates stereotyped cognitive representations of homeless people and the demeaning treatment they receive. Attitudinal responses to homeless people are significantly impacted by stereotyped cognitive evaluations and thus, should be systematically measured. Past research gives insight into the cognitive and behavioral evaluations that people are making when they consider homeless persons, and these evaluations should be considered for a comprehensive model of such attitudes. In addition, past research suggests specific domains within the attitudinal structure, discussed in more depth below, which could be used for item development for a measure examining cognitive evaluations toward homeless persons.

## Theoretical links to attitudes toward homeless persons

As described above, people's attitudes toward homeless persons are complex and can be contradictory at times. Developing a comprehensive model based on theory and past research is important when creating a theoretically and psychometrically sound measure of attitudes toward homeless people. When examining current theoretical models that seek to understand attitudes toward outgroups, there is a need to integrate models to provide a more comprehensive understanding of attitudes toward homeless persons. The following model is proposed to provide a guiding framework for the development of a measure of attitudes of homeless persons. This model represents a potential attitudinal structure of attitudes toward individuals experiencing homelessness (see Figure 1.1).



*Figure 1.1.* Proposed model for attitudes toward homeless persons.

This model is the product of integrating several theories that have been created to explain attitudes toward outgroups. This model primarily draws upon the following theories and models: (a) stereotype content model (Fiske, Cuddy, Glick, & Xu, 2002), (b) dehumanization (Haslam, 2006), (c) attribution theory (Weiner, 1980), and (d) integrated threat theory (Stephan & Stephan, 1996; 2000). The proposed framework highlights the three attitude structures: cognitive, affective, and behavioral. It suggests an interaction



between the three attitude structures and uses the foci of the identified theories to operationalize each of those structures. To better understand the development of the model, a review of the relevant theories will be presented. While all levels of the attitude structure will be discussed, special attention will be paid to the cognitive evaluations since this dissertation focuses on developing a measure of that specific portion of the model.

**Stereotype Content Model.** The stereotype content model has provided significant evidence of the types of cognitive and affective evaluations that people experience when thinking of a prototypical homeless person (Fiske et al., 2002). The stereotype content model focuses on identifying stereotyping processes through understanding how stereotype content responds to systematic principles. They proposed that different groups elicit different types of stereotypes, suggesting that content of stereotypes vary across groups. The authors argued that stereotypes are captured by two dimensions: warmth and competence. The model led to the identification of four categories of groups, which demonstrate how the dimensions of warmth and competence combine to influence perceptions of status and competition and how they correspond with various forms of prejudice.

For those who are viewed as high in warmth and high in competence, they are often viewed with admiration and pride, as having high status, and as not being competitive (e.g., ingroup, close allies). Those viewed as high in warmth but low in competence are viewed as having low status and not being competitive and elicit pity, sympathy, and a paternalistic prejudice (e.g., elderly people, disabled people, housewives). Those viewed as low in warmth but high in competence are viewed as

having high status and being competitive and elicit feelings of envy and jealousy (e.g., Asians, Jews, rich people, feminists). Lastly, those who are viewed as low in warmth and low in competence are viewed as having low status but competitive and elicit feelings of contempt, disgust, anger, and resentment (e.g., homeless, welfare recipients).

Stereotype content model is one of the few models that have been explicitly applied to understanding attitudes toward homelessness. Fiske and colleagues (2002) found that homeless people were rated lowest in the low warmth, low competence category compared to all other social groups. In fact, the homeless as a group were rated two standard deviations away from the disgust cluster, making the homeless the most stigmatized group in this model. Harris and Fiske (2006) expanded on understanding the accompanying emotions of the low, low quadrant through brain imaging. Harris and Fiske (2006) showed participants pictures of stereotypical homeless individuals and other representatives of the four quadrants while in an fMRI. The researchers found that there was significant medial prefrontal cortex (mPFC) activity when participants reported feeling pride, envy, and pity while being shown pictures from the other three quadrants. mPFC is an index of social cognition that activates whenever people are thinking about a person (e.g., Amodio & Frith, 2006). When participants were shown pictures of social groups from the low warmth/low competence quadrant (e.g., homeless individuals), they self-reported greater disgust, and there was no significant activation of the mPFC. However, there was significant activation in the left insula and right amygdala, which was similar to the neural pattern found when participants reported disgust when viewing pictures of objects such as vomit. The authors suggested that people may not view

members in extreme outgroups (low warmth/low competence quadrant) as completely human, highlighting a possible dehumanization process.

Stereotype content model has demonstrated through a number of other studies the implications of how stereotype content can impact people's prejudice and discriminatory behavior (e.g., Cikara, Farnsworth, Harris, & Fiske, 2010; Fiske, Cuddy, & Glick, 2007; Harris & Fiske, 2006; Harris & Fiske, 2007; Harris & Fiske, 2011). This model suggests that a measure of cognitive evaluations would need to include items representing the constructs of warmth and competence. In addition, this model implicates disgust (an affective evaluation) as a major component of people's attitudes toward the homeless. Thus, it would be expected that a measure of cognitive evaluations toward homelessness would be related to a measure of disgust or one's sensitivity to the emotion of disgust. The research supporting the stereotype content model has provided the most alarming descriptions of how intense people's negative attitudes can be and has highlighted the possibility of people engaging in the process of dehumanization.

**Dehumanization.** As highlighted by the stereotype content model, homeless persons seem to not only be stigmatized but also dehumanized. The study of dehumanization has identified several cognitive evaluations that are typically associated with punitive and harsh behavioral responses to members of the dehumanized group. Dehumanization can be defined as the "act of perceiving or treating people as if they are less than fully human" (Haslam & Stratemeyer, 2016). Dehumanization has become a major focus in research over the last 17 years. In order to understand dehumanization, there must be an understanding of the two senses of humanness: uniquely human characteristics and characteristics of human nature. Uniquely human characteristics are

those traits that are unique to being human. However, human nature refers to those features that may not be unique to humans but may be typical or a core characteristic of humans (Haslam, 2006). Haslam (2006) argued that uniquely human characteristics and human nature are distinct sense of humanness and that dehumanization occurs when the characteristics that comprise these senses are denied to others.

Haslam (2006) proposed civility, refinement, moral sensibility, rationality, logic, and maturity as characteristics of human uniqueness. In addition, he proposed emotional responsiveness, interpersonal warmth, cognitive openness, agency, individuality, and depth as characteristics of human nature. Given the two distinct senses of humanness, Haslam (2006) also proposed two distinct forms of dehumanization. If a person is denied human uniqueness, they should be perceived as uncultured, coarse, amoral, impulsive, irrational, and unintelligent. Given that people perceive these individuals as lacking unique human characteristics, they will be viewed as animal-like and as a result, experience animalistic dehumanization. If a person is denied characteristics of human nature, they will be perceived as inert, cold, rigid, interchangeable, passive, and superficial. This perception is described as mechanistic dehumanization because the view of others is that of an object or robot.

Those who are denied uniquely human traits often become objects of disgust, revulsion, and contempt. These individuals are typically viewed downward, as sub-humans. On the contrary, those denied characteristics of human nature are likely to face indifference and are seen as lacking autonomous agency. These individuals are judged horizontally rather than downwardly. They are more likely to be viewed as foreign or alien. Given the stereotype content identified by Harris and Fiske (2006) and surveys of

attitudes toward homeless individuals described above, it appears that animalistic dehumanization is most applicable when discussing stigmatizing views of homeless people, although this has not explicitly been examined.

While there has been a significant amount of research that has examined dehumanization, few studies have understood the principles of dehumanization of the homeless. A couple of studies have qualitatively captured homeless individuals feeling as if they are dehumanized (Bierderman & Nichols, 2014; Georgiades, 2015). Toolis & Hammack (2015) interviewed housed individuals who reported wanting distinct separation from the homeless due to fear for safety and threats to economic vitality, and provided these responses to justify criminalizing homelessness. However, this study demonstrated the complexity of people's attitudes toward homelessness as they also felt that this narrative would perpetuate the dehumanization of homelessness. In contrast, Harris and Fiske (2006) provided support for the dehumanization of homelessness by identifying the lack of activation of those typical neural patterns that people have when seeing other humans.

Further, dehumanization has been connected with harm and a lack of helping (Haslam & Loughnan, 2014). While the link between dehumanization, helping/harm, and homelessness has not been explicitly examined, it is reasonable to propose that people may exhibit similar behaviors when encountering homeless individuals. Research with other groups has demonstrated beliefs in harsher punishment and support for unjust treatment as well as decreases in willingness to help when the perceivers view the targets in dehumanizing ways (Fincher & Tetlock, 2016). Studies examining attitudes towards homelessness have demonstrated that people desire social distance from homeless

individuals; however, they are willing to provide support from a distal level, such as through paying more taxes to address homelessness.

The theory of dehumanization suggests the need to include items related to the cognitive evaluations of animalistic dehumanization (e.g., morality, dangerousness, cleanliness, laziness, and rationality) in a cognitive measure of attitudes toward homeless persons. Dehumanization also suggests that a cognitive measure should be related to behavioral evaluations of animalistic dehumanization (e.g., avoidance, segregation, support for harsher punishment/coercion) when considering attitudes toward homeless persons.

**Attribution Theory.** Attribution theory is another theory that has been developed to understand the relationship between people's stereotypes and emotional reactions to outgroups. Attribution theory attempts to understand the relationship between human motivation/emotion and the desire to identify causes of life events (Weiner, 1980). The most common questions included in research examining attitudes toward homeless persons ask about the causes of homeless episodes. This theory suggests that a person bases his or her decision about the reasons for an outcome on perceptions of locus of control, stability of the cause, and the controllability of the cause in order to understand the reasons for an outcome (Weiner, 1980). If the condition is viewed as being under one's control or being one's responsibility, then the evaluator may be more likely to respond with anger and little pity, and may even believe that the person should be punished or ignored. On the other hand, if the evaluator views one's condition as being outside of one's control, then the evaluator may be more likely to respond with pity and be more likely to offer help (Weiner, 1986).

This theory has been applied to a variety of stigmatized groups including those with mental illness, those who identify as LGBT, and those with physical disabilities. For example, Corrigan and colleagues (2003) found that when people viewed the cause of a person's mental illness as controllable, they responded with feelings of anger and fear. Feelings of anger and fear were associated with a desire for social distance and support for coercive treatment. If people perceived the cause of mental illness as uncontrollable, then they were more likely to respond with pity and to support more helpful behavioral responses.

Attribution theory has provided the field with the basic understanding of how victim blaming, or blaming individuals for their predicaments, can impact people's attitudes, emotions, and behavioral responses. Few studies have specifically applied attribution theory to the social issue of homelessness (e.g, Snow & Reeb, 2013). However, many of the studies examining attitudes toward homeless persons have examined the perception of blame. As discussed above, much of that research has shown that the public tends to perceive personal characteristics as causes for a homeless person's situation. For instance, people may believe that homeless people are lazy and just need to go get a job. Thus, personal attributions related to blame, such as being lazy, incompetent, or irrational, as well as dangerousness, signify cognitive evaluations needing to be represented in a measure focused on those cognitive evaluations. Given the connections that attribution theory makes between cognitive, affective, and behavioral evaluations, a measure of cognitive evaluations of homeless persons should be related to affective evaluations, such as anger, pity, and fear, and behavioral evaluations, such as avoidance, segregation, coercion, and willingness to help.

**Integrated Threat Theory.** Integrated threat occurs when one group's action, beliefs, or characteristics challenge the well-being of another group. That is, the ingroup finds the outgroup threatening in some way. The public often views homeless people as threatening in a variety of ways, such as threatening their safety and ability to enjoy parks as well as taking federal dollars that could be used to benefit them. Integrated threat theory was developed by integrating and expanding two previous theories: realistic group conflict theory and symbolic threat (Stephan & Stephan, 1996; 2000). Building upon literature that suggests that realistic and symbolic threat account for unique portions of variance in attitudes toward outgroups (McLaren, 2001; Wilson, 2001), Stephan and Stephan (1996, 2000) proposed four major types of threats: realistic threat, symbolic threat, intergroup anxiety, and negative stereotypes.

*Realistic group conflict theory.* One of the earliest theories that considered intergroup threat was the realistic group conflict theory, which proposed that when two groups are in competition for scarce resources, the potential success of one group threatens the well-being of the other, resulting in negative group attitudes (Sherif & Sherif, 1969). The resources may be tangible (e.g., money) or may involve issues of power or control (e.g., political power). This theory also proposes that members may still perceive an outgroup as threatening even though self-interest is not directly impacted.

Much of the research examining how resource threat impacts intergroup conflict has examined attitudes toward racial and ethnic groups. Brief and colleagues (2005) found that when white participants perceived black people in their community as taking all of the available economic resources, they were more likely to respond negatively to having diverse workplaces. In addition, Zarate and colleagues (2004) found that when



participants viewed Mexican immigrants as a threat to economic well-being, they responded with more prejudice toward Mexican immigrants.

While realistic threat has not been explicitly applied to homeless people, the stereotypes that people seem to rely on suggest that people view the homeless as a threat to their tangible resources. For example, people tend to assume that homeless individuals are abusing the system and taking federal money when they could be working. This view implies unfairly using tax payer dollars that could be utilized to benefit something for housed individuals.

Realistic group conflict theory has made a tremendous impact in understanding how the threat of resources can influence bias and stigma. However, researchers argued that this does not capture all components that may create conflict and perceptions of threat, particularly when there is an absence of conflict over resources. Thus, the idea of symbolic threat was created.

*Symbolic threat.* The concept of symbolic threat addresses instances of intergroup bias that occur in the absence of conflict over resources. Bias, such as racism, is said to result from conflicting values and beliefs rather than from competition or conflicting goals (Kinder & Sears, 1981; McConahay, 1982). Threats to values have been shown to influence attitudes toward social policies aimed at helping minorities (Sawires & Peacock, 2000). For example, White Americans may believe that affirmative action programs will threaten the value of equity. Given that many White Americans do not believe that prejudice and discrimination are still prevalent, they are likely to see affirmative action programs as violating the value of equity by giving Black Americans an unfair advantage (Riek, Mania, & Gaertner, 2006).

Similar to realistic threat, symbolic threat has not been applied to attitudes toward individuals experiencing homelessness. However, attitude studies have identified common statements that could be viewed as symbolic threat. For example, people commonly report negative attitudes toward panhandling and seeing homeless people on the streets. People may be indirectly noting violations to their values related to enjoying their day without being confronted with poverty, which interferes with that enjoyment. Considering that living on the streets forces a person experiencing homelessness to live out their difficulties in the public domain, homelessness symbolizes all that is wrong within society (Hopper, 2003). Whether their view is that there is something wrong with a society that allows homelessness to occur or whether their view is that there is something wrong with the individuals who are homeless, it forces people to be confronted with contradictions to their own values.

Originally, the theories of realistic and symbolic threat were in direct conflict with each other. However, the field was challenged to think of these threats as complementary rather than completely independent. As a result, the integrated threat theory was proposed.

*Integrated Threat Theory.* The integrated threat theory was proposed by Stephan and Stephan (1996, 2000) upon understanding that both symbolic threat and realistic threat contribute to negative outgroup attitudes. In addition to realistic and symbolic threat, Stephan and Stephan (1996, 2000) proposed intergroup anxiety and negative stereotypes as other sources of threat. In this integrated threat theory, realistic and symbolic threats are understood similarly to what have been described above. Intergroup anxiety (an affective evaluation) refers to the feelings of uneasiness in the presence of

members of an outgroup because of the one's uncertainty of how to behave or interact with outgroup members. These interactions then become threatening as a result. Negative stereotypes generate threat by creating negative expectations about the behavior of outgroup members.

As with many of the other theories discussed, integrated threat theory has not been explicitly applied to homelessness. However, common stereotypes that have been noted throughout this paper suggest that the public has concerns regarding realistic and symbolic threat, highlighting the need to have items representing realistic and symbolic on a measure of cognitive evaluations of homeless persons. People may be concerned that dedicating more resources to homelessness may take resources away from their own ingroup. This may also be related to the misinformed belief that people who are poor or homeless are abusing the system. In addition, comments related to homeless people ruining parks and public spaces may indicate threats to people's values regarding daily living. In addition, homelessness as a social issue violates the norm and value that if one works hard, you may succeed. Homelessness may represent that sometimes hard work does not equate to success, which may cause fear. Integrated threat theory also emphasizes that a measure of cognitive evaluations of homeless persons should be related to a person's level of intergroup anxiety (an affective evaluation).

**Proposed model of attitudes toward homeless persons.** Following the attitude structure discussed above (i.e., cognitive, affective, and behavioral evaluations), it seems necessary to integrate the theories that have been described (i.e., stereotype content model, dehumanization, attribution theory, and integrated threat theory) by understanding how their theoretical contributions inform the attitudinal structure toward individuals

experiencing homelessness (see Figure 1.1). Previous theory suggests a number of cognitive evaluations that may be impacting attitudes toward homeless individuals. Those that seem to be most relevant based on past attitude studies include cognitive evaluations regarding warmth, competence, morality, dangerousness, cleanliness, laziness, rationality, realistic threat, and symbolic threat. These cognitive evaluations may be affected by and influence affective evaluations. Most notably, the affective evaluations of disgust, intergroup anxiety, anger, fear, pity, and admiration seem most prevalent when reacting to homeless people. Lastly, cognitive and affective evaluations may be affected by and affect behavioral evaluations. This can be broken into distal contact (i.e., donating, voting behavior) and proximal contact (helping, avoidance, segregation, violence).

It is important to note that one measure cannot possibly capture all aspects of attitudes toward individuals experiencing homelessness. Similarly, one measure cannot capture all aspects of an integrated model. As a first step, this dissertation will create a new measure focused on assessing cognitive attitudes toward homeless persons. While it is important to understand each of the components discussed, it would be more practical to create several measures that capture each type of attitudinal evaluation in order to allow for measures that are more feasible to use. Since the hope is that a new measure would be used to assess and track attitudes, the first measure should focus on the types of attitudes that researchers appear to be tracking. Researchers seem to frequently be interested in the cognitive evaluations of homeless persons. Many attitude change interventions examine whether or not their intervention has led to changes in their cognitive evaluations of homeless individuals, which emphasizes the necessity of having

a valid and reliable measure of such interventions. The decision to start with a measure of cognitive evaluations is supported by past research suggesting that cognitive mechanisms are necessary of changing existing attitudes (Crano & Prislin, 2006). Thus, items for this new measure should reflect the types of cognitive evaluations suggested in this purposed model: warmth, competence, morality, dangerousness, cleanliness, laziness, rationality, realistic threat, and symbolic threat.

### **Current and Past Measures of Attitudes Toward Homeless Persons**

Most research on attitudes toward homeless persons and the social issue of homelessness can be broken into three categories: (a) research taking an inventory of people's beliefs about homelessness and homeless persons; (b) research examining archival data of public opinion; and (c) research examining change in attitudes following some manipulation or intervention. Much of the research that takes inventory or measures change in attitudes utilizes some sort of self-report measure examining attitudes toward homeless persons. While there have been several studies that have examined people's attitudes toward homeless persons, there has not been consistency in how attitudes are measured. There is a need to develop theoretically and psychometrically sound measurement in order to improve consistency across studies.

### **Individualized Inventories and Archival Data**

Many researchers who have utilized an individualized inventory of attitudes toward homelessness and homeless persons have not been consistent with the questions asked to participants across studies, and sometimes the responses come from archival data (Link et al., 1995; Tompsett et al., 2006; Toro & McDonnell, 1992). While each of these studies formed subscales, and some completed factor analyses, the subscales are not

consistent across studies and the scales formed have not been utilized in studies outside of the study in which the measure was created.

Toro and McDonell (1992) completed an inventory that was, at the time, a methodological improvement from past surveys. They utilized a more extensive survey that was developed through piloting and interviewer training. This inventory was composed of items from the MG/AP poll, an existing national survey, with items assessing policy-related beliefs about homelessness, items examining agreements about the causes and solutions of homelessness and the life-styles of homeless persons, items assessing knowledge regarding the characteristics of homeless people, and items assessing the respondent's demographic background. The final product was a 77-item self-report survey that took about 15 to 20 minutes to complete. However, the authors noted having a high refusal rate and hypothesized that it may be helpful to cut the number of items for such a measure, suggesting the need for a briefer measure. They also suggested that there needs to be consistency in the items asked across studies so that temporal shifts in public opinion can be assessed.

Unfortunately, the suggestion to consistently use the same items across studies has infrequently occurred. In another commonly cited study, Link and colleagues (1995) used archival data and their own inventory of items to provide a more complete characterization of the American public's compassion for homeless people. The archival data was collected from the American Public Opinion data and from the data bank of the Roper Center. In addition, they developed items to assess the following factors: willingness to help, supports of federal efforts, donation, emotional responsiveness, lack of empathy for the situation of homeless people, deviant attributes, dangerous and

undesirable characteristics, and restrictions placed on homeless people. Link and colleagues (1995) did find mostly moderate reliability indicators, with most factors reporting an alpha in the .7 range. While important information regarding attitudes toward homeless persons was gained from this study, it is difficult to compare the findings from this study to past studies given the inconsistency in measurement.

Similarly, another large scale public opinion study (Arumi et al., 2007) also created their own inventory of opinions and attitudes to examine New Yorkers' attitudes and beliefs about homelessness and homeless people and their implications for public action. This inventory was developed by Public Agenda through the use of five focus groups, which allowed for a qualitative exploration of people's attitudes toward a complex issue and population. From these focus groups, 93 items were developed. Factors were not developed for this inventory and reliability information was not provided. Once again, important information was gained from this study, but it is difficult to make direct comparisons to other public opinion studies.

Understanding the need to provide some consistency across public opinion studies, Tompsett and colleagues (2006) conducted a study in which they utilized an instrument that was adapted from those used in Toro & McDonell (1992) and Link and colleagues (1995). Factor analyses reduced the 69 items to eight factors: general compassion, limit public rights, trustworthy, social isolation, street people, housing/services needed, economic factors as cause, and personal factors as cause. This allowed for three of the resulting factors to be directly comparable to those found in Toro & McDonell (1992). However, this survey, like the other inventories discussed, confuses the public's attitudes toward people experiencing homelessness and toward the issue of

homelessness. In addition, this survey does not appear to have been utilized in any future public opinion studies or with studies utilizing stigma reduction interventions.

As noted, these individualized inventories have provided information regarding people's attitudes toward homeless persons and homelessness at several time points. Due to their length, they have been able to capture the public's attitudes toward homeless persons as well as their attitudes toward solving the issue of homelessness. As demonstrated in these inventories, it would take a large survey, and likely even larger than these inventories, to capture attitudes toward both homeless people and the issue of homelessness. However, lengthy measures are not feasible to administer in studies utilizing stigma reduction interventions. Many of these other studies have utilized one of the briefer measurements that have been developed.

### **ATHI and ATHQ**

Other studies (e.g., Asiamah, 2015; Reeb & Snow, 2013; Wisehart, Whatley, & Briihl, 2013), particularly those studies that have examined changes in attitudes, have used one of two measures: 1) the Attitudes toward Homelessness Inventory (ATHI); and 2) the Attitudes Towards the Homeless Questionnaire (ATHQ). These two measures have been the only brief measures available for people to utilize in studies examining changes in attitudes toward homelessness. While the measures based on archival data and individualized inventories developed in the studies described above may or may not be more reliable and thorough measures, they are too long for many studies examining changes in attitudes. Thus, attitude change researchers have resorted to utilizing the ATHI or the ATHQ. Although these measures do not have strong psychometric



properties, as described below, they do provide more consistent measurement across attitude change studies.

**Attitudes toward Homelessness Inventory.** The Attitudes toward Homelessness Inventory (ATHI) was developed by Kingree and Daves (1997) due to a lack of psychometrically-sound instruments to measure the nature and change in attitudes toward homelessness. This is currently seen as the best available tool for measuring and detecting changes in attitudes toward homelessness. They intended to create a measure that would capture multiple attitudinal dimensions with a small number of items.

Through four development and validation studies, Kingree and Daves (1997) developed a short, 11-item, 6-point Likert-type measure. The ATHI is comprised of four subscales: personal characteristics, societal causes, affiliation, and solvable problem. All scores can also be combined to provide a total score of attitudes toward homelessness. The personal characteristics subscale, which includes 3 items, assesses how likely one believes personal characteristics are responsible for someone's homeless situation. The societal causes subscale, 3 items, examines the belief that homelessness has societal causes. The affiliation subscale, 2 items, assesses the extent to which a person is willing to affiliate with a homeless person. Lastly, the solvable problem subscale, 3 items, measures the extent to which a person believes that homelessness is a solvable problem.

The ATHI was created by identifying items based on the available literature, a common method for developing measures. Kingree and Daves (1997) stated that the literature suggested four categories of attitudes, the subscales described above. As a result, 27 items were developed. Those items were administered to a group of participants, and confirmatory factor analysis and reliability analyses were used to create

the 11-item, four-dimensional instrument most commonly used today. Kingree and Daves (1997) additionally demonstrated the factor structure and construct validity in two separate studies and demonstrated predictive validity in a fourth study by showing that the ATHI can be used to measure change in attitudes.

Kingree and Daves (1997) reported the internal consistency to be .71 for the total scale, .73 for the societal causes subscale, .72 for the personal characteristics subscale, .65 for the affiliation subscale, and .60 for the solvable problem subscale. While this measure appears to be the most common and most psychometrically sound measure used to detect changes in attitudes toward homelessness, it seems that there is significant variability with how the measure is used and with the reliability coefficients for the measure and subscales. Several studies had to remove items due to low internal consistency. For instance, Ruggerio (2015) removed the item “I would feel comfortable eating a meal with a homeless person”, and Chancellor (2010) removed the item “Most homeless persons are substance abusers” because they were lowering internal reliability. Other researchers have added items to the 11-item measure or only used select subscales or items. Aberson & McVean (2008) used only the personal characteristics and societal causes subscales and subtracted the societal causes from personal characteristics to create a personal attribution score. Reliability based on the difference scores ranged between .64 and .77 depending on the sample. Moran (2015) included 9 other items and Farmer (2015) included 7 other items from the original 27 item scale under the belief that the 11-item version was not sufficient for understanding attitudes toward homelessness. Baumgartner, Bauer, and Bui (2012) only utilized the total score ( $\alpha = .62$ ) while

Chancellor (2010) only utilized the subscales due to an extremely low reliability coefficient for the total score ( $\alpha = .39$ ).

While a few studies have demonstrated moderate internal consistency for this measure similar to those coefficients reported by Kingree and Daves (1997), many other studies have found low internal consistency with the total score and subscale scores. Reliability coefficients for total scores fall between .39 and .74 (Baumgartner et al., 2012; Chancellor, 2010; Moran, 2015; Ruggerio, 2014, 2015; Asiamah, 2014, Kloos & Snow-Hill, forthcoming). There is also significant variability in the internal consistency of the subscales. The ranges for each subscale is as follows: .42 and .69 for personal characteristics, .53 and .88 for societal causes, .20 and .70 for affiliation, and .38 and .75 for solvable problems (Chancellor, 2010; Moran, 2015; Asiamah, 2014; Kloos & Snow-Hill, forthcoming).

There could be a variety of reasons that could account for low internal consistency. While Kingree and Daves (1997) sought to develop a short measure in order to increase completion of the survey and decrease test taker fatigue, it is likely that the variability in reliability coefficients is a result of the low number of items, particularly for the subscales. For example, the affiliation subscale only contains two items. Thus, the reliability coefficient for that subscale is solely based on one correlation. The other three subscales are only composed of three items.

In addition, the items may be outdated and may not reflect the significant amount of research that has been conducted over the last 20 years since the ATHI was developed. Careful review of the items and their respective factors must be considered. Within the personal characteristics subscale, the items “Most homeless persons are substance

abusers” and “Homeless people had parents who took little interest in them as children” may be measuring different types of blame. Furthermore, the item regarding substance use does not necessarily state that substance use is responsible for their homeless condition; the item is uncovering whether or not this is a characteristic of homeless people. Within the affiliation subscale, the two items that make up this subscale include very different levels of affiliation. “I would feel comfortable eating a meal with a homeless person” involves much more contact than just meeting someone as in this item, “I feel uneasy when I meet homeless people.”

Further, the ATHI may not capture all of the complexities of homelessness given the brevity of the measure and the focus on only four attitudes. As described above, people report very complex and complicated views of homelessness and homeless persons. Given such complexity, a measure based on a more comprehensive model may be necessary. Based on the use of the ATHI, it is evident that researchers desire a brief measure that can be used to quickly assess and track attitudes. The ATHI was developed to fit a four factor model, not a one factor model. However, researchers seem to desire to use a total score for their analyses. Thus, it may be beneficial to develop a measure that is comprehensive in nature but designed to be a one factor measure.

Despite its name, the ATHI is partially measuring attitudes toward the issue of homelessness and partially measuring attitudes toward homeless people. Most of the personal characteristic and affiliation items are measuring attitudes toward the homeless while the societal causation and solutions items are measuring attitudes toward homelessness. Further, the individual level subscales capture very few of the cognitive evaluations proposed in this paper.

**Attitudes Towards the Homeless Questionnaire (ATHQ).** A less commonly used measure is the Attitudes Towards the Homeless Questionnaire (ATHQ), which was developed by Lester and Pattison (2000) to assess attitudes toward homeless persons in the United Kingdom, specifically targeting health professionals' attitudes. The initial ATHQ contained 30, 5-point Likert scale items. These items were developed by taking verbatim responses from previous in-depth interviews with general practitioners in the United Kingdom. An item level correlation analysis led to the removal of 10 items, which resulted in a 20-item measure. Lester and Pattison (2000) indicated a test-retest reliability correlation coefficient of .8 and the Cronbach's alpha as .74. This measure contains no subscales so only a total score is used.

The ATHQ has been adapted for varying samples given its development specifically for doctors. Habibian, Elizondo, and Mulligan (2010) adapted it to use with dental students; however, reliability statistics were not provided. Others have utilized the ATHQ as a guide for developing their own measure due to the ATHQ being developed for a very specific sample (e.g., Zrinyi & Balogh, 2004). Due to similar reasons, Asiamah (2014) eliminated six items from the ATHQ in order to administer it to college students and reported a Cronbach's alpha of .71 to .76, similar to that of the developers. Mason and Lester (2003) used the ATHQ to examine whether medical school changes people's attitudes toward homeless people. Although they did not include reliability information for their study, this study sparked Buchanan (2004) to write a letter to the editor regarding the small magnitude of change the ATHQ seems to capture following an intervention (Mason & Lester, 2003; Lester & Pattison, 2000). This seemed to have prompted Buchanan, Rohr, Stevak, and Sai (2007) to compare the ATHQ and the ATHI

to see which measure better documents changes in attitudes among health professionals. This study found that the ATHI was four times more responsive to change compared to the ATHQ.

Similar to the ATHI, the ATHQ also blurs the distinction between attitudes toward the issue of homelessness and attitudes towards homeless persons; although its name would suggest that it would focus on attitudes toward homeless persons. For example, the item “nearly all homeless people are drug addicts” refers to attitudes toward homeless people while the item “homelessness is a major problem in our society” refers to attitudes toward the issue of homelessness.

Given the specificity of the sample for which the ATHQ was developed and the lack of support for detecting change in attitude evaluations, it appears that many researchers have opted to either use the ATHI or have pulled together their own set of items for their research studies. However, as noted above, while the ATHI may be more sensitive to change, the psychometric properties have not held across many studies. In addition, while it seems that researchers have resorted to pulling together their own items to assess attitudes toward homelessness, the drastic variability in how this information is collected prevents the comparisons of attitudes expressed across different studies and populations and suggests the need to develop a new measure that addresses each of these issues.

### **Psychometric Properties and Scale Development**

As this proposal describes, attitudes toward homeless people currently lacks a standard assessment approach with adequate psychometric properties that can be used across samples and studies. Given that the common practice is to use in-house

assessments or measures with deficits in reliability, there is a need to develop a set of universal items designed to measure attitudes toward homeless people. In order to design this measure, it is important to review the process for creating a scale and to review the psychometric properties of importance.

Devellis (2017) emphasizes that the first step to developing a measure is to identify the construct of interest and that the construct and measure should be well grounded in theory. Attitudes toward homeless people is a latent construct, in which the assessment is dependent on measurement indirectly through a series of items (DeVellis, 2017). This proposal argues that measurement on attitudes toward homeless people has been difficult due to a lack of integration of various theories and models used to explain the dimensions of attitudes toward outgroups. In this case, the review above has proposed a theoretical background for clarifying the construct.

### **Item development**

Once the construct of interest has been clearly identified, an item pool representing the construct of interest should be generated. A measure comes from an item pool that has been randomly sampled from a universal set of items that relate to the construct. Item development should utilize redundancy in which the items can capture the construct through responses to a similar item for optimizing measurement without redundancy solely being through alterations in grammatical structure. Devellis (2017) states that an item pool must contain considerably more items than what is planned for the final measure. He also states that length, reading level, grammar, and ambiguity should be considered when developing items. In addition, he advises to include both negatively and positively worded items that indicate high and low levels of the construct.

The format of items on a measure must also be considered. Some theoretical models are more conducive to particular formats than others. For example, measurement of the presence or absence of an event would be best assessed through dichotomous items, whereas gradations of perceptions are best captured through Likert response formats. Furthermore, applying multiple response options within an item allow for increasing variability and increase the opportunity to discriminate differences within the construct (DeVellis, 2017).

The next step in item development is to consider having a panel of experts review the items and consider how relevant they are to the construct of interest, which can increase the validity of the scale. In addition to improved validity, this process can also allow for a review of item clarity and conciseness and can include the opportunity for identifying gaps in the items that would be helpful in measuring the construct (DeVellis, 2017).

The items then need to be administered to a development sample. The number of items and scales within the measure influences the needed sample size (DeVellis, 2017). After the item pool has been administered to a large sample, the individual items need to be analyzed for appropriateness for the scale. Item-scale correlations should be examined in order to assess how correlated individual items are with all items in the pool. In addition, item means and variances should be considered to determine whether the item is able to discriminate among individuals on different levels of the construct being measured (DeVellis, 2017).



## Reliability

One of the most important indicators of a scale's quality is the reliability coefficient, or the extent to which a measure performs in consistent and predictable ways. The goal is to develop a measure that performs consistently and predictably across samples to indicate that the measure is actually assessing the true construct ( DeVellis, 2017). A specific indicator of reliability is internal reliability or Cronbach's alpha ( $\alpha$ ). *Internal reliability* provides a measure of how related the items are to one another, or the proportion of shared variance among items. Cronbach's alpha varies between 0.0 and 1.0. Nunnally (1978) suggests that a value of .7 is the lowest acceptable cutoff score. DeVellis (2017) suggests that below .6 is unacceptable, between .6 and .65 is undesirable, between .65 and .70 is minimally acceptable, between .70 and .80 is respectable, between .80 and .90 as very good, and above .90 as needing to consider shortening the measure.

Another measure of consistency that can be useful for scale development is *test-retest reliability* (DeVellis, 2017). That is, a scale measuring a stable construct should consistently provide similar results of the same respondent each time the measure is administered. Given the debate over stability of attitudes toward homeless people, it would be important to have a measure that assesses for the stability of attitudes over time while being sensitive to change in attitudes. In other words, a measure assessing attitudes toward homeless people should present consistent results when administered to a respondent except when there is a reason for there to be a change in those attitudes, such as due to a stigma reduction intervention or to a change in the presentation of homelessness in the media.

## **Validity**

While reliability involves how much a variable influences a set of items, validity is concerned with whether the variable is the underlying cause of item covariation (DeVellis, 2017). There are three types of validity that are essential to scale development: content validity, criterion-related validity, and construct validity. *Content validity* refers to the extent to which a set of items actually reflects the content domain. Assessing content validity is when having an expert panel provide input and feedback on item content can be helpful. *Criterion-Related Validity* refers to the extent to which items on a measure predict a criterion that it is expected to predict. This is why criterion-related validity is often referred to as predictive validity. *Construct validity* is concerned with the relationship of the score on a scale or other variables. That is, is the measure positively related to other constructs that should be positively related and negatively related and unrelated to other constructs that should be negatively related or unrelated. Thus, it is important to build a nomological net of associations of the construct of interest.

## **Present Project**

Although there have been previous attempts to collect inventories and develop measures to examine attitudes toward individuals experiencing homelessness, currently there is not an updated measure with good psychometric properties. Furthermore, having a measure with links to comprehensive theory would provide more robust measurement of the types of attitudes toward homeless people. Thus, this project aims to develop a new measure of attitudes toward homeless persons based on a purposed model with a sharper focus on the cognitive evaluations that people have about homeless persons.

The purposed model suggests that nine constructs (i.e., laziness, cleanliness, warmth, competence, realistic threat, symbolic threat, morality, rationality, and dangerousness) may comprise the overall latent construct of attitudes toward homeless people. In order to develop a measure that reliably and validly captures each of those nine constructs, a longer measure would need to be developed based on a nine factor model to include nine subscales. However, researchers seem to desire to have a brief measure that can be easily and quickly administered across different settings and studies. While a more comprehensive measure would be ideal to develop, it seems most pertinent to develop a shorter measure that can easily be implemented in attitude studies with a plan to develop more comprehensive measures at a later time so that researchers can choose between a brief or comprehensive measure.

As addressed above, it is difficult to have reliable subscales with a brief measure due to the number of items per subscale, as with the ATHI. Thus, this study will develop a one factor model so that researchers are able to measure an overall score for attitudes toward homeless people. However, the items developed for this study will still represent the nine proposed constructs with the plan to have each of those constructs represented on this brief measure. Item selection will purposively select items that represent their respective construct but also measure and load highly on a one factor model of attitudes toward homeless people.

As noted throughout this paper, it is important that there be more discrimination in the measurement of attitudes. Thus, this measure will focus on attitudes toward homeless people as opposed to examining attitudes toward both homeless people and the issue of homelessness. In addition, this measure will further discriminate based on

attitude structure such that cognitive evaluations toward homeless people are the focus. While cognitive, affective, and behavioral evaluations are important for understanding attitudes toward homeless people, it seems necessary to examine these factors separately in order to better understand their bidirectional relationship. Cognitive evaluations of homeless people seem to be what researchers want to track most in their studies and research suggests that cognitive mechanisms are necessary for changing existing attitudes, it appears best to start with a measure that assesses such cognitive

To accomplish the goals discussed, three studies will be completed.

### **Research Questions**

**Study 1.** The purpose of study one was to test the adequacy of the factor structure found in the ATHI by Kingree and Daves (1997). Thus, several research questions were addressed in this study. First, this study examined whether the four factor structure holds in a new sample. Second, an examination of the correlation matrix provided information regarding whether items are similarly related. Third, reliability was examined in a new, large sample to examine whether the poor psychometrics of the ATHI may be due to too few of items in small samples. Fourth, items were reviewed to examine whether any items from the ATHI should be retained for a new measure. Considering that the ATHI is the most commonly used measure for assessing attitudes toward homelessness, it seems necessary to first conduct a recent factor analysis in order to gather a greater understanding of the shortcomings of the ATHI and to help inform the development of a new measure.

**Study 2.** The purpose of study two was to generate and test a pool of items that will be used to create a new measure. Items were identified based on the model proposed

(using the cognitive evaluation constructs: warmth, competence, morality, dangerousness, cleanliness, laziness, rationality, realistic threat, and symbolic threat) and were reviewed by a panel of experts for content validity. After the item pool is administered, quantitative analyses were conducted in order to determine items that best represent a one factor model of cognitive attitudes toward homeless people.

**Study 3.** After refinement of the new measure, the purpose of study three was to pilot test the new measure assessing cognitive attitudes toward homeless persons. Quantitative analyses were conducted in order to ascertain the psychometric properties of the measure. In developing a measure of attitudes toward homeless persons, it is hypothesized that: 1) factor structure will be retained in the new sample; 2) the scale will demonstrate moderate reliability indicators (e.g., alpha values of .70-.90; DeVellis, 2017); and 3) the measure will demonstrate convergent and discriminant validity. To demonstrate convergent validity, it is hypothesized that negative cognitive evaluations will be positively related to perceived vulnerability to disease, intergroup disgust sensitivity, intergroup anxiety, blame, fear, beliefs about dangerousness, and desire to avoid, segregate, or coerce homeless persons into services. Further, it is hypothesized that negative cognitive evaluations will be negatively related to feelings of pity and willingness to help. Convergent validity measures were picked due to their representation within the proposed model. To demonstrate discriminant validity, it is hypothesized that negative cognitive evaluations will be unrelated to general negative/positive affect to ensure that the measure is capturing attitudes toward homeless persons rather than just general negativity.

## CHAPTER II: METHODS

### Study 1: Review Existing Measure

**Participants.** Data was collected at three time points: 2010, 2011, and 2014. Participants were selected using a random digit-dial telephone survey. Phone numbers were randomly generated. Once the call was answered, the caller asked to speak with a person over 18 years of age who had the next birthday.

For 2010, participants included 415 (279 female, 136 male) residents of Richland County, South Carolina (see Table 2.1). Participants ranged in age from 18 to 97 years ( $M = 55.29$ ,  $SD = 18.97$ ). On average, participants had lived in South Carolina for 37.22 years ( $SD = 24.72$  and had 2.13 children under the age of 18 living in the home ( $SD = 1.55$ ). For 2011, participants included 383 (196 female, 187 male) residents of Richland County, South Carolina. Participants ranged in age from 18 to 97 years ( $M = 45.37$ ,  $SD = 19.91$ ). On average, participants had lived in South Carolina for 31.41 years ( $SD = 23.79$ ). On average, participants had 2.61 children under the age of 18 living in the home ( $SD = 1.70$ ). For 2014, participants included 101 (67 female, 34 male) residents of Richland County, South Carolina. Participants ranged in age from 18 to 97 years ( $M = 55.89$ ,  $SD = 18.84$ ). On average, participants had lived in South Carolina for 41.54 years ( $SD = 24.55$ ) and had 2.29 children under the age of 18 living in the home ( $SD = 1.76$ ). For the purposes of this study, data from these three time points will be totaled. The total sample was fairly representative of the census data for Richland County, with the

exception that females were overrepresented in this sample (United States Census Bureau, 2018).

Table 2.1

*Demographic information for 2010, 2011, and 2014*

	2010 (n= 415)	2011 (n= 383)	2014 (n= 101)	Total (n=899)
Gender				
Male	32.8% (136)	48.7% (187)	33.7% (34)	39.7% (357)
Female	67.2% (279)	51.3% (196)	66.3% (67)	60.2% (542)
Race/Ethnicity				
African American	41% (170)	44.6% (171)	34.7% (35)	41.8% (376)
Asian American	1.4% (5)	3.6% (14)	2% (2)	2.3% (21)
Caucasian	54.7% (227)	46.1% (177)	54.5% (55)	51.1% (459)
Latinx	1.7% (7)	2.7% (10)	1% (1)	2.0% (18)
Native American	1.2% (5)	1% (4)	1% (1)	1.1% (10)
Highest level of education completed				
Did not complete high school	6.7% (29)	4% (15)	5% (5)	5.4% (49)
Completed high school/Received GED	22.2% (92)	23% (88)	21.8% (22)	22.5% (202)
Spent 1 to 10 years in college	68.9% (286)	68% (260)	72.48% (73)	68.9% (619)
Yearly Income				
Less than \$5,000	1.7% (7)	1.5% (6)	2% (2)	1.7% (15)
\$5,000-\$24,999	16.2% (67)	16.2% (62)	17.8% (18)	16.3% (147)
\$25,000-\$49,999	24.3% (101)	29% (111)	24.9% (25)	26.4% (237)
\$50,000-\$74,999	12.8% (53)	17.5% (67)	17.8% (18)	15.4% (138)
\$75,000-\$99,999	12.5% (52)	8.1% (31)	7.9% (8)	10.1% (91)
\$100,000 and over	14.2% (60)	13.4% (51)	16.8% (17)	14.2% (128)

**Measures.** *Attitudes Toward Homelessness Inventory (ATHI)*. The ATHI is an 11-item measure examining people's perceptions towards the homeless population (see Appendix A; Kingree & Daves, 1997). Participants respond to each item on a 6-point scale ranging from *Strongly Agree* (1) to *Strongly Disagree* (6). The ATHI consists of four subscales: Personal Characteristics, Societal Causes, Affiliation, and Solvable

Problem. The Personal Characteristics subscale, which includes 3 items, assesses how strongly an individual believes that personal characteristics of homeless individuals are likely the cause of their homeless situation. The Societal Causes subscale, which includes 3 items, examines the belief that homelessness has societal causes. The Affiliation subscale, which includes 2 items, assesses the extent to which an individual is willing to affiliate with homeless people. The Solvable Problem subscale, which includes 3 items, measures the extent to which an individual believes that homelessness is a solvable problem. The higher the score, the more the participant supports the construct being examined.

*Experience with Homelessness.* Participants were asked 7 questions about their past experiences with homelessness (Kloos & Snow-Hill, forthcoming). These included questions about having ever been homeless, ever stayed at someone else's home when you didn't have a place to live, have a family member or friend who has been homeless, had a conversation with a homeless person who was not a friend or family member, done volunteer work involving homelessness, given money to a homeless person on the street, and given money to an agency that addresses homelessness (see Appendix B). This information may help build the nomological network for the cognitive evaluations of homeless people as the proposed attitude structure suggests that cognitive evaluations influence one's behavioral evaluations.

**Procedure.** Participants were selected via random digit-dial phone survey and were called by research assistants. Research assistants were undergraduates who were all trained on administering the survey over the phone and on the computer system for generating phone numbers and entering data received from participants. In 2010 and



2011, professional staff at the survey research center additionally administered the telephone survey. Both cell phone and home phone numbers were generated. Once someone answered the phone, the person with the next birthday who was over the age of 18 was selected to participate. The participant was then read the informed consent. Following consent, the participant answered questions from the ATHI, the experience with homelessness questions, and finally the demographic questions. Following completion of the survey, participants were debriefed and thanked.

**Data analysis.** A confirmatory factor analysis (CFA) was conducted to examine whether the factor structure proposed by Kingree and Daves (1997) holds in this dataset. All CFA data analyses were conducted utilizing the mplus Version 7.2 statistical software package (Muthen, L. K., & Muthen, B. O., 1998-2012). Full information maximum-likelihood (FIML) was utilized to estimate parameter estimates in the model, as this method has been shown to generate the most asymptotically unbiased (i.e., neither overestimates or underestimates model parameters), asymptotically efficient (i.e., the variability of the parameter estimates are minimized), and consistent parameter estimates (i.e., model parameters are the most accurate representation of population parameters, as sample increases) in a variety of circumstances (West, Finch, & Curran, 1995). Moreover, FIML is able to accommodate missing data analysis and is currently recognized as one of two preferred missing data handling techniques (Enders, 2010). After applying a CFA to the data, factor loadings and residual variances were examined. A correlation matrix was also generated to examine which items cluster together based on high correlations with other items (Field, 2010).

In order to examine latent variables among ATHI items, an exploratory factor analysis (EFA) was conducted. Factor analysis allows for explaining variation among items by identifying groups of items that co-vary with one another and to indicate an underlying construct (DeVellis, 2017). Similar to the CFA described above, a correlation matrix was examined. The generated component matrix indicated the factor loadings for each variable, allowing for an examination of how many items load on to each factor. Other potential factor structures will be examined depending on EFA results.

## **Study 2: Create New Measure**

**Participants.** In order to conduct the psychometric analyses described below, the instrument was administered to a large sample of adults. Participants were recruited via Amazon Mechanical Turk (MTurk), which is an online platform that allows a wide variety of participants to respond to the item pool. Participants were restricted to those living in the United States and over the age of 18. Participants received \$1 for completing the survey. Prior to data analysis, the dataset was subjected to two main steps of data cleaning. First, 24 (1%) of the initial 2258 respondents were identified as invalid, due to lack of effort or attention. Respondents were identified as invalid by these four decisions: (a) a participant was eliminated if they completed the survey in fewer than four minutes (the shortest amount of time a test subject could complete the survey while comprehending the questions); (b) a participant was eliminated if they provided the same response for more than 50% of the survey; (c) a participant was eliminated if their responses mapped onto another participant with the same IP address; (d) a participant was eliminated if their answers widely differed on two items that were duplicates. Second, 129 (5.8%) of the remaining respondents were omitted for failing to complete

70% of the entire survey. Ultimately, the data-cleaning process eliminated 153 respondents (6.8%), leaving a final sample of 2105 participants.

Of the entire adult sample, 50.8% identified as female, 48.4% as male, 0.3% as non-binary, 0.1% as transgender, and 0.1% as agender. On average, participants were 36.89 years old ( $SD = 11.87$ ) and ranged between 18 and 82 years of age. The sample mostly reflected the racial breakdown estimated by the United States Census Bureau (2018) with the exception of under sampling of Latinx participants. Of all participants, 75.2% identified as White, 8.6% identified as Black, 6.4% identified as Asian/Pacific Islander, 5.3% Latinx, 3.3% Biracial, 1.4% Native American, and 0.8% Other. The average reported household income also reflected the national average of 2016 (\$55,322). Participants reported their median household earning to be \$50,000.00, but ranged between \$0 and \$750,000. Median income was reported due to the income distribution being positively skewed. Overall, participants were more highly educated than that reported by the Census Bureau in 2018. Of all participants, 0.6% reported receiving less than a high school diploma or GED, 10.4% reported receiving a high school diploma or GED, 24.3% reported attending some college, 12.8% received an Associate's Degree, 39% received a Bachelor's Degree, and 12.7% received a Graduate Degree or Professional Training.

***Expert Panel.*** Experts in the area of homelessness, social psychology, and scale development were consulted in order to provide feedback throughout item development. The panel provided input regarding the initial item pool that was generated for the proposed scale. The expert panel examined how well the proposed items in the pool targeted the proposed construct and associated domains. The expert panel included two

homeless service providers, one community leader in the area of homelessness, and four researchers with expertise in homelessness, attitudes, poverty, and/or scale development. The panel was given a list of 102 potential items as well as the proposed model to aide in evaluating items. The panel examined each item's relevance to the proposed construct, examined wording of items, and provided suggestions for missing items. Based on expert panel feedback, 5 items were removed based on perceived low representation of the construct, 11 items were reworded for clarity, and 3 items were added. The panel recommended that some items include person-first language as opposed to identity first language; thus, 25 duplicate items were created with one item using the language "homeless people" and one item using the language "people experiencing homelessness" to assess differences in responses. When items were provided to the panel, all items measured negative attitudes. Feedback from the panel suggested that the item pool should contain items measuring positive attitudes toward homeless people in order to capture attitudes ranging from negative to positive rather than just more to less negative. Thus, 10 items were added and 35 of the previous items were reworded to reflect positive attitudes toward homeless people.

**Measure.** Participants were given 135 items based on the nine constructs from the proposed theoretical framework (See Figure 2.1) and input from the expert panel. Results from these items were used to create the proposed measure. In order for there to be representation for each construct in this one factor measure, items were developed to represent each construct in the proposed model (9 constructs). Following review for the expert panel, 135 items were identified and approved for testing in this study (see Appendix M). The item breakdown for each construct was: dangerousness (15 items);

laziness (17 items); cleanliness (12 items); realistic threat (17 items); symbolic threat (15 items); competence (16 items); morality (15 items); warmth (13 items); and rationality (15 items). It is important to note that 25 of the 135 items were simply reworded to include “people experiencing homelessness” vs. “homeless people” at the suggestion of the expert panel. That is, 25 items were assessed twice with one item using “homeless people” and another item using “people experiencing homelessness.” Many within the social science field have advocated using person first language rather than identity first language when describing those with a stigmatizing condition (i.e., using people experiencing homelessness as opposed to homeless people) (Dunn & Andrews, 2015). It has been suggested that the public is more likely to develop negative perceptions when individuals are identified by a label and place a larger focus on the stigmatizing condition rather than the humanity of the person being described (Dunn & Andrews, 2015). However, some scholars have criticized the use of person first language arguing that it is awkward and does not do much to eliminate negative perceptions typically connected to stigmatizing conditions (Gernsbacher, 2017). Thus, both identity-first and person-first language were tested to examine whether there are differences in the way participants respond regarding their attitudes toward the homeless. All negatively worded items will be reversed scored such that higher numbers reflect more positive attitudes. In addition to the items aimed at assessing attitudes toward homeless persons, the scale will also include items regarding demographic characteristics, such as the individual’s age, sex, education, race/ethnicity, and estimated income (see Appendix L).

Participants could respond to items based on a 6 point scale (1 = strongly disagree; 2 = disagree; 3 = somewhat disagree; 4 = somewhat agree; 5 = agree; 6 =

strongly agree). Because this measure is trying to capture gradations of attitudes, having multiple Likert response option allows for capturing increased variability. In addition, it was decided that a “neither agree nor disagree” option would not be included in this measure in order to force participants with relatively weak attitudes to decide between agree or disagree.

**Procedure.** Users on Amazon Mechanical Turk (MTurk) self-selected to participate in the study. MTurk is an online web-based platform for recruiting and paying participants for completing tasks and surveys. After reading informed consent (see Appendix J), participants answered demographic questions and items for potential use in a measure of attitudes toward homeless people. On average, participants spent about 12 minutes (median = 11.52) completing this survey. After completing the survey, participants were debriefed and thanked (see Appendix K). All procedures were reviewed and approved by university IRB.

Although MTurk provides the capability of collecting data from a large number of participants and from a diverse sample, several precautions were monitored. First, a code was entered into the syntax of the survey such that those with the same MTurk worker code could not be used to retake the survey. In addition, IP addresses were checked to ensure that the same person had not completed the survey multiple times. Second, participants were only able to participate in the survey if they had a 95% approval rating based on previous survey taking. This suggests that researchers have rated this participant as someone who has provided careful responses. Finally, MTurk includes precautions to prevent bots, or web robots. Participants had to complete a CAPTCHA in order to participate in the survey. This is to help eliminate the risk of having bots complete the

survey as it is nearly impossible for bots to complete CAPTCHAs. Consistency across items was also examined. If item responses did not appear to be consistent, the submission was rejected.

**Data analysis.** Analyses were conducted in several steps. First, data was screened for normality and outliers, which demonstrated that study variables fell within the acceptable ranges using Kline's (2011) guidelines. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .87, which is good as it is recommended to be higher than .6. Bartlett's Test of Sphericity was also good ( $\chi^2 = 196573.53, p < .001$ ).

As reported in the results, poor-performing items were identified and removed if they met the following criteria: (1) item removal improved internal consistency; (2) floor or ceiling effects (defined by less than 5% or more than 80% endorsed the highest or lowest category, respectively); (3) low factor loadings ( $< 0.7$ ; Hair et al., 2006); (3) low item-total correlations ( $< 0.4$ ; Monahan et al., 2009), or (4) unexpected correlations among items.

A confirmatory factor analysis (CFA) was conducted for a one factor model to examine factor loadings and model fit. Full information maximum-likelihood (FIML) was used to estimate the model parameters and address missing survey responses. Item performance was assessed and redundant items removed to produce a parsimonious final measure. The following guidelines were used to assess model fit: (1) standardized root mean square residual (SRMR)  $< .08$  was acceptable and  $< .05$  was good; (2) root mean square error of approximation (RMSEA)  $< .08$  was acceptable and  $< .05$  was good; and (3) comparative fit indices (CFI)  $> .90$  were acceptable and  $> .95$  were considered good (Browne & Cudeck, 1992; Hu & Bentler, 1999). Model chi-square is not the best

measure for model fit in this sample given its sensitivity to large sample sizes. SRMR, RMSEA, and CFI are better indices as they are less sensitive to sample size (Kline, 2011). Analyses were conducted using SPSS version 19 and Mplus.

### **Study 3: Test New Measure**

**Participants.** A new sample ( $n = 722$ ) was collected via MTurk using the same procedures described in study 2. Participants received \$2 for completing the survey. Prior to data analysis, the dataset was subjected to two main steps of data cleaning that were used in study 2. First, 16 (1.7%) of the initial 926 respondents were identified as invalid, due to lack of effort or attention. Respondents were identified as invalid by these four decisions: (a) a participant was eliminated if they completed the survey in fewer than eight minutes (the shortest amount of time a test subject could complete the survey while comprehending the questions); (b) a participant was eliminated if they provided the same response for more than 50% of the survey; (c) a participant was eliminated if their responses mapped onto another participant with the same IP address; and (d) a participant was eliminated if their answers widely differed on two items that were duplicates. Second, 86 (9.3%) of the remaining respondents were omitted for failing to complete 70% of the entire survey. Ultimately, the data-cleaning process eliminated 102 respondents (12.4%), leaving a final sample of 824 participants. A sample size of at least 200 was target, as that has been suggested to be the minimum number necessary to conduct factor analysis (DeVellis, 2017). Due to a technical error, only 219 of the 824 total participants completed the ATHI and ATHQ. Thus, analyses including the ATHI and ATHQ will only include those 219 participants.



MTurk is able to identify participant IDs who participated in the first and second wave of data collection allowing for responses to be matched in order to assess test-retest reliability ( $n = 102$ ). In other words, 102 of the 824 participants had taken the survey in study 2 and 3. These 102 participants were not included in the CFA, resulting in a sample of 722 participants.

Of the entire adult sample ( $n = 824$ ), 50.5% identified as female, 45.5% as male, <1% as transgender, and 2.5% preferred not to answer. On average, participants were 40.16 years old ( $SD = 12.07$ ) and ranged between 19 and 75 years of age. The sample mostly reflected the racial breakdown estimated by the United States Census Bureau in 2017. However, those identifying as Black or Latinx were underrepresented. Of all participants, 74.9% identified as White, 6.2% identified as Black, 7.8% identified as Asian/Pacific Islander, 4.1% Latinx, 2.8% Biracial, 1% Native American, and 1.1% Other. The average participant reported household income also reflected the national average of 2016 (\$55,322). Participants reported their household earnings to be \$56,192.14 on average ( $SD = 37,694.77$ ), but ranged between \$0 and \$250,000. Overall, participants were more highly educated than that reported by the Census Bureau in 2017. Of all participants, <1% reported receiving less than a high school diploma or GED, 9.2% reported receiving a high school diploma or GED, 21% reported attending some college, 11.5% received an Associate's Degree, 41.9% received a Bachelor's Degree, and 14.2% received a Graduate Degree or Professional Training. According to the 2017 US Census Data, this sample is highly educated as the census report that only 31% of people had a Bachelor's degree or higher. This sample found double that, in which 56.1% of participants reported having a bachelor's degree or higher.

**Measures.** Participants were given the new one factor, 9-item measure of attitudes toward homeless people (Survey of Attitudes toward Homeless People). Each item reflects one of the constructs of the theoretical framework described above (see Figure 2.1). Since all items reflected negative attitudes toward homeless people, items were not reversed scored unlike study 2. Thus, higher scores reflect more negative attitudes. Demographic information was obtained including sex, age, ethnicity, highest level of education, and estimated income.

***Comparison to Existing Measures.*** Measures were also given in order to conduct construct validity estimates. Therefore, in addition to the piloted measure, the ATHI (see Appendix A) and the ATHQ were administered to 219 of 824 participants. See above for information regarding the ATHI. The **Attitudes Towards the Homeless Questionnaire** (ATHQ) is a 20-item instrument developed in the United Kingdom that was originally designed to measure the attitudes of health professionals towards homeless patients (see Appendix C; Buchanan et al., 2007). Responses on the ATHQ occur on a 5-point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree).

***Convergent Validity.*** The following measures will be used to assess convergent validity of the purposed measure.

***Perceived Vulnerability to Disease Questionnaire (PVDQ).*** THE PVDQ is a 15 item measure examining concerns with disease infection (Duncan, Schaller, & Park, 2009). A total score and 2 subscale scores may be calculated: perceived infectability and germ aversion. Perceived infectability (7 items) assesses beliefs about immunological functioning and personal susceptibility to infectious diseases. Germ aversion (8 items) measures aversive affective responses to situations that connote a relatively high

likelihood of pathogen transmission. Participants responded to each item on a 7-point scale, with endpoints labeled “strongly disagree” to “strongly agree” (see Appendix E). Duncan and colleagues (2009) reported a Cronbach’s alpha of .82 for the total score and a .87 and .74 for the perceived infectability and germ aversion subscale scores, respectively, and these values have been replicated in other studies (i.e., Hodson et al., 2013). In the present study, internal consistency was .91 for perceived infectability and .79 for germ aversion. Research on animalistic dehumanization suggests that participants with greater negative attitudes toward homeless people, particularly cognitive evaluations related to cleanliness, will have more concerns with disease infection.

*Intergroup Disgust Sensitivity Scale (ITG-DS).* The ITG-DS is an 8-item measure used to assess intergroup disgust sensitivity, including outgroup revulsion, avoidance of physical and/or intimate contact with outgroups, concerns of stigma transfer, and desire for post-contact “purification” (Hodson et al., 2013). Participants respond to each item using a 7-point scale ranging from “strongly disagree” to “strongly agree” (see Appendix F). The authors identified a unitary construct with reasonable internal consistency ( $\alpha = .75$ ). Internal consistency in this sample was .72. Given the contributions of the Stereotype Content Model to the proposed theoretical framework, it is expected that the proposed measure and intergroup disgust sensitivity will be positively related such that participants who report more negative attitudes will be more sensitive to intergroup disgust.

*Intergroup Anxiety Scale – Modified (IAS).* The IAS is a measure of intergroup anxiety that consists of 12 items that ask participants to rate how they would feel when interacting with members of another racial group (Stephan et al., 2002). This measure

will be adapted to replace the racial group with homeless people. The response format is a 10-point scale ranging from *not at all* to *extremely* (See Appendix G). Cronbach's alphas have been reported between .83 and .92 (Stephan et al., 2002), and it was .95 in the present study. The incorporation of the Integrated Threat Theory in the proposed theoretical framework suggests that people with more negative cognitive evaluations will report higher levels of intergroup anxiety.

*Attribution Questionnaire.* The 27-item Attribution Questionnaire is based upon a measurement used by Corrigan et al. (2003) that assesses the following constructs: Personal Responsibility Beliefs (Blame), Pity, Anger, Fear, Help, Dangerousness, Avoidance, Segregation, and Coercion. Participants responded to all items after reading a vignette. Corrigan and colleagues (2003) used a vignette about a man with schizophrenia. For the purposes of this study, the vignette will be about a homeless person (see Appendix H), which has been piloted in another study (Snow & Reeb, 2013). Items are answered on a 9 point Likert Scale; e.g., "Taylor would terrify me" (9 = very much). A higher score demonstrates that the participant is in more agreement with the items. Corrigan and colleagues (2003) reported adequate reliability for six of the subscales, ranging from .70 to .96. When the homeless vignette has been used, acceptable to excellent reliability was found ranging from .72 to .92 (Snow & Reeb, 2013). Cronbach's alphas ranged between .73 and .92 across subscales in the present study. The Attribution Questionnaire captures cognitive, affective, and behavioral evaluations. More negative attitudes on the proposed measure should be related to higher scores on Blame, Anger, Dangerousness, Fear, Avoidance, Segregation, and Coercion and lower score on Pity and Willingness to Help.

*Experience with Homelessness.* Participants were asked 7 questions about their past experiences with homelessness (Kloos & Snow-Hill, forthcoming). These included questions about having ever been homeless, ever stayed at someone else's home when you didn't have a place to live, have a family member or friend who has been homeless, had a conversation with a homeless person who was not a friend or family member, done volunteer work involving homelessness, given money to a homeless person on the street, and given money to an agency that addresses homelessness (see Appendix B). This information may help build the nomological network for the cognitive evaluations of homeless people as the proposed attitude structure suggests that cognitive evaluations influence one's behavioral evaluations.

*Measures for Discriminant Validity.* The following measures will be used to assess discriminant validity.

*The Positive and Negative Affect Schedule (PANAS).* The PANAS is a widely used adjective-based questionnaire to measure positive and negative affect in state-like and trait-like formats (Watson et al., 1988). It is comprised of 10 items measuring positive affect and 10 items measuring negative affect (see Appendix D). Participants rated the degree to which certain emotions are felt using a 5-point Likert scale ranging from 1 (very slightly nor not at all) to 5 (extremely) using a general time frame to assess trait affectivity. The PANAS has demonstrated adequate internal consistency and test re-test reliability (e.g., Allan, Lonigan, & Phillips, 2015; Anthony, Lonigan, Hooe, & Phillips, 2002; Lonigan et al., 2003; Watson & Clark, 1991). In the present study Cronbach's alpha was .95 for negative affect and .91 for positive affect. The proposed

measure should primarily capture attitudes toward homeless people rather than general state-like and trait-like affect.

*Neutral Objects Satisfaction Questionnaire (NOSQ).* The NOSQ (Judge, Timothy, & Hulin, 1993) is a 25 item measure that examines general negativity by assessing participants' satisfaction with neutral objects (See Appendix I). Participants responded with one of three options (1=Dissatisfied, 2=Neutral, 3=Satisfied) to 25 neutral objects. The NOSQ has demonstrated Cronbach's alphas around .83 and test-retest reliability of .88 (Eschelman & Bowling, 2011). Cronbach's alpha was .88 in the present study. The proposed measure should specifically capture negative attitudes toward homeless people rather than just people who tend to be negative about most people and things.

**Procedure.** Procedures for study 3 are equivalent to study 2. Users on Amazon Mechanical Turk (MTurk) self-selected to participate in the study. After reading informed consent (see Appendix O), participants answered demographic questions, items for potential use in a measure of attitudes toward homeless people, and measures used for construct validity. On average, participants spent about 30.24 ( $SD = 27.71$ ) minutes completing this survey. After completing the survey, participants were debriefed and thanked (see Appendix P).

**MTurk precautions.** Although MTurk provides the capability of collecting data from a large number of participants and from a diverse sample, several precautions will need to be monitored. First, a code was entered into the syntax of the survey such that those with the same IP address could not retake the survey. In addition, IP addresses were checked to ensure that the same person had not completed the survey multiple times. Second, participants were only be able to participate in the survey if they have a 98%

approval rate based on previous survey taking and had to have more than 1000 surveys previously approved. This suggests that researchers have rated this participant as someone who has provided careful responses. Finally, MTurk includes precautions to prevent bots, or web robots. Participants had to complete a CAPTCHA in order to participate in the survey. This is to help eliminate the risk of having bots complete the survey as it is nearly impossible for bots to complete CAPTCHAs. Consistency across items was also examined. If items did not appear to be consistent, the submission was rejected.

**Data analysis.** To examine whether the 9-item, one factor structure holds in a new sample, this second MTurk sample ( $n = 722$ ) was used to test the CFA model. The 102 participants who took the survey at time 1 and time 2 were eliminated from the CFA in order for the factor structure to be examined in a new sample. Internal consistency was calculated to assess the homogeneity of the items within the proposed measure. This was calculated using Cronbach's coefficient alpha ( $\alpha$ ). Cronbach's alphas were calculated for the total measure and each factor. Construct validity was assessed by conducting bivariate correlations between the new measure and the other measures hypothesized to be a part of its nomological network. For the subsample who completed the measure twice ( $n=102$ ), test-retest reliability was assessed to examine temporal stability using Pearson correlation. Analyses were conducted using SPSS version 19 and Mplus.

## CHAPTER III: RESULTS

### Study 1: Review Existing Measure

**Internal consistency for ATHI.** Internal consistency was examined using Cronbach's alpha. Across the total score and subscales ranged from unacceptable to questionable. Internal consistency for the total score was poor ( $\alpha = .57$ ) as was the internal consistency for the personal characteristics subscale ( $\alpha = .56$ ). The affiliation subscale ( $\alpha = .40$ ) and the solvable problem subscale ( $\alpha = .49$ ) demonstrated unacceptable internal consistency while the structural causation subscale demonstrated questionable internal consistency ( $\alpha = .57$ ).

**Confirmatory Factor Analysis of Original Four Factor Model.** A confirmatory factor analysis (CFA) was conducted to examine whether the factor structure proposed by Kingree and Daves (1997) held in an original dataset. After applying a four factor CFA to the data, all factor loadings were statistically significant (see Table 3.1), and all residual variances were statistically larger than zero (ranging from .51 to .82). Although factor loadings are all statistically significant, factor loadings are fairly low. All factor loadings are below 0.7, which is the recommended cutoff (Hair et al., 2006). For example, item 10 has a factor loading of .46 on factor Affiliation and item 11 has a factor loading of .43 on factor Solutions. In addition, many of the correlations between factors are fairly low indicating that factors are not highly correlated (see Table 3.2). However, according to global incremental fit indices, the model does fit the data relatively well,  $\chi^2(38)=119.05$ ,  $p<.05$ , even though the chi-square is statistically significant. In addition, other fit indices



Table 3.1

*CFA for original ATHI factor structure*

	Estimate	Standard Error
Personal Causation by		
Homeless people had parents who took little interest in them as children (q1)	.57*	.04
Most circumstance of homelessness in adults can be traced to their emotional experiences in childhood (q7)	.58*	.04
Most homeless persons are substance abusers (q8)	.50*	.04
Societal Causation by		
Recent government cutbacks in housing assistance for the poor have made the homeless problem in this country worse (q2)	.64*	.03
The low minimum wage in this country virtually guarantees a homeless population (q3)	.58*	.03
Recent government cutbacks in welfare have contributed substantially to the homeless problem in this country (q9)	.70*	.03
Affiliation by		
I would feel comfortable eating a meal with a homeless person (q4)	.56*	.08
I feel uneasy when I meet homeless people (q10)	.46*	.06
Solutions by		
Rehabilitation programs for homeless people are too expensive to operate (q5)	.49*	.04
There is little to be done for people in homeless shelters except to see that they are comfortable and well fed (q6)	.57*	.04
A homeless person cannot really be expected to adopt a normal lifestyle (q11)	.43*	.04

*Note:* \*  $p < .05$ 

suggested model fit based on recommended cutoff values (SRMR = .04; RMSEA = .05; CFI = .93) (Browne & Cudeck, 1992; Hu & Bentler, 1999). Thus, it appears that the factor structure originally defined by Kingree & Daves (1997) relatively fits the data of the present study. However, reliability coefficients remain low for the subscales and total score. In order to determine the source of low reliability, an Exploratory Factor Analysis (EFA) was completed to examine whether items load onto multiple factors and a

reliability analysis was conducted to examine whether the lack of correlations among items and factors is resulting in low reliability.

Table 3.2

*Estimated correlation matrix for the latent variables.*

Factor	PC	SC	AFF
Personal Causation (PC)	1.00		
Societal Causation (SC)	0.07*	1.00	
Affiliation (AFF)	-0.18*	0.11*	1.00
Solutions (SOL)	-0.37*	-0.06	.23*

*Note:* \*  $p < .05$

**Exploratory Factor Analysis.** In order to examine whether items from the ATHI load onto multiple factors, an exploratory factor analysis (EFA) with geomin rotation was used to understand how items load onto four factors. Geomin rotation is an oblique rotation that allows for correlations among factors, which is seen with the ATHI. The factor structure generated by the EFA with geomin rotation fit substantially better than the CFA model that matched the original factor structure of the ATHI ( $\chi^2=22.38$ ,  $p > .05$  on 17 degrees of freedom; SRMR=.01; RMSEA = .02; CFI = .99). This shows that some items cross-load on multiple factors (see Table 3.3). However, items generally loaded as expected given Kingree and Daves (1997) original model.

A 3-factor solution did not fit the data well even though fit indices suggested adequate model fit ( $\chi^2=77.52$ ,  $p < .05$  on 25 degrees of freedom; SRMR=.03; RMSEA = .05; CFI = .95). There were no significant factor loadings on factor 1 of this model, and items that loaded on the other two factors did not make theoretical sense. A bifactor solution with 4 specific factors is not more attractive than the EFA 4-factor model described above as there did not seem to be any support for an overall factor based on

factor loadings, which does not support the use of a bifactor model. Thus, the 4-factor solution was the best fitting model.

Table 3.3

*Geomin Rotated Factor Loadings for an EFA 4-Factor Solution.*

	PC	SC	AFF	SOL
Homeless people had parents who took little interest in them as children (q1)	.54*	.002	-.06	.02
Most circumstance of homelessness in adults can be traced to their emotional experiences in childhood (q7)	.61*	-	-.04	-
Most homeless persons are substance abusers (q8)	.43*	.13*	.03	.003
Recent government cutbacks in housing assistance for the poor have made the homeless problem in this country worse (q2)	-.09	.66*	-.01	.18*
The low minimum wage in this country virtually guarantees a homeless population (q3)	.05	.59*	-.006	-.09
Recent government cutbacks in welfare have contributed substantially to the homeless problem in this country (q9)	.01	.68*	.01	-.06
I would feel comfortable eating a meal with a homeless person (q4)	.08	.18*	.25*	.13
I feel uneasy when I meet homeless people (q10)	.001	-	.91*	-.02
Rehabilitation programs for homeless people are too expensive to operate (q5)	.13	.004	.02	.39*
There is little to be done for people in homeless shelters except to see that they are comfortable and well fed (q6)	.10	-.01	-.03	.59*
A homeless person cannot really be expected to adopt a normal lifestyle (q11)	-.03	-.05	.24*	.36*

*Note:* \*  $p < .05$

**Reliability Analysis.** In order to further examine the issue of low reliability with both the total score and the subscale scores of the measure, alpha was examined if particular items were deleted. Results showed that the Cronbach's alpha would decrease if any items were removed. Thus, all items were maintained in analyses.

Considering that internal consistency is a measure based on the correlations between different items on the same test, the internal consistency of a measure will be

low if the items do not highly correlate. When conducting the factor analysis above, it was determined that the factors did not highly correlate. This suggested that the reliability coefficient will consequently be low.

When examining a correlation matrix of all items, some items negatively correlated with other items while other items were positively correlated, even after reverse scoring the items suggested by the author. Considering that internal reliability is based off of those correlations, having negative and positive correlations among items will decrease the reliability coefficient between and the correlations will cancel each other. Thus, a further look at the coding of items was necessary.

A one factor analysis was conducted to examine whether all items loaded onto one factor in the same direction. A one factor model show poor model fit ( $\chi^2=599.67$ ,  $p<.05$  on 44 degrees of freedom; SRMR=.09; RMSEA = .12; CFI = .48). This CFA showed that all but 3 items positively loaded onto one factor. Items 3 and 9 negatively loaded onto one factor, and item 2 did not significantly load onto this factor. This suggested some inconsistency in the way items were coded. However, all items demonstrated significant positive correlations with the total ATHI score.

According to the developers, in order to compute a total score, items 2, 3, 4, and 9 should be recoded such that higher scores reflect more positive attitudes. According to the one factor CFA, items 2, 3, and 9 (societal causes items) should not be recoded. However, it does not make theoretical sense to leave these items in their original scale. In order to have a total scale score, all item scales should show that higher scores signify more favorable attitudes toward homelessness. It makes theoretical sense to recode the items suggested by the developers. If the societal causes items are recoded back to their

original scale, higher scores would indicate more negative views of homelessness. Thus, Cronbach's alpha was calculated again without the societal causes items recoded. Cronbach's alpha slightly increased from .57 to .59, which is not an adequate reliability coefficient and is not substantially different than the Cronbach's alpha with structural causation items recoded.

Taken together, it appears that while the four factor solution suggested by the developers appears to be the best fit for the data, but the factor loadings and reliability coefficients are not sufficient for ensuring adequate measurement of attitudes toward homeless people. Given that negative attitudes toward homeless individuals has been linked to poor outcomes at an individual and societal level, and is frequently identified as a target for changing policies and programming that may end homelessness, there are still gaps in our understanding of attitudes toward homeless individuals due to psychometric and theoretical limitations. Thus, the next step in this study was to produce a brief measure with strong psychometric properties that reflects the complex theoretical properties of attitudes toward homeless people.

## **Study 2: Create New Measure**

**Item selection.** Participants provided responses to 135 items assessing cognitive attitudes toward homeless persons. Refer to methods section for item creation procedure. In order to determine which items should be selected for the final measure, several steps were followed.

***“Homeless people” vs. “people experiencing homelessness”.*** To test the debate about identity-first or people-first language, the 25 items that were assessed twice with one item using “homeless people” and the other item using “people experiencing

homelessness” were examined to determine whether identify-first or person-first language should be used in the measure.

When combining all 25 items using “homeless people” ( $M = 4.00$ ) and all 25 items using “people experiencing homelessness” ( $M = 4.02$ ), there is a significant difference in the average response of the two types of questions,  $t(2034) = -5.03, p < .001$ , indicating that items including “people experiencing homelessness” had more positive responses than items including “homeless people”. It is important to note, however, that while the difference between the two types of items is statistically significant, examining the average of the two types of items shows a difference of only .02, which is likely not a meaningful difference. With this large of a sample size, the smallest of differences can be found to be statistically significant while an examination of the effect size leads to questioning that significance.

However, those items that differed were examined to see whether there was a consistent pattern of responses that would support the advantages of one approach to wording over the other. When examining items individually, 5 of the 25 items showed statistically significant differences in responses. Higher numbers reflect more positive attitudes. Of the 5 items, 3 items demonstrated that “people experiencing homelessness” resulted in less stigmatizing attitudes than “homeless people” (people experiencing homelessness ( $M = 3.48$ )/homeless people ( $M = 3.20$ ) behave unpredictability,  $t(2104) = -2.16, p < .05$ ; people experiencing homelessness ( $M = 3.56$ )/homeless people ( $M = 3.30$ ) are trustworthy,  $t(2104) = -2.34, p < .05$ ; and people experiencing homelessness ( $M = 4.15$ )/homeless people ( $M = 3.88$ ) are competent enough to work a variety of jobs,  $t(2104) = 2.35, p < .05$ ). However, the other 2 significant items demonstrated that

“homeless people” resulted in less stigmatizing attitudes compared to “people experiencing homelessness” (homeless people ( $M = 4.21$ )/people experiencing homelessness ( $M = 3.79$ ) try to improve their circumstances,  $t(2104) = 3.00, p < .05$ ; and homeless people ( $M = 4.29$ )/people experiencing homelessness ( $M = 4.09$ ) are too lazy to get a job,  $t(2104) = 2.35, p < .05$ ).

There is no clear pattern of the items that demonstrated statistically significant differences between item wordings. Some items showed that using “homeless people” resulted in less stigmatizing attitudes while other items showed that using “people experiencing homelessness” resulted in less stigmatizing attitudes. In addition, there appeared to be no pattern related to having the item positively or negatively worded. Thus, based on statistical analyses alone, there does not seem to be a clear justification of using one wording or the other.

The public typically discusses homelessness using identity-first language as opposed to person-first language. Since the use of identity-first language (“homeless people”) is more salient for the public and given that there is no statistical reason to use one form of language over the other, items using person-first language were removed from further analyses. The purpose of this measure is to assess people’s attitudes and to assess change in those attitudes, not to elicit attitudes itself. It is suggested that the use of “homeless people” would be more consistent with the way in which the public talks or thinks about this population.

Thus, 25 items using the terminology “people experiencing homelessness” were removed, leaving 110 items for potential inclusion in the item pool. An additional two items were removed because they also used the terminology “people experiencing

homelessness”, although they did not have matching “homeless people” items, in order to keep terminology consistent across items on the new measure (item “people experiencing homelessness are using my tax dollars and are still homeless” (realistic threat) and item “I don’t want to think about people experiencing homelessness” (symbolic threat)). In addition, two duplicate items were deleted. Thus, 106 items were left in the item pool.

***Item removal.*** For all 106 items remaining, the Cronbach’s alpha for internal consistency was .94. When looking at whether the Cronbach’s alpha would differ depending on whether any of the items were removed, none of the Cronbach’s alphas dropped below .93 with any item removed. This is likely due to the number of items in the scale.

When examining the correlation matrix among all 106 items, two items (items “The amount of government resources provided to homeless people is reasonable given their need” (realistic threat) and item “I don’t know how to help a homeless person” (symbolic threat)) were removed because they did not correlate with other items as expected. The first item was negatively correlated with both positively and negatively worded items, and the second item was not significantly related to most of the other items surveyed. No items were removed based on floor or ceiling requirements. In addition, 3 items (items “homeless people do not have criminal records” (dangerousness); “homeless people are competent enough to work a variety of jobs (competence); and “my time out and about is not negatively impacted by seeing homeless people”(symbolic threat) were removed because of low item-total correlations ( $<0.4$ ; Monahan et al., 2009). Thus, 102 items remained in the item pool.



***Confirmatory factor analysis and measure refinement.*** Missing data from all participants completing the survey were minimal. Specifically, rate of missingness for total responses was approximately 0.14%. Since the rate of missingness was minimal, full information maximum-likelihood (FIML) was employed to estimate model parameters in order for all information and cases to be used in analyses. A confirmatory factor analysis was conducted to examine factor loadings for a one factor model for the remaining 102 items. Items were removed if they demonstrated low factor loadings ( $<0.7$ ; Hair et al., 2006). As a result, 63 items were removed due to having factor loadings less than 0.7, resulting in a remainder of 39 items. This eliminated all positively worded items, suggesting that for the purposes of this measure, negatively worded items hung together better as a one factor measure.

Due to wanting a more parsimonious measure with strong psychometric properties, items that assessed similar constructs were compared and better performing items with stronger face validity were retained. In other words, items that represented the same construct were compared and were retained if they appeared to best measure the construct at face value and if they performed better in regards to their factor loadings. As a result, 24 items were removed, resulting in a remainder of 15 items. The 15-item measure was tested using a CFA to assess model fit. The one factor model demonstrated strong fit in the data (SRMR = .03; RMSEA = .07; CFI = .96;  $\chi^2 = 1038.55$ ,  $p < .001$ ). Although the chi-square was still significant, chi-square is not the best fit index for this sample as chi-square is highly susceptible to sample size.

The 15-item measure had items representing each of the 9 constructs (morality – 2 items; rationality – 2 items; symbolic threat – 1 item; warmth – 2 items; cleanliness – 2

items; dangerousness – 1 item; laziness – 2 items; realistic threat – 2 items; and competence – 1 item). The 15-item measure demonstrated excellent internal reliability with a Cronbach's alpha of 0.95.

Considering that internal reliability was so high ( $\alpha = 0.95$ ) for the 15 item measure, it was determined to shorten the measure further as DeVellis (2017) suggests when Cronbach's alpha is above 0.90. If there was more than one item representing a particular construct on the 15-item measure, those items were compared in a similar manner based on performance and face validity. Based on theory, items that appeared to best represent their construct clearly and without representing any other construct were retained. Thus, items were reduced to a 9-item measure such that there was one item representing each construct in the proposed model. The 9-item measure performed well (SRMR = .02; RMSEA = .05; CFI = .99;  $\chi^2 = 176.37$ ,  $p < .05$ ) and demonstrated stronger fit than the 15-item measure (see Table 3.4). The final 9-item measure demonstrated excellent internal reliability ( $\alpha = 0.92$ ), which was slightly lower than the 15-item measure, but closer to the ideal range of 0.80 – 0.90 (DeVellis, 2017). This final 9-item measure will be referred to as the Survey of Attitudes toward Homeless People (SAHP).

Table 3.4.

*Comparison of 39, 15, and 9 item measure.*

Measure	$\chi^2$	SRMR	RMSEA	CFI	$\alpha$
39 items	9132.93, $p < .05$	.04	.07	.88	.98
15 items	1038.55, $p < .05$	.03	.07	.96	.95
9 items	176.37, $p < .05$	.02	.05	.99	.92

*Note.* Cut off values for fit indices are: SRMR (<0.08 is acceptable; <0.05 is good); RMSEA (<0.08 is acceptable; <0.05 is good); and CFI (>0.90 is acceptable; >0.95 is good).

See Table 3.5 for a summary of item means, standard deviations, skewness, and kurtosis. Skewness and kurtosis were within normal limits, with skewness ranging from -.81 to -.30 and kurtosis values ranging from -.63 to .04. Item performance for the final measure is listed in Table 3.6 and the inter-item correlation matrix is listed in Table 3.7. See Figure 3.1 for a visual representation of the one-factor solution with item loadings. See Appendix N to examine a table labeling the construct each item represented and indicated when the item was removed for the item pool.

Table 3.5

*Descriptive statistics for the final 9 items.*

Item	Mean	Standard Deviation	Skewness	Kurtosis
1. Homeless people use the system when they could pay their own way.	4.31	1.26	-.49	-.31
2. You cannot reason with a homeless person.	4.41	1.21	-.67	.04
3. Resources that go to homeless people take away resources from people like me.	4.58	1.28	-.81	-.03
4. Homeless people have very different values from people like me.	4.11	1.36	-.44	-.63
5. Homeless people only care about themselves.	4.49	1.29	-.76	-.05
6. Homeless people infect outdoor areas.	4.41	1.36	-.60	-.48
7. Homeless people have likely committed felonies.	4.07	1.17	-.30	-.30
8. Homeless people are lazy.	4.20	1.32	-.43	-.61
9. If homeless people were smarter, they would not be homeless.	4.39	1.34	-.60	-.47

*Note.* Response scale was 1 to 6 with higher score representing less negative attitudes.

Table 3.6

*Item performance of the final 9 items (n=2105).*

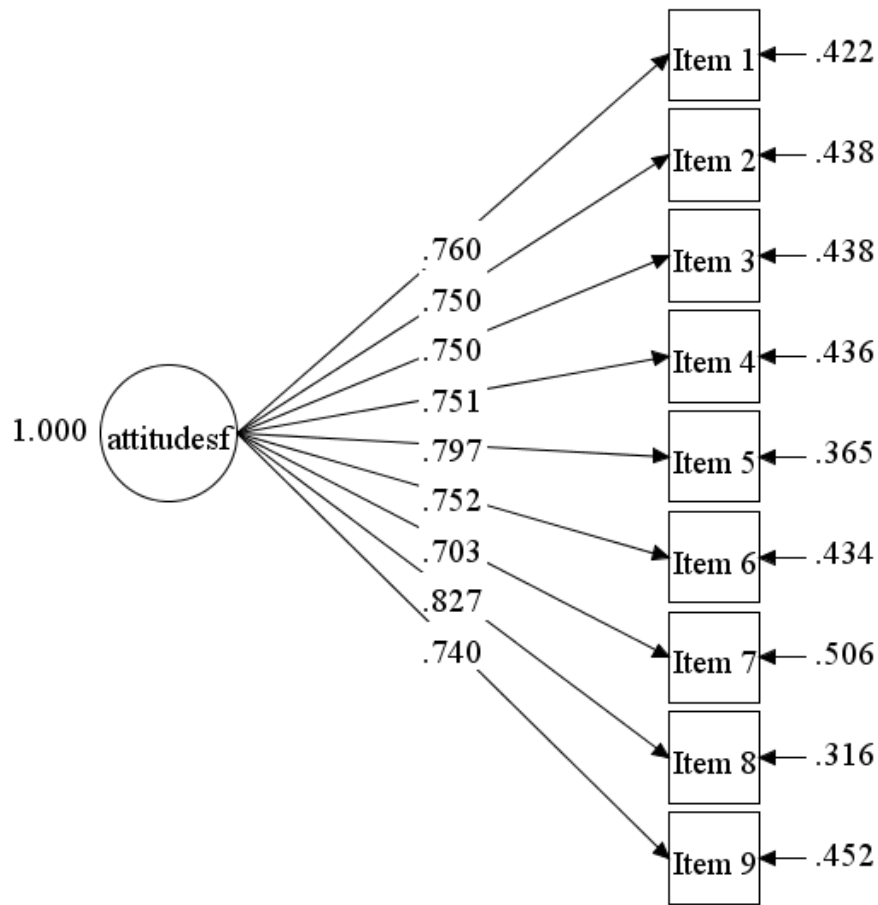
Item	Construct	Factor Loading	Item-Total Correlation	Total scale $\alpha$ if item removed	$R^2$
1. Homeless people use the system when they could pay their own way.	Morality	.76	.78	.92	.58
2. You cannot reason with a homeless person.	Rationality	.75	.77	.92	.56
3. Resources that go to homeless people take away resources from people like me.	Realistic Threat	.75	.78	.92	.56
4. Homeless people have very different values from people like me.	Symbolic Threat	.75	.77	.92	.56
5. Homeless people only care about themselves.	Warmth	.80	.82	.91	.64
6. Homeless people infect outdoor areas.	Cleanliness	.75	.78	.92	.57
7. Homeless people have likely committed felonies.	Dangerous	.70	.73	.92	.50
8. Homeless people are lazy.	Laziness	.83	.84	.91	.68
9. If homeless people were smarter, they would not be homeless.	Competence	.74	.76	.92	.55

Table 3.7

*Inter-item correlation matrix for final 9 items.*

Items	1	2	3	4	5	6	7	8
1	-							
2	.58	-						
3	.61	.54	-					
4	.55	.58	.57	-				
5	.58	.62	.63	.61	-			
6	.55	.60	.57	.56	.60	-		
7	.51	.53	.50	.51	.56	.56	-	
8	.66	.60	.60	.63	.66	.61	.60	-
9	.56	.53	.58	.56	.60	.55	.51	.63

Note. All correlations were statistically significant,  $p < .05$ .



*Figure 3.1.* Results of confirmatory factor analysis highlighting the 9-item, one-factor solution. Standardized factor loadings and errors terms are presented.

### Study 3: Test New Measure

**Confirmatory factor analysis.** The SAHP was administered to 722 new MTurk participants; that is, participants who were not included in Study 2. Similar to the CFA conducted in study 2, a new CFA confirmed that a one factor model demonstrated strong fit in the new sample (SRMR = .02; RMSEA = .06; CFI = .98;  $\chi^2(27) = 112.63$ ,  $p < .001$ ). Item performance in the final sample is presented in Table 3.8.

**Reliability.** The Cronbach's alpha for the SAHP demonstrated excellent reliability ( $\alpha = .93$ ). In addition, 102 participants completed the SAHP at time 1 and time

2, and the 9-item measure demonstrated excellent test-retest reliability over the 9 month period ( $r = 0.85$ ,  $p < .001$ ).

**Construct validity.** Associations between the SAHP and related constructs were assessed. In regards to the SAHP's association with other homelessness-related attitudes measures, associations were statistically significant and in the expected direction.

Responses on the 9-item measure were positively correlated with total scores on the ATHI and the ATHQ ( $r = .83$ ;  $r = .87$ , respectively), such that as attitudes became more negative on the 9-item measure, attitudes on the ATHI and ATHQ also became more negative ( $n = 219$ ) (see Table 3.9). In regards to the subscales on the ATHI, the more negative attitudes were reported on the SAHP, the more personal blame respondents ascribed to homelessness ( $r = 0.70$ ), the more social distance respondents wanted from homeless individuals ( $r = -0.42$ ), the less societal blame respondents ascribed to homelessness ( $r = -0.68$ ), and the less likely respondents were to endorse there being solutions to the issue of homelessness ( $r = 0.64$ ) ( $n = 824$ ) (See Table 3.9).

In regards to convergent validity, the total score of the SAHP was significantly associated in the expected direction with each construct assessed at the  $p < .001$  level except for one (i.e., perceived infectability). The SAHP was positively associated with intergroup anxiety ( $r = 0.47$ ), such that more negative cognitive attitudes toward homeless people were associated with more feelings of intergroup anxiety toward homeless people. In addition, the greater sensitivity participants reported to intergroup disgust, the more negative participants attitudes were toward homeless individuals ( $r = 0.54$ ). In regards to the attribution questionnaire, as participants reported more negative attitudes on the SAHP, they endorsed more negative cognitive evaluation related to

perceived blame ( $r = 0.60$ ) and more perceived dangerousness ( $r = 0.65$ ). They also endorse more negative affective responses, such as more anger ( $r = 0.66$ ), less pity ( $r = -0.45$ ), and more fear ( $r = 0.61$ ), and more negative behavioral responses, such as less helping behavior ( $r = -0.49$ ), more avoidance ( $r = 0.56$ ), stronger desire for segregation ( $r = 0.63$ ), and stronger desire for a homeless person to be coerced into treatment ( $r = 0.49$ ). As participants attitudes toward the homeless became more negative on the SAHP, they also endorsed stronger aversions to germs ( $r = 0.22$ ). However, attitudes toward the homeless were not significantly related to the participants' concern over perceived infectability ( $r = 0.06$ ) ( $n = 824$ ) (See Table 3.9).

Participants attitudes toward homeless individuals were also significantly related to the amount of contact they reported having with homeless people ( $r = -0.23$ ) as well as whether they view their past contact as positive or negative ( $r = 0.55$ ), such that more negative attitudes were related to less contact with the less and viewing that contact as more negative ( $n = 824$ ).

In order to demonstrate discriminant validity, associations between state-like affect and attitudes toward neutral objects were assessed. Discriminant validity was demonstrated through a lack of an association with attitudes toward neutral objects ( $r = 0.005$ ) and positive affect ( $r = 0.08$ ). However, attitudes toward homeless individuals was significantly associated with negative affect ( $r = .30$ ), such that more negative attitudes were related to more negative affect. It is important to note that positive and negative affect, as measured by the PANAS, was the first survey participants completed during the study, such that answering questions about homeless people did not alter responses on

their affect. See Table 3.9 for correlations and descriptive information for all measures related to construct validity.

Table 3.8

*Item performance and CFA for the SAHP within the new sample (n = 722).*

Item	Construct Represented	Factor Loading	Item-Total Correlation	Total scale $\alpha$ if item removed	$R^2$
1. Homeless people use the system when they could pay their own way.	Morality	.78	.80	.93	.60
2. You cannot reason with a homeless person.	Rationality	.80	.82	.93	.64
3. Resources that go to homeless people take away resources from people like me.	Realistic Threat	.78	.81	.93	.60
4. Homeless people have very different values from people like me.	Symbolic Threat	.80	.83	.93	.64
5. Homeless people only care about themselves.	Warmth	.81	.83	.93	.64
6. Homeless people infect outdoor areas.	Cleanliness	.79	.81	.93	.60
7. Homeless people have likely committed felonies.	Dangerousness	.72	.75	.93	.50
8. Homeless people are lazy.	Laziness	.84	.85	.93	.69
9. If homeless people were smarter, they would not be homeless.	Competence	.78	.81	.93	.61



Table 3.9

*Correlations and descriptive statistics for construct validity of SAHP.*

Measure	Correlation with SAHP	Mean (SD)
SAHP	-	2.69 (1.08)
Attitudes toward Homelessness Inventory - Total	$r = .83, p < .001$	2.92 (.86)
ATHI - Personal Causation	$r = .70, p < .001$	3.70 (1.14)
ATHI - Societal Causes	$r = -.42, p < .001$	2.55 (1.16)
ATHI - Affiliation	$r = -.68, p < .001$	2.99 (1.34)
ATHI - Solvable Problem	$r = .64, p < .001$	2.87 (1.21)
Attitudes toward the Homeless Questionnaire	$r = .87, p < .001$	2.53 (.67)
Intergroup Anxiety Scale	$r = .47, p < .001$	3.09 (1.75)
Intergroup Disgust Sensitivity	$r = .54, p < .001$	2.89 (1.00)
Attribution Questionnaire - Blame	$r = .60, p < .001$	4.57 (1.83)
Attribution Questionnaire - Danger	$r = .65, p < .001$	2.48 (1.78)
Attribution Questionnaire - Anger	$r = .66, p < .001$	2.38 (1.73)
Attribution Questionnaire - Pity	$r = -.45, p < .001$	6.47 (1.90)
Attribution Questionnaire - Fear	$r = .61, p < .001$	2.24 (1.73)
Attribution Questionnaire - Help	$r = -.49, p < .001$	6.00 (1.98)
Attribution Questionnaire - Avoid	$r = .56, p < .001$	4.53 (2.01)
Attribution Questionnaire - Segregation	$r = .63, p < .001$	2.24 (1.71)
Attribution Questionnaire - Coercion	$r = .49, p < .001$	3.98 (2.02)
Perceived Vulnerability to Disease – Germ Aversion	$r = .22, p < .001$	4.22 (1.15)
Perceived Vulnerability to Disease – Perceived Infectability	$r = .06, p > .05$	3.35 (1.34)
Amount of Past Contact with Homeless People	$r = -.23, p < .001$	3.09 (1.75)
Perception of Past Experience with Homeless People	$r = -.55, p < .001$	4.63 (1.44)
Neutral Objects Satisfaction Questionnaire	$r = .005, p > .05$	2.37 (.35)
PANAS – Positive Affect	$r = .08, p < .05$	2.96 (.88)
PANAS – Negative Affect	$r = .30, p < .001$	1.31 (.63)

## **CHAPTER IV: DISCUSSION**

This study developed a new, reliable, and valid measure of cognitive attitudes toward homeless individuals. This new measure is explicitly linked to an integrated model of social psychology theories that aims to better understand attitudes toward homeless people. It also overcomes limitations of previous measures and performs better than those measures. Using a systematic approach, the Survey of Attitudes toward Homeless People (SAHP) is a 9-item measure demonstrating a one factor structure with each item representing one proposed construct related to cognitive attitudes toward homeless people: (1) cleanliness; (2) competence; (3) dangerousness; (4) laziness; (5) morality; (6) rationality; (7) realistic threat; (8) symbolic threat; and (9) warmth.

This project was conducted over the course of three studies. Study 1 analyzed the psychometric properties of the most commonly used measure of attitudes toward homelessness (i.e., ATHI). While the four factor solution originally proposed by Kingree and Daves (1997) was the best fitting model for the ATHI, the factor loadings and reliability estimates were insufficient for adequate measurement of attitudes toward homeless people. Poor psychometrics along with outdated items and items with poor content validity suggested the need to create a new measure of attitudes toward homeless people.

Based on the integrated theoretical framework proposed in this paper, 135 items were generated to be tested on a large sample in study 2. This resulted in the development of the one factor Survey of Attitudes toward Homeless People (SAHP). Study 3 tested t

psychometric properties of the SAHP in a new sample. Internal consistency was excellent for the measure (.93), and it demonstrated excellent consistency over a 9-month period.

The SAHP demonstrated strong construct validity. It was significantly associated in the expected direction with each hypothesized construct, with the exception of perceived infectability and state-like negative affect. The strongest associations (large effect sizes) were observed between attitudes and feelings of anger ( $r = .66$ ), perceived dangerousness ( $r = .65$ ), desire to segregate homeless persons ( $r = .63$ ), feelings of fear ( $r = .61$ ), and blame for homeless condition ( $r = .60$ ). Overall, the new measure, which focused on cognitive evaluations, demonstrated associations with other constructs purposed in the model (i.e., affective and behavioral evaluations) suggesting a possible attitudinal structure for attitudes toward homeless individuals. While more research is needed to confirm these associations, this provides promising evidence of the nomological network of cognitive attitudes toward homeless people.

This new measure was constructed to represent one portion of an integrated model based on the theories of stereotype content model, dehumanization, attribution theory, and integrated threat theory. While past measures have been developed by data only processes and the public's responses to large inventories identifying various values, this is the first measure of its kind to identify items with a theoretical basis for understanding attitudes toward homeless individuals. This is important because having a theoretical basis driving measurement and the understanding of attitudes toward homeless individuals can lead to more effective stigma-reduction interventions and more desirable outcomes in attitude change. Oftentimes, there is little or no theoretical basis for the strategies adopted in stigma-reduction initiatives in relation to homelessness. Due to this

lack of underlying theory, it seems difficult to see how the initiatives can successfully induce attitude and behavior change. More theory-driven measurement, as opposed to only data-driven measurement, can better inform those initiatives by targeting areas that appear to be contributing to attitudes the most.

The preliminary evidence demonstrated in this current study suggests that only viewing one social psychological theory of attitudes is not sufficient for capturing the complexity of people's attitudes toward homeless persons. Each of the theories presented in the model represent different aspects that may explain people's tendency to have negative attitudes toward homeless people. Attitudes measurement must reflect the complexities of attitudes theory. If measurement only examines constructs from one of the described theories, researchers may be missing crucial elements that are interacting to result in such attitudes. Social psychology has provided the field with a variety of different theories that seek to explain attitudes toward outgroups. Too often, the field of psychology strives to develop new theory and has to argue why this theory is unique. However, there is value in examining the convergence of all of the previously developed theories. Rather than reinventing the wheel, complimentary processes can be examined from validated theories to create a common-ground model (Diekmann, 2019). While the theories presented in this project were created independently, they have points of convergence. By identifying and integrating those areas of convergence, latent constructs can be explained with greater depth and precision. It is interesting that items representing nine different attitudinal constructs represented an overall cognitive attitudes factor. This suggests that these nine constructs work well together to represent cognitive attitudes toward homeless people. However, more research is needed to examine the convergence

and integration of the theory proposed in order to determine whether there are missing theoretical pieces that cannot be explained with the current available theories.

Some observations between the SAHP and the other measures did not result as hypothesized. Attitudes were not associated with perceived infectability although they were expected to be positively associated ( $r = .06$ ). The developers of the Perceived Vulnerability to Disease questionnaire created two subscales: perceived infectability and germ aversion (Duncan et al., 2009). They defined perceived infectability as an assessment of people's beliefs regarding their susceptibility to future health problems, whereas they defined germ aversion as an assessment of people's discomfort in situations that indicate an increased likelihood for the transmission of pathogens. However, they noted that many phenomena tend to be predicted by either perceived infectability or germ aversion, but not by both. Thus, it makes sense that germ aversion would be the construct more associated with attitudes toward homeless people as it has demonstrated links to disgust sensitivity, an affective evaluation common in people's responses to homeless individuals. It is possible that infectability could be related to people's concern about oneself being vulnerable to disease, or possibly homelessness. People may perceive that it is unlikely that they will become homeless themselves. Germ aversion may be related to what people can do to protect themselves from contagions. That is, while people may think it is unlikely to become homeless themselves, they do not want to be tainted by homeless people and any perceived diseases they may carry. In addition, the developers suggested that perceived infectability is often informed by rational appraisals while germ aversion is informed by intuitive appraisals of disease transmission risk. Thus, it seems reasonable that germ aversion would be most associated with attitudes as people tend to

base their attitudes on stereotypical thoughts concerning homeless people rather than on factual information. More research is needed to fine tune the distinctions among cleanliness, perceived infectability, and germ aversion and their importance in a model of cognitive attitudes toward homeless people.

It was also hypothesized that attitudes toward homeless people would not be associated with general negative affect. The PANAS negative affect measure can be defined as a person's tendency to experience nonspecific negative mood states (Watson et al., 1988). Thus, it would seem that people who are more sensitive to negative mood states are also more likely to express negative attitudes toward outgroups. More research would be needed to evaluate this hypothesis. In this sample, there was a small correlation between negative affect and attitudes toward neutral objects ( $r = -.25, p < .001$ ), such that as people's sensitivity to negative affect increased so did their dissatisfaction with neutral objects. This also suggests that research may want to control for general negative affect when examining attitudes toward homeless people if it is indeed true that people more sensitive to negative affect generally display more dislike to any object or person. Concerning measurement of attitudes toward outgroups, it would be ideal to ensure that one is measuring more than a person's state-like negative affect. In addition, further research may want to examine the relationship between state-like negative affect and attitudes toward outgroups.

The new SAHP improves upon the ATHI and ATHQ in several ways. First, the internal consistency of the new measure ( $\alpha = .93$ ) is much better than the internal consistency reported by past studies with the ATHI (ranging between .39 and .74). However, the current study found strong internal consistency for the total score of the

ATHI in this sample ( $\alpha = .82$ ). However, this is not consistent with past research. The internal reliability for the ATHQ was similarly strong ( $\alpha = .85$ ). Participants completed the SAPH prior to completing the ATHI and ATHQ. It is possible that participants were already primed to answer such questions by completing the SAPH, and as a result, responses to the ATHI and ATHQ were shaped to be more internally consistent. It is important to note that while the internal reliability for the ATHI and ATHQ was strong in this sample, they have demonstrated significant variability in their internal reliabilities across studies. It will be important to continue to establish the SAPH's psychometric properties by demonstrating strong internal consistency across varying types of samples and studies in order to ensure that the strong psychometric properties hold beyond this study's sample.

Second, the new measure incorporates items representing nine dimensions of attitudes while still being a brief measure. Researchers have argued that the ATHI does not capture the complexity of attitudes resulting in researchers using individualized measures. The new measure was specifically designed to draw from the complexity of attitudes while still loading onto one factor. In addition, this new measure is specific to attitudes towards individuals who are homeless as opposed to combining attitudes toward individuals and toward the social issue of homelessness. Much of past measurement blurs this distinction and groups them together into one construct. However, attitudes toward homeless individuals and attitudes toward the social issue of homelessness seem to represent distinct, separate categories, as demonstrated by the discrepancy between people's negative attitudes toward homeless individuals and people's more positive attitudes toward the social issue of homelessness. Thus, the complexity and

inconsistencies that researchers have found when measuring attitudes may be due to needing to consider these two ideas as separate attitudes.

This measure also selected items that were not specific to time. For example, the ATHI has items such as “Recent government cutbacks in housing assistance for the poor may have made the homeless problem in this country worse.” This kind of item is sensitive to date in time as there are not always “recent cutbacks.” This item is also an example of an item that is focused on attitudes toward the issue of homelessness as opposed to homeless individuals. Some have viewed the items on the ATHI as outdated so the SAPH was designed to surpass a specific point in time. Further, unlike the ATHQ, this new measure was designed to be used with any group of individuals rather than just a specific sample, like health practitioners.

The development of this measure also provides initial progress in the ability to test the integrated model proposed in this paper for understanding attitudes toward homeless individual. It is promising that the nine cognitive constructs proposed in the model represented a one factor solution of cognitive attitudes toward homeless individuals. This gives initial evidence that these nine constructs hold together well to represent cognitive attitudes toward homeless individuals overall. Having strong measurement will be crucial in providing support and refining the proposed model.

Overall, the SAPH improves upon past measurement of attitudes toward homeless people in many ways. It provides greater specification of attitudes by focusing only on cognitive evaluations of homeless people identified in a proposed integrative model and by distinguishing between attitudes toward homeless people versus attitudes toward the social issue of homelessness. It is the first attitudes toward homeless people survey to be



explicitly grounded in theory. It has demonstrated stronger factor loadings and better reliability than past measures and is strongly related to measures of affective and behavioral evaluations as expected. Lastly, the SAPH was designed to be administered to a variety of samples, and items were designed to withstand time.

## **Limitations**

This study has several limitations highlighting future research opportunities. While MTurk is a great platform for being able to collect data from a large amount and variety of participants in a short amount of time, there are some drawbacks to using such a platform. As with any online platform, there is concern regarding whether bots are responding to surveys. There is still a lot of work being done to identify more statistically driven ways to check for survey responding by bots. However, there is confidence in this study's outcomes due to the variety of safeguards that were used to prevent bots from responding to the study and to ensure adequacy in responses. For example, only participants who had over a 98% approval rating and had completed over 5000 MTurk surveys could complete the survey, and participants had to complete CAPTCHAs and were screened for answer consistency.

A second limitation relates to the potential representativeness of the sample to different communities. Across samples, there was underrepresentation of participants identifying as Black or Latinx compared to the US census. Future work to establish the utility of this measure in new samples, including samples representing a variety of identities as well as off line samples, is needed in order to continue to build this measure's psychometric strength and to provide more theoretical understanding to attitudes toward homeless individuals.

In addition, some descriptor variables were highly skewed in this sample. Thus, the non-normality of these variables will need to be addressed prior to using these variables in analyses beyond simply describing the sample. More specifically, there were several outliers in terms of income with some participants reporting large household incomes. It is unclear whether these incomes are accurate or if there may have been errors in typing in the correct income. However, the median income was equivalent to the average income reported by the U.S. Census. It is important to note that those outliers still passed consistency and attention check items throughout the survey, which prevented them from being excluded from the analyses.

Due to factor structure, the SAPH ended up being comprised of only negatively worded items. This can be viewed as a strength in many ways, particularly concerning the ease in which total scores can be calculated. However, it also means that this measure only captures degrees of negative attitudes; that is, more negative attitudes to less negative attitudes. It does not capture a range of attitudes including positive attitudes toward homeless individuals. Thus, it is only measuring one half of the whole dimension of attitudes. It is unclear whether a negatively worded, brief measure would prime participants to have more negative attitudes toward homeless individuals, and this should be examined further.

### **Future Directions**

This project represents a small piece that is needed for theory refinement and measure development, but it provides many avenues for future directions. It would also be important for this measure to be tested in a setting or intervention that has shown to improve attitudes toward homeless individuals so that the SAHP can be examined with

regards to its sensitivity to change. Since it is the hope that the purposed model and the newly developed measure can be used to identify targets for attitude change, it would be important for this measure to be able to capture changes in attitudes.

It is important to note that the measure developed in this current study is only one measure that is intended to be developed to explore the proposed integrated model. This measure was specifically designed to be a brief one factor measure that could be easily administered in a variety of studies. Future work should include developing a bank of measures based on the proposed model that can be used to assess attitudes toward homeless individuals. To address the above issue, a two-factor measure should be created that includes both negative and positive cognitive attitudes in order to capture all degrees of attitudes.

In a similar vein, this measure only includes one item per construct from the model. Although this measure accomplished its goals of being a one-factor measure capturing a variety of attitudes, it would be important to create a longer version of this measure that includes subscales of the identified constructs. Developing a longer measure with subscales representing each of the nine constructs of cognitive evaluations would allow researchers to identify and examine changes in attitudes across the different constructs and to further examine the complexity of attitudes toward homeless individuals. With a multidimensional measure, the purposed model could be tested using structural equation modeling. In order to test this model, psychometrically and theoretically sound instruments will need to be developed.

Additionally, future research should also explore how this measure of cognitive evaluations relates to the affective and behavioral evaluations outlined in the purposed

model. To do this, measurement will need to be developed in order to assess the constructs proposed within the affective and behavioral components of the model. It will need to be determined whether a self-report survey is the best way to assess affective and behavioral evaluations. Since affective evaluations are related more to implicit attitudes (Gawronski & Bodenhausen, 2007), a measure may need to be developed that can better capture automatic affective reactions to homeless individuals. It may be that a measure more similar to the Implicit Association Test may better capture automatic affective responses (Greenwald & Mahzarin, 1995), which has participants rapidly select evaluative terms (e.g., good/bad) when shown some target word (e.g., black/white). While the Implicit Association Test has been adapted to assess implicit attitudes for a number of outgroups, it has yet to be applied to the homeless (Project Implicit, 2011).

With regards to measuring behavioral evaluations, a similar decision as affective evaluations would need to be made into whether a direct, self-report survey is the best way of measuring behavior. In addition, it is important to consider the difference between measuring actual behavior versus behavioral intentions. For example, after completing a stigma-reduction intervention, it would be important to measure whether people report improved intentions regarding their interactions with the homeless as well as measuring their actual behaviors. Fishbein & Ajzen's (1975) theory of planned behavior posits that behavioral intention is a main antecedent of behavior. However, improved behavioral intentions do not always lead to improved behaviors (Hassan, Shiu, & Shaw, 2016), as demonstrated in research focused on the intention-behavior gap (Carrington, Neville, & Whitewell, 2010). Thus, it would be important to consider these concepts when deciding how to best measure behavioral evaluations toward homeless individuals.

Future research should validate the theoretical framework proposed in this project so that the relationship between and within cognitive, affective, and behavioral evaluations can be better understood within the context of attitudes toward homeless persons. Testing this model and identifying the core components related to attitudes toward homeless people could better inform stigma-reduction interventions aiming to improve attitudes. Once more is understood about attitudes toward homeless individuals, it would be important to extend this work by examining how these attitudes relate to attitudes toward the social issue of homelessness, which would likely require a different set of measurement.

### **Summary**

Overall, this dissertation has provided preliminary validation of a 9-item, one factor instrument that can be used to assess negative attitudes toward homeless individuals. While more validation is needed, the SAHP appears to improve upon past brief measures used for this purpose with improved reliability and survey structure. This survey was developed based on an integrated model of social psychological theories that explain attitudes toward outgroups. The SAHP is a brief survey that measures the cognitive evaluations proposed in that model. While more validation work of both the measure and the model is needed, it has potential applications for furthering our understanding of attitudes toward homeless individuals and be used within a variety of studies seeking to assess and change negative attitudes.

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## APPENDIX A: ATTITUDES TOWARDS HOMELESSNESS INVENTORY

The following items are designed to assess your attitudes about homelessness. Please read each item carefully and then indicate your level of agreement or disagreement with it by selecting one of the six response options. Please respond honestly. There are no right or wrong answers and your responses will be treated confidentially.

*Subscales:* Personal Causation (PC) 1, 7, 8; Structural Causation (SC) 2, 3, 9; Affiliation (AFF) 4, 10, 12; Solutions (SOLNS) 5, 6, 11

### 1. Homeless people had parents who took little interest in them as children. (PC)

1	2	3	4	5	6
<i>Strongly Agree</i>	<i>Agree</i>	<i>Unsure, but probably Agree</i>	<i>Unsure, but probably Disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

### 2. Recent government cutbacks in housing assistance for the poor may have made the homeless problem in this country worse. (SC)

1	2	3	4	5	6
<i>Strongly Agree</i>	<i>Agree</i>	<i>Unsure, but probably Agree</i>	<i>Unsure, but probably Disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

### 3. The low minimum wage in this country virtually guarantees a homeless population. (SC)

1	2	3	4	5	6
<i>Strongly Agree</i>	<i>Agree</i>	<i>Unsure, but probably Agree</i>	<i>Unsure, but probably Disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

### 4. I would feel comfortable eating a meal with a homeless person. (AFF)

1	2	3	4	5	6
<i>Strongly Agree</i>	<i>Agree</i>	<i>Unsure, but probably Agree</i>	<i>Unsure, but probably Disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

### 5. Rehabilitation programs for homeless people are too expensive to operate. (SOL)

1	2	3	4	5	6
<i>Strongly Agree</i>	<i>Agree</i>	<i>Unsure, but probably Agree</i>	<i>Unsure, but probably Disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

### 6. There is little to be done for people in homeless shelters except to see that they are comfortable and well fed. (SOL)

1	2	3	4	5	6
<i>Strongly Agree</i>	<i>Agree</i>	<i>Unsure, but probably Agree</i>	<i>Unsure, but probably Disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

**7. Most circumstances of homelessness in adults can be traced to their emotional experiences in childhood. (PC)**

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
<i>Strongly Agree</i>	<i>Agree</i>	<i>Unsure, but probably Agree</i>	<i>Unsure, but probably Disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

**8. Most homeless persons are substance abusers. (PC)**

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
<i>Strongly Agree</i>	<i>Agree</i>	<i>Unsure, but probably Agree</i>	<i>Unsure, but probably Disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

**9. Recent government cutbacks in welfare have contributed substantially to the homeless problem in this country. (SC)**

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
<i>Strongly Agree</i>	<i>Agree</i>	<i>Unsure, but probably Agree</i>	<i>Unsure, but probably Disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

**10. I feel uneasy when I meet homeless people. (AFF)**

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
<i>Strongly Agree</i>	<i>Agree</i>	<i>Unsure, but probably Agree</i>	<i>Unsure, but probably Disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

**11. A homeless person cannot really be expected to adopt a normal lifestyle. (SOL)**

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
<i>Strongly Agree</i>	<i>Agree</i>	<i>Unsure, but probably Agree</i>	<i>Unsure, but probably Disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

## APPENDIX B – EXPERIENCE WITH HOMELESSNESS, STUDY 1

*Finally, I wanted to ask about any experiences you may have had with homelessness or addressing homelessness. Please answer Yes or No.*

Have you had these experiences?

1. Been homeless	YES	or	NO
2. Stayed at someone else's home when I didn't have a place to live	YES	or	NO
3. Have a family member or friend who has been homeless	YES	or	NO
4. Had a conversation with a homeless person who was not a friend or family member	YES	or	NO
5. Had a negative experience with a homeless person	YES	or	NO
6. Had a positive experience with a homeless person	YES	or	NO
7. Done volunteer work involving homelessness	YES	or	NO
8. Given money to a homeless person on the street	YES	or	NO
9. Given money to an agency that addresses homelessness	YES	or	NO

10. On a scale from 1 to 7 with one being negative to 7 being positive, in general, what have your interactions with homeless people been like?

1	2	3	4	5	6	7
Negative						Positive

## APPENDIX C – ATTITUDES TOWARDS HOMELESSNESS QUESTIONNAIRE

Please select the number that most closely represents your views on the questionnaire.

There are no right and wrong answers to these questions. You do not need to spend long on each statement- often your first response is the most accurate.

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>6</i>
<i>Strongly Agree</i>	<i>Agree</i>	<i>Neither Agree nor Disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>

1. Homeless people do not choose to be homeless 5	1	2	3	4
2. Nearly all homeless people are drug addicts 5	1	2	3	4
3. Homeless people are victims 5	1	2	3	4
4. Homeless people are rude 5	1	2	3	4
5. Homeless people are aggressive 5	1	2	3	4
6. Homelessness is a major problem in our society 5	1	2	3	4
7. Homelessness is a self inflicted state 5	1	2	3	4
8. Homelessness is not a health issue 5	1	2	3	4
9. People make themselves homeless to get a better house 5	1	2	3	4
10. No one in this country has to 'sleep rough' 5	1	2	3	4
11. The State should spend more money on providing housing 5	1	2	3	4
12. Alcoholism is a personal weakness 5	1	2	3	4
13. Homelessness is not a significant problem in the US 5	1	2	3	4
14. The State should spend more money on the care of the homeless 5	1	2	3	4



## APPENDIX D: THE POSITIVE AND NEGATIVE AFFECT SCHEDULE

The scale consists of a number of words that describe different feelings and emotions. Read each item and then list the number from the scale below next to each word. Indicate to what extent you feel this way right now, that is, at the present moment.

1	2	3	4	5
Very Slightly or Not at All	A Little	Moderately	Quite a Bit	Extremely

_____ 1. Interested	_____ 11. Irritable
_____ 2. Distressed	_____ 12. Alert
_____ 3. Excited	_____ 13. Ashamed
_____ 4. Upset	_____ 14. Inspired
_____ 5. Strong	_____ 15. Nervous
_____ 6. Guilty	_____ 16. Determined
_____ 7. Scared	_____ 17. Attentive
_____ 8. Hostile	_____ 18. Jittery
_____ 9. Enthusiastic	_____ 19. Active
_____ 10. Proud	_____ 20. Afraid

## APPENDIX E: PERCEIVED VULNERABILITY TO DISEASE QUESTIONNAIRE

Listed below are 15 statements. For each statement, rate the extent to which you agree or disagree with it. Indicate your rating by circling the number between 1 and 7 which best reflects your opinion (1 = strongly disagree, 7 = strongly agree)

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

1.	It really bothers me when people sneeze without covering their mouths.	1	2	3	4	5	6	7
2.	If an illness is 'going around,' I will get it.	1	2	3	4	5	6	7
3.	I am comfortable sharing a water bottle with a friend.	1	2	3	4	5	6	7
4.	I don't like to write with a pencil someone else has obviously chewed on.	1	2	3	4	5	6	7
5.	My past experiences make me believe I am not likely to get sick even when my friends are sick.	1	2	3	4	5	6	7
6.	I have a history of susceptibility to infectious diseases.	1	2	3	4	5	6	7
7.	I prefer to wash my hands pretty soon after shaking someone's hand.	1	2	3	4	5	6	7
8.	In general, I am very susceptible to colds, flu, and other infectious disease.	1	2	3	4	5	6	7
9.	I dislike wearing used clothes because you don't know what the past person who wore it was like.	1	2	3	4	5	6	7
10.	I am more likely than the people around me to catch an infectious disease.	1	2	3	4	5	6	7
11.	My hands do not feel dirty after touching money.	1	2	3	4	5	6	7
12.	I am unlikely to catch a cold, flu, or other illness, even if it is going around.	1	2	3	4	5	6	7
13.	It does not make me anxious to be around sick people.	1	2	3	4	5	6	7
14.	My immune system protects me from most illnesses that other people get.	1	2	3	4	5	6	7
15.	I avoid using public telephones because of the risk that I may catch something from the previous user.	1	2	3	4	5	6	7

## APPENDIX F: INTERGROUP DISGUST SENSITIVITY SCALE

Please circle your response, using the scale below.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Strongly Disagree</b>	<b>Moderately Disagree</b>	<b>Slightly Disagree</b>	<b>Neither Disagree Nor Agree</b>	<b>Slightly Agree</b>	<b>Moderately Agree</b>	<b>Strongly Agree</b>

1. I would ask for hotel bed sheets to be changed if the previous occupant belonged to another social group.

**1                      2                      3                      4                      5                      6                      7**

2. I feel disgusted when people from other ethnic groups invade my personal space.

**1                      2                      3                      4                      5                      6                      7**

3. When socializing with members of a stigmatized group, one can easily become tainted by their stigma.

**1                      2                      3                      4                      5                      6                      7**

4. After shaking hands with someone from another ethnic group, even if their hands were clean, I would want to wash my hands.

**1                      2                      3                      4                      5                      6                      7**

5. After interacting with another ethnic group, I typically desire more contact with my own ethnic group to “undo” any ill effects from intergroup contact.

**1                      2                      3                      4                      5                      6                      7**

6. I would not feel disgusted if I ate food prepared by another ethnic group with their hands

**1                      2                      3                      4                      5                      6                      7**

7. It would be repulsive to swim in a chlorinated swimming pool if most of the people in the pool belonged to another ethnic group.

**1                      2                      3                      4                      5                      6                      7**

8. It would not bother me to have an intimate sexual relationship with someone from another racial group.

**1                      2                      3                      4                      5                      6                      7**

### APPENDIX G: INTERGROUP ANXIETY SCALE – MODIFIED

Please indicate how you would feel on a range of 1 (not at all) to 10 (extremely), how much you would feel the following emotions when interacting with a homeless person.

1	2	3	4	5	6	7	8	9	10
Not at All									Extremely

1.	Uncertain	1	2	3	4	5	6	7	8	9	10
2.	Worried	1	2	3	4	5	6	7	8	9	10
3.	Awkward	1	2	3	4	5	6	7	8	9	10
4.	Anxious	1	2	3	4	5	6	7	8	9	10
5.	Threatened	1	2	3	4	5	6	7	8	9	10
6.	Nervous	1	2	3	4	5	6	7	8	9	10
7.	Comfortable	1	2	3	4	5	6	7	8	9	10
8.	Trusting	1	2	3	4	5	6	7	8	9	10
9.	Friendly	1	2	3	4	5	6	7	8	9	10
10.	Confident	1	2	3	4	5	6	7	8	9	10
11.	Safe	1	2	3	4	5	6	7	8	9	10
12.	At ease	1	2	3	4	5	6	7	8	9	10

## APPENDIX H: ATTRIBUTION QUESTIONNAIRE

**Please read the following statement about Taylor:**

Taylor is 30 years old and is currently homeless. Taylor is not married and does not have any children. Taylor has a long history of estranged family relationships. Taylor has been living in shelters for homeless people. Before becoming homeless, Taylor held a number of low-paying jobs including working at a large paper manufacturing company. However, Taylor has been unemployed for over a year now.

**Now answer each of the following questions about Taylor. Select the number of the best answer to each question.**

### **Blame**

10. I would think that it was Taylor's own fault that he/she is in the present condition.

**1      2      3      4      5      6      7      8      9**

no, not at all

yes, absolutely so

11. How controllable, do you think, is the cause of Taylor's present condition?

**1      2      3      4      5      6      7      8      9**

not at all under  
personal control

completely under  
personal control

23. How responsible, do you think, is Taylor for his/her present condition?

**1      2      3      4      5      6      7      8      9**

not at all  
responsible

very much  
responsible

### **Anger**

1. I would feel aggravated by Taylor.

**1      2      3      4      5      6      7      8      9**

not at all

very much

4. How angry would you feel at Taylor?

1 2 3 4 5 6 7 8 9

not at all

very much

12. How irritated would you feel by Taylor?

1 2 3 4 5 6 7 8 9

not at all

very much

**Pity**

9. I would feel pity for Taylor.

1 2 3 4 5 6 7 8 9

none at all

very much

22. How much sympathy would you feel for Taylor?

1 2 3 4 5 6 7 8 9

none at all

very much

27. How much concern would you feel for Taylor?

1 2 3 4 5 6 7 8 9

none at all

very much

**Help**

8. I would be willing to talk to Taylor about his/her problems.

1 2 3 4 5 6 7 8 9

not at all

very much

20. How likely is it that you would help Taylor?

1 2 3 4 5 6 7 8 9

definitely  
would not help

definitely  
would help

21. How certain would you feel that you would help Taylor?

1	2	3	4	5	6	7	8	9
not at all certain								absolutely certain

**Dangerousness**

2. I would feel unsafe around Taylor.

1	2	3	4	5	6	7	8	9
no, not at all								yes, very much

13. How dangerous would you feel Taylor is?

1	2	3	4	5	6	7	8	9
not at all								very much

18. I would feel threatened by Taylor.

1	2	3	4	5	6	7	8	9
no, not at all								yes, very much

**Fear**

3. Taylor would terrify me.

1	2	3	4	5	6	7	8	9
not at all								very much

19. How scared of Taylor would you feel?

1	2	3	4	5	6	7	8	9
not at all								very much

24. How frightened of Taylor would you feel?

1	2	3	4	5	6	7	8	9
not at all								very much

**Avoidance** (reverse score all three questions)

7. If I were an employer, I would interview Taylor for a job.

1 2 3 4 5 6 7 8 9

not likely

very likely

16. I would share a car pool with Taylor every day.

1 2 3 4 5 6 7 8 9

not likely

very much likely

26. If I were a landlord, I probably would rent an apartment to Taylor.

1 2 3 4 5 6 7 8 9

not likely

very likely

### **Segregation**

6. I think Taylor poses a risk to his/her neighbors unless he/she is hospitalized.

1 2 3 4 5 6 7 8 9

none at all

very much

15. I think it would be best for Taylor's community if he/she were put away in a psychiatric hospital.

1 2 3 4 5 6 7 8 9

not at all

very much

17. How much do you think an asylum, where Taylor can be kept away from his/her neighbors, is the best place for him/her?

1 2 3 4 5 6 7 8 9

not at all

very much

### **Coercion**

5. If I were in charge of Taylor's treatment, I would require him/her to take his/her medication.

1 2 3 4 5 6 7 8 9



not at all

very much

14. How much do you agree that Taylor should be forced into treatment with his/her doctor even if he/she does not want to?

**1      2      3      4      5      6      7      8      9**

not at all

very much

25. If I were in charge of Taylor's treatment, I would force him/her to live in a group home.

**1      2      3      4      5      6      7      8      9**

not at all

very much

Note: Items are organized according to subscale. The item number indicates the item's actual placement in the questionnaire as completed by the participant.

## **APPENDIX I: NEUTRAL OBJECT SATISFACTION QUESTIONNAIRE – SHORT FORM**

Directions: The following questions ask about your degree of satisfaction with several items. Consider each item carefully. Circle the numbered response that best represents your feeling about the corresponding item.

		Dissatisfied	Neutral	Satisfied
1.	The city in which you live	1	2	3
2.	The residence where you live	1	2	3
3.	The neighbors you have	1	2	3
4.	The high school you attended	1	2	3
5.	The climate where you live	1	2	3
6.	The movies being produced today	1	2	3
7.	The quality of food you buy	1	2	3
8.	Today's cars	1	2	3
9.	Local newspapers	1	2	3
10.	Your relaxation time	1	2	3
11.	Your first name	1	2	3
12.	The people you know	1	2	3
13.	Television programs	1	2	3
14.	Local speed limits	1	2	3
15.	The way people drive	1	2	3
16.	Advertising	1	2	3
17.	The way you were raised	1	2	3
18.	Telephone service	1	2	3
19.	Public transportation	1	2	3

20.	Restaurant food	1	2	3
21.	Yourself	1	2	3
22.	Modern art	1	2	3
23.	Popular music	1	2	3
24.	8 ½" x 11" paper	1	2	3
25.	Your telephone number	1	2	3

## **APPENDIX J: INFORMED CONSENT, STUDY 2**

### **UNIVERSITY OF SOUTH CAROLINA**

#### **CONSENT TO BE A RESEARCH SUBJECT**

##### **Views of Homeless Persons**

You are being asked to participate in this study because you are a user of Amazon Mechanical Turk. The purpose of this study is to gather various opinions on homeless people. The results from this study will be used to construct a survey to understand how people view homeless people. You will be asked to complete questions that collect basic demographic information and assess various opinions of homeless people. Participation in this study is completely voluntary and anonymous. You are free to terminate your participation at any time or skip questions that you do not feel comfortable answering. This study is being conducted by Nyssa Snow-Hill, a graduate student in the Department of Psychology at the University of South Carolina. In return for your time and effort, you will receive \$1 for participation in this research study. Participation in the study will take about 15-20 minutes to complete. Once you complete the survey, please submit over Amazon Mechanical Turk. After the survey is reviewed, your account will be credited with \$1. If you have any questions participation in this study, email Nyssa Snow-Hill at [nsnow@email.sc.edu](mailto:nsnow@email.sc.edu). Questions about your rights as a research subject are to be directed to, Lisa Johnson, Assistant Director, Office of Research Compliance, University of South Carolina, 1600 Hampton Street, Suite 414D, Columbia, SC 29208, phone: (803) 777-7095 or email: [LisaJ@mailbox.sc.edu](mailto:LisaJ@mailbox.sc.edu).

## **APPENDIX K: DEBRIEFING FORM, STUDY 2**

### **Debriefing Form if Survey is Completed**

Thank you for participating in this study. The purpose of this study is to gather various opinions on people experiencing homelessness. The results from this study will be used to construct a survey to understand how people view homeless people. This study is being conducted by Nyssa Snow-Hill, a graduate student in the Department of Psychology at the University of South Carolina. In return for your time and effort, you will receive \$1 for participation in this research study. After the survey is reviewed and determined to be a quality response, your account will be credited with \$1. If you have any questions about your participation in this study, email Nyssa Snow-Hill at [nsnow@email.sc.edu](mailto:nsnow@email.sc.edu). Questions about your rights as a research subject are to be directed to, Lisa Johnson, Assistant Director, Office of Research Compliance, University of South Carolina, 1600 Hampton Street, Suite 414D, Columbia, SC 29208, phone: (803) 777-7095 or email: [LisaJ@mailbox.sc.edu](mailto:LisaJ@mailbox.sc.edu).

### **Debriefing Form if Qualification Requirements are not Met**

Thank you for considering to take this survey. As stated in the consent form, there are certain requirements that must be met in order to participate and receive compensation.

You are seeing this message because you are not eligible to complete the study and receive compensation. This may be due to any of the following reasons:

- You are not a resident of the United States of America.
- You are under 18 years of age.
- You failed to answer a question that checked to see if you read and understood the instructions.
- You completed this survey more than once.

This follows Amazon Mechanical Turk policy, which states that "a Requester may reject your work if the HIT was not completely correctly or the instructions were not followed."

You may close this window or use your explorer bar to navigate back to the Amazon Mechanical Turk site.

Thank you for your time.

## **APPENDIX L: DEMOGRAPHIC QUESTIONS, STUDY 2 AND 3**

Please complete the following demographic information:

1. Age: \_\_\_\_\_
2. Gender: \_\_\_\_\_
3. Race/Ethnicity:
  - a. White
  - b. Black
  - c. Latino/a
  - d. Asian/Pacific Islander
  - e. Native American
  - f. Biracial/Multiracial. Please describe: \_\_\_\_\_
  - g. Other. Please describe: \_\_\_\_\_
4. Highest level of education completed:
  - a. Less than high school diploma/GED
  - b. High School Diploma/GED
  - c. Some College
  - d. Associate's Degree
  - e. Bachelor's Degree
  - f. Graduate/Professional Training
5. Yearly household income: \_\_\_\_\_

## APPENDIX M: ITEM POOL, STUDY 2

Please select how much you agree or disagree with each statement.

Response Options:

1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree

9.*	Homeless people commit violent crimes.	1	2	3	4	5	6
10.*	Homeless people have no motivation to improve their circumstances.	1	2	3	4	5	6
11.*	People experiencing homelessness are dirty.	1	2	3	4	5	6
12.	Homeless people are not receiving as much government assistance as people think.	1	2	3	4	5	6
13.	Homeless people value hard work.	1	2	3	4	5	6
14.*	I think that homeless people are just pulling a con on people when they are panhandling.	1	2	3	4	5	6
15.*	People experiencing homelessness are rude.	1	2	3	4	5	6
16.	Homeless people are reasonable.	1	2	3	4	5	6
17.*	Homeless people behave unpredictably.	1	2	3	4	5	6
18.*	People experiencing homelessness are lazy.	1	2	3	4	5	6
19.	I am not likely to “catch” something from a homeless person.	1	2	3	4	5	6
20.*	Homeless people use up money that could be used for more important things.	1	2	3	4	5	6
21.*	Homeless people ruin my time at parks by being there.	1	2	3	4	5	6
22.*	People are likely homeless because they dropped out of school.	1	2	3	4	5	6
23.*	Homeless people are immoral.	1	2	3	4	5	6
24.	Homeless people are likable.	1	2	3	4	5	6
25.*	People experiencing homelessness are alcoholics.	1	2	3	4	5	6
26.*	Homeless people make communities more dangerous.	1	2	3	4	5	6
27.*	Homeless people are looking for handouts rather than work.	1	2	3	4	5	6
28.	Homeless people take care of their personal hygiene when they have access to basic necessities.	1	2	3	4	5	6

29.*	People experiencing homelessness are using my tax dollars and are still homeless.	1	2	3	4	5	6
30.*	Homeless people want their rights to be put ahead of the rights of people like me.	1	2	3	4	5	6
31.*	Homeless people do not know how to take care of themselves.	1	2	3	4	5	6
32.	Homeless people are trustworthy.	1	2	3	4	5	6
33.*	People experiencing homelessness don't care about the struggles of other people.	1	2	3	4	5	6
34.*	Homeless people are mentally ill.	1	2	3	4	5	6
35.*	I fear for my safety when I am around homeless people.	1	2	3	4	5	6
36.*	Homeless people don't work because they can make enough money sitting on the street doing nothing.	1	2	3	4	5	6
37.*	Homeless people smell bad.	1	2	3	4	5	6
38.	Homeless people do not receive enough resources to help them with their situation.	1	2	3	4	5	6
39.*	People experiencing homelessness need to help themselves.	1	2	3	4	5	6
40.	Homeless people are intelligent.	1	2	3	4	5	6
41.*	Homeless people use the system when they could pay their own way.	1	2	3	4	5	6
42.*	Homeless people are unpleasant.	1	2	3	4	5	6
43.*	You cannot reason with a homeless person.	1	2	3	4	5	6
44.	Homeless people do not have criminal records.	1	2	3	4	5	6
45.*	Homeless people are too lazy to help themselves.	1	2	3	4	5	6
46.*	People experiencing homelessness spread diseases.	1	2	3	4	5	6
47.*	Homeless people are using all of the available government assistance and are still homeless.	1	2	3	4	5	6
48.*	Homeless people need to help themselves.	1	2	3	4	5	6
49.	Homeless people are able to hold conversations with others.	1	2	3	4	5	6
50.*	A homeless person's immoral behavior likely led to their current situation.	1	2	3	4	5	6
51.*	Homeless people are rude.	1	2	3	4	5	6
52.*	Homeless people have unreasonable beliefs about how they should be treated.	1	2	3	4	5	6
53.	I feel safe around homeless people.	1	2	3	4	5	6
54.*	Homeless people are too lazy to get a job.	1	2	3	4	5	6
55.*	Homeless people have diseases that can be spread to other people.	1	2	3	4	5	6
56.*	Resources that go to homeless people take away from resources from people like me.	1	2	3	4	5	6
57.*	Homeless people have very different values from people like me.	1	2	3	4	5	6



58.	Homeless people are competent enough to work a variety of jobs.	1	2	3	4	5	6
59.*	People experiencing homelessness are immoral.	1	2	3	4	5	6
60.*	Homeless people only care about themselves.	1	2	3	4	5	6
61.*	Homeless people are drug addicts.	1	2	3	4	5	6
62.*	Homeless people you see on the street are dangerous.	1	2	3	4	5	6
63.	People experiencing homelessness try to improve their circumstances.	1	2	3	4	5	6
64.*	Homeless people spread diseases.	1	2	3	4	5	6
65.*	If homeless people get more government help, things will be more difficult for people like me.	1	2	3	4	5	6
66.*	I am unable to go to certain parks because homeless people are there.	1	2	3	4	5	6
67.	Homeless people are responsible.	1	2	3	4	5	6
68.*	Homeless people waste government money.	1	2	3	4	5	6
69.	People experiencing homelessness are likable.	1	2	3	4	5	6
70.*	You can't talk to a homeless person because they don't make sense.	1	2	3	4	5	6
71.*	Homeless people are aggressive.	1	2	3	4	5	6
72.*	Homeless people would rather leech off of the welfare system than work hard.	1	2	3	4	5	6
73.*	Homeless people infect outdoor areas.	1	2	3	4	5	6
74.	The amount of government resources provided to homeless people is reasonable given their need.	1	2	3	4	5	6
75.*	I don't know how to help a homeless person.	1	2	3	4	5	6
76.*	Homeless people would only be able to hold low-status jobs.	1	2	3	4	5	6
77.*	People experiencing homelessness use the system when they could pay their own way.	1	2	3	4	5	6
78.	Homeless people care about their families.	1	2	3	4	5	6
79.*	Whatever money homeless people have, they spend on drugs and alcohol.	1	2	3	4	5	6
80.*	Homeless people have likely committed felonies.	1	2	3	4	5	6
81.*	Homeless people choose to be homeless.	1	2	3	4	5	6
82.*	People experiencing homelessness smell bad.	1	2	3	4	5	6
83.*	The government has provided more help to homeless people than they deserve.	1	2	3	4	5	6
84.	My time out and about is not negatively impacted by seeing homeless people.	1	2	3	4	5	6
85.*	Homeless people are disorganized and careless.	1	2	3	4	5	6
86.*	Homeless people commit petty crimes because they are delinquent.	1	2	3	4	5	6
87.*	I just don't like homeless people.	1	2	3	4	5	6
88.	People experiencing homelessness are reasonable.	1	2	3	4	5	6
89.*	Homeless people make areas feel unsafe.	1	2	3	4	5	6

90.*	Homeless people are lazy.	1	2	3	4	5	6
91.*	Most homeless people have a sexually transmitted infection.	1	2	3	4	5	6
92.*	Homeless people prevent the economy from improving.	1	2	3	4	5	6
93.	Homeless people value taking care of themselves.	1	2	3	4	5	6
94.*	Homeless people make a lot of bad choices.	1	2	3	4	5	6
95.*	Homeless people urinate in public because they lack morals.	1	2	3	4	5	6
96.	Homeless people are friendly.	1	2	3	4	5	6
97.*	People experiencing homelessness tend to be paranoid.	1	2	3	4	5	6
98.	Homeless people are more likely to be victims of a crime than to commit a crime.	1	2	3	4	5	6
99.*	If homeless people worked harder, they wouldn't be homeless.	1	2	3	4	5	6
100.*	Homeless people are dirty.	1	2	3	4	5	6
101.*	Having homeless people around hurts business.	1	2	3	4	5	6
102.	People experiencing homelessness value hard work.	1	2	3	4	5	6
103.*	Homeless people are bad money managers.	1	2	3	4	5	6
104.*	Homeless people are offensive.	1	2	3	4	5	6
105.	Homeless people will help you out if you are in trouble.	1	2	3	4	5	6
106.*	It is impossible to follow a homeless person's train of thought.	1	2	3	4	5	6
107.*	People experiencing homelessness behave unpredictably.	1	2	3	4	5	6
108.	Homeless people try to get jobs.	1	2	3	4	5	6
109.*	The city needs to disinfect the area where homeless people have been.	1	2	3	4	5	6
110.*	Homeless people take advantage of the city to get better housing.	1	2	3	4	5	6
111.*	A downtown area cannot be revitalized because of homeless people.	1	2	3	4	5	6
112.	People experiencing homelessness are able to hold conversations with others.	1	2	3	4	5	6
113.	Homeless people live by a set of moral principles.	1	2	3	4	5	6
114.*	Homeless people don't care about the struggles of other people.	1	2	3	4	5	6
115.*	Homeless people are alcoholics.	1	2	3	4	5	6
116.	People experiencing homelessness are not dangerous.	1	2	3	4	5	6
117.	Being homeless requires working hard to obtain basic necessities.	1	2	3	4	5	6
118.*	I would avoid a business if homeless people were there.	1	2	3	4	5	6

119.*	If homeless people tried harder, they would be just as well off as people like me.	1	2	3	4	5	6
120.*	Homeless people are bad money managers.	1	2	3	4	5	6
121.	People experiencing homelessness are trustworthy.	1	2	3	4	5	6
122.	Homeless people will help you out if you are in trouble.	1	2	3	4	5	6
123.*	Homeless people tend to be paranoid.	1	2	3	4	5	6
124.*	People experiencing homelessness are aggressive.	1	2	3	4	5	6
125.	Most homeless people would work if they could get a job.	1	2	3	4	5	6
126.*	If you talk to a homeless person, they will ask you for money.	1	2	3	4	5	6
127.*	I don't want to think about people experiencing homelessness.	1	2	3	4	5	6
128.	People experiencing homelessness are competent enough to work a variety of jobs.	1	2	3	4	5	6
129.	Homeless people are law-abiding	1	2	3	4	5	6
130.	Homeless people are nice.	1	2	3	4	5	6
131.*	People experiencing homelessness are too lazy to get a job.	1	2	3	4	5	6
132.	Homeless people are not dangerous.	1	2	3	4	5	6
133.*	Homeless people ruin neighborhoods.	1	2	3	4	5	6
134.*	If people experiencing homelessness tried harder, they would be just as well off as people like me.	1	2	3	4	5	6
135.	Homeless people are competent enough to make decisions for themselves.	1	2	3	4	5	6
136.	Homeless people have manners.	1	2	3	4	5	6
137.	Homeless people are rational.	1	2	3	4	5	6
138.	Someone can be working and still be homeless.	1	2	3	4	5	6
139.*	The government has provided more help to people experiencing homelessness than they deserve.	1	2	3	4	5	6
140.	Homeless people are capable of taking care of their pets.	1	2	3	4	5	6
141.	Homeless people try to improve their circumstances.	1	2	3	4	5	6
142.	People experiencing homelessness do not receive enough resources to help them with their situation.	1	2	3	4	5	6
143.*	If homeless people were smarter, they would not be homeless.	1	2	3	4	5	6
144.	Homeless people are realistic in the kind of help they deserve to receive.	1	2	3	4	5	6

\* = Reversed scored

## APPENDIX N – ITEM ELIMINATION TABLE

Item Pool			Reason for Item Removal			
	Item	Construct	People Experiencing Homelessness	Correlations	Factor Loading <0.7	Lower Face Validity
9.*	Homeless people commit violent crimes.	Dangerousness			X	
17.*	Homeless people behave unpredictably.	Dangerousness			X	
26.*	Homeless people make communities more dangerous.	Dangerousness				X
35.*	I fear for my safety when I am around homeless people.	Dangerousness			X	
44.	Homeless people do not have criminal records.	Dangerousness		X		
53.	I feel safe around homeless people.	Dangerousness			X	
62.*	Homeless people you see on the street are dangerous.	Dangerousness				X

71.*	Homeless people are aggressive.	Dangerousness				X
80.*	Homeless people have likely committed felonies.	Dangerousness				
89.*	Homeless people make areas feel unsafe.	Dangerousness				X
98.	Homeless people are more likely to be victims of a crime than to commit a crime.	Dangerousness			X	
107.*	People experiencing homelessness behave unpredictably.	Dangerousness	X			
116.	People experiencing homelessness are not dangerous.	Dangerousness	X			
124.*	People experiencing homelessness are aggressive.	Dangerousness	X			
132.	Homeless people are not dangerous.	Dangerousness			X	
10.*	Homeless people have no motivation to improve their circumstances.	Laziness			X	
18.*	People experiencing homelessness are lazy.	Laziness	X			

27.*	Homeless people are looking for handouts rather than work.	Laziness				X
36.*	Homeless people don't work because they can make enough money sitting on the street doing nothing.	Laziness				X
45.*	Homeless people are too lazy to help themselves.	Laziness				X
54.*	Homeless people are too lazy to get a job.	Laziness				X
63.	People experiencing homelessness try to improve their circumstances.	Laziness	X			
72.*	Homeless people would rather leech off of the welfare system than work hard.	Laziness				
81.*	Homeless people choose to be homeless.	Laziness			X	
90.*	Homeless people are lazy.	Laziness				
99.*	If homeless people worked harder, they wouldn't be homeless.	Laziness				X

108.	Homeless people try to get jobs.	Laziness			X	
117.	Being homeless requires working hard to obtain basic necessities.	Laziness			X	
125.	Most homeless people would work if they could get a job.	Laziness			X	
131.*	People experiencing homelessness are too lazy to get a job.	Laziness	X			
138.	Someone can be working and still be homeless.	Laziness			X	
141.	Homeless people try to improve their circumstances.	Laziness			X	
11.*	People experiencing homelessness are dirty.	Cleanliness	X			
19.	I am not likely to “catch” something from a homeless person.	Cleanliness			X	
28.	Homeless people take care of their personal hygiene when they have access to basic necessities.	Cleanliness			X	

37.*	Homeless people smell bad.	Cleanliness			X	
46.*	People experiencing homelessness spread diseases.	Cleanliness	X			
55.*	Homeless people have diseases that can be spread to other people.	Cleanliness			X	
64.*	Homeless people spread diseases.	Cleanliness			X	
73.*	Homeless people infect outdoor areas.	Cleanliness				
82.*	People experiencing homelessness smell bad.	Cleanliness	X			
91.*	Most homeless people have a sexually transmitted infection.	Cleanliness				
100.*	Homeless people are dirty.	Cleanliness			X	
109.*	The city needs to disinfect the area where homeless people have been.	Cleanliness			X	
12.	Homeless people are not receiving as much government assistance as people think.	Realistic Threat			X	



20.*	Homeless people use up money that could be used for more important things.	Realistic Threat			X	
29.*	People experiencing homelessness are using my tax dollars and are still homeless.	Realistic Threat	X			
38.	Homeless people do not receive enough resources to help them with their situation.	Realistic Threat			X	
47.*	Homeless people are using all of the available government assistance and are still homeless.	Realistic Threat			X	
56.*	Resources that go to homeless people take away from resources from people like me.	Realistic Threat				
65.*	If homeless people get more government help, things will be more difficult for people like me.	Realistic Threat			X	
74.	The amount of government resources provided to	Realistic Threat		X		

	homeless people is reasonable given their need.					
83.*	The government has provided more help to homeless people than they deserve.	Realistic Threat				X
92.*	Homeless people prevent the economy from improving.	Realistic Threat			X	
101.*	Having homeless people around hurts business.	Realistic Threat			X	
110.*	Homeless people take advantage of the city to get better housing.	Realistic Threat				
118.*	I would avoid a business if homeless people were there.	Realistic Threat				X
126.*	If you talk to a homeless person, they will ask you for money.	Realistic Threat			X	
133.*	Homeless people ruin neighborhoods.	Realistic Threat				X
139.*	The government has provided more help to people experiencing homelessness	Realistic Threat	X			

	than they deserve.					
142.	People experiencing homelessness do not receive enough resources to help them with their situation.	Realistic Threat	X			
13.	Homeless people value hard work.	Symbolic Threat			X	
21.*	Homeless people ruin my time at parks by being there.	Symbolic Threat			X	
30.*	Homeless people want their rights to be put ahead of the rights of people like me.	Symbolic Threat			X	
39.*	People experiencing homelessness need to help themselves.	Symbolic Threat	X			
48.*	Homeless people need to help themselves.	Symbolic Threat			X	
57.*	Homeless people have very different values from people like me.	Symbolic Threat				
66.*	I am unable to go to certain parks because homeless people are there.	Symbolic Threat			X	
75.*	I don't know how to help a	Symbolic Threat		X		

	homeless person.					
84.	My time out and about is not negatively impacted by seeing homeless people.	Symbolic Threat		X		
93.	Homeless people value taking care of themselves.	Symbolic Threat			X	
102.	People experiencing homelessness value hard work.	Symbolic Threat	X			
111.*	A downtown area cannot be revitalized because of homeless people.	Symbolic Threat				X
119.*	If homeless people tried harder, they would be just as well off as people like me.	Symbolic Threat			X	
127.*	I don't want to think about people experiencing homelessness.	Symbolic Threat	X			
134.*	If people experiencing homelessness tried harder, they would be just as well off as people like me.	Symbolic Threat	X			
14.*	I think that homeless	Morality			X	

	people are just pulling a con on people when they are panhandling.					
23.*	Homeless people are immoral.	Morality				X
32.	Homeless people are trustworthy.	Morality			X	
41.*	Homeless people use the system when they could pay their own way.	Morality				
50.*	A homeless person's immoral behavior likely led to their current situation.	Morality				X
59.*	People experiencing homelessness are immoral.	Morality	X			
68.*	Homeless people waste government money.	Morality				X
77.*	People experiencing homelessness use the system when they could pay their own way.	Morality	X			
86.*	Homeless people commit petty crimes because they are delinquent.	Morality				X
95.*	Homeless people urinate in public	Morality				X

	because they lack morals.					
104.*	Homeless people are offensive.	Morality				
113.	Homeless people live by a set of moral principles.	Morality			X	
121.	People experiencing homelessness are trustworthy.	Morality	X			
129.	Homeless people are law-abiding	Morality			X	
136.	Homeless people have manners.	Morality			X	
15.*	People experiencing homelessness are rude.	Warmth	X			
24.	Homeless people are likable.	Warmth			X	
33.*	People experiencing homelessness don't care about the struggles of other people.	Warmth	X			
42.*	Homeless people are unpleasant.	Warmth				X
51.*	Homeless people are rude.	Warmth				
60.*	Homeless people only care about themselves.	Warmth				

69.	People experiencing homelessness are likable.	Warmth	X			
78.	Homeless people care about their families.	Warmth			X	
87.*	I just don't like homeless people.	Warmth				X
96.	Homeless people are friendly.	Warmth			X	
114.*	Homeless people don't care about the struggles of other people.	Warmth				X
122.	Homeless people will help you out if you are in trouble.	Warmth			X	
130.	Homeless people are nice.	Warmth			X	
16.	Homeless people are reasonable.	Rationality			X	
25.*	People experiencing homelessness are alcoholics.	Rationality	X			
34.*	Homeless people are mentally ill.	Rationality			X	
43.*	You cannot reason with a homeless person.	Rationality				
52.*	Homeless people have unreasonable beliefs about	Rationality				

	how they should be treated.					
61.*	Homeless people are drug addicts.	Rationality			X	
70.*	You can't talk to a homeless person because they don't make sense.	Rationality				X
79.*	Whatever money homeless people have, they spend on drugs and alcohol.	Rationality				X
88.	People experiencing homelessness are reasonable.	Rationality	X			
97.*	People experiencing homelessness tend to be paranoid.	Rationality	X			
106.*	It is impossible to follow a homeless person's train of thought.	Rationality			X	
115.*	Homeless people are alcoholics.	Rationality			X	
123.*	Homeless people tend to be paranoid.	Rationality			X	
137.	Homeless people are rational.	Rationality			X	
144.	Homeless people are realistic in the kind of help	Rationality			X	



	they deserve to receive.					
22.*	People are likely homeless because they dropped out of school.	Competence			X	
31.*	Homeless people do not know how to take care of themselves.	Competence			X	
40.	Homeless people are intelligent.	Competence			X	
49.	Homeless people are able to hold conversations with others.	Competence			X	
58.	Homeless people are competent enough to work a variety of jobs.	Competence		X		
67.	Homeless people are responsible.	Competence			X	
76.*	Homeless people would only be able to hold low-status jobs.	Competence			X	
85.*	Homeless people are disorganized and careless.	Competence				X
94.*	Homeless people make a lot of bad choices.	Competence			X	
103.*	Homeless people are bad	Competence			X	

	money managers.					
112.	People experiencing homelessness are able to hold conversations with others.	Competence	X			
120.*	Homeless people are bad money managers.	Competence			X	
128.	People experiencing homelessness are competent enough to work a variety of jobs.	Competence	X			
135.	Homeless people are competent enough to make decisions for themselves.	Competence			X	
140.	Homeless people are capable of taking care of their pets.	Competence			X	
143.*	If homeless people were smarter, they would not be homeless.	Competence				

## **APPENDIX O: STUDY 3 INFORMED CONSENT**

### **UNIVERSITY OF SOUTH CAROLINA**

#### **CONSENT TO BE A RESEARCH SUBJECT**

##### **Views of Homeless Persons 2**

You are being asked to participate in this study because you are a user of Amazon Mechanical Turk. The purpose of this study is to gather various opinions on homeless people. The results from this study will be used to construct and validate a survey to understand how people view homeless people. You will be asked to complete questions that collect basic demographic information and assess various opinions of homeless people. Participation in this study is completely voluntary and anonymous. You are free to terminate your participation at any time or skip questions that you do not feel comfortable answering. This study is being conducted by Nyssa Snow-Hill, a graduate student in the Department of Psychology at the University of South Carolina. In return for your time and effort, you will receive \$2 for participation in this research study. Participation in the study will take about 45 minutes to complete. Once you complete the survey, please submit over Amazon Mechanical Turk. After the survey is reviewed, your account will be credited with \$2. If you have any questions participation in this study, email Nyssa Snow-Hill at [nsnow@email.sc.edu](mailto:nsnow@email.sc.edu). Questions about your rights as a research subject are to be directed to, Lisa Johnson, Assistant Director, Office of Research Compliance, University of South Carolina, 1600 Hampton Street, Suite 414D, Columbia, SC 29208, phone: (803) 777-7095 or email: [LisaJ@mailbox.sc.edu](mailto:LisaJ@mailbox.sc.edu).

### **APPENDIX P: DEBRIEFING FORM, STUDY 3**

Thank you for participating in this study. The purpose of this study is to gather various opinions on people experiencing homelessness. The results from this study will be used to construct and validate a survey to understand how people view homeless people. This study is being conducted by Nyssa Snow-Hill, a graduate student in the Department of Psychology at the University of South Carolina. In return for your time and effort, you will receive \$2 for participation in this research study. After the survey is reviewed and checked to assure that you met survey requirements, your account will be credited with \$2. If you have any questions about your participation in this study, email Nyssa Snow-Hill through Amazon Mechanical Turk. Questions about your rights as a research subject are to be directed to, Lisa Johnson, Assistant Director, Office of Research Compliance, University of South Carolina, 1600 Hampton Street, Suite 414D, Columbia, SC 29208, phone: (803) 777-7095 or email: LisaJ@mailbox.sc.edu.

Your validation code is:

`#{e://Field/mTurkCode}`

To receive payment for participating, click "Accept HIT" in the Mechanical Turk window, enter this validation code, then click "Submit."