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**HOW TO COUNT:
A COMPREHENSIVE METHODOLOGY
FOR COUNTING UNACCOMPANIED YOUTH**

by

Laurie M. Goldmann, B.A.

A thesis submitted to
the Faculty of Graduate Studies and Research
in partial fulfillment of
the requirements for the degree of

Master of Arts
Department of Sociology and Anthropology

Carleton University

Ottawa, Ontario

May 10, 1999

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submitted by Laurie M. Goldmann, B.A.
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the degree of Master of Arts

Thesis Supervisor

Chair, Department of Sociology and Anthropology

Carleton University
May 25, 1999

ABSTRACT:

Historically the homeless population was believed to be homogeneous in composition. Today this group is comprised of people from all walks of life – male and female, young and old, sick and healthy, single individuals and families who find themselves on the streets and/or in shelters. Of these subgroups, unaccompanied youth are becoming an increasingly visible segment of the homeless population (e.g. squeegee kids). Services are required to help these youth before they become homeless adults. But how can services be properly designed when an accurate count of the target population does not exist? Depending on the purpose of the research, current data on the extent of homelessness suffers from underestimation to overestimation. Using a combination of enumeration techniques, a street and a shelter count, and the capture-recapture method of estimation, an accurate weekly estimate of the unaccompanied youth population of the Ottawa region will be attainable. This estimate will yield a more realistic portrayal of the size of the unaccompanied youth population. Knowing the size of the target population will guide policy development in the right direction – helping the unaccompanied youth population.

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THE STREET

*Living by the minute
forget about tomorrow.
A world full of sadness,
a world full of sorrow.
Cold dark nights,
long hard days,
The street kills our souls
in many ways.
Criminal deeds,
blood-filled fights,
fight for our turf,
fight for our rights.
Society scorns our
dreams,
thoughts and dreams,
the law of the street and
what it all means.
Kill for our people,
lie dead in a ditch.
Steal money for meals,
we're dreaded by rich.
The good times,
the bad times,
they're all the same.
If you want to survive
don't break the rules of
the game.
The streets are hell that
so few have seen,
but the people that have,
you know what I mean
Stay clear of the streets
or you'll never be free,
from the way of life that
was forced on me*

Homeless at 17

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CHAPTER 1: INTRODUCTION

Homelessness figures prominently among the on-going debates on social issues currently facing Canadian society. In the early 1980's the dominant attitude towards the homeless was "out of sight, out of mind". However, with the United Nations designation of 1987 as the "International Year of Shelter for the Homeless" the issue was brought into the forefront. Today, homelessness in Canada is recognized as a serious problem. As a result, a number of Canadian cities have declared homelessness as a national disaster. In the Ottawa-Carleton region, a resolution was passed on November 14, 1998 calling upon the Federal Government to declare homelessness a national disaster (RMOC, March 29, 1991: 1). Therefore,

"more and more the issue of homelessness is being propelled out of the darkness and into the centre of a growing, fierce public debate about the nature of our society and the way we deal with massive social maladies."
(O'Reilly-Fleming, 1993: 2).

This shift of the homeless from the fringes of society into the mainstream has made it difficult for politicians to ignore this issue. Consequently, on March 23, 1999, Claudette Bradshaw was appointed as the first Minister of Homelessness in Canada (Peritz et al., March 24, 1999: A4). Furthermore, a 2-day National Summit on Homelessness was held in Toronto. This was the first summit of its kind to be held with the issue of homelessness as the sole topic of discussion (Dunphy, March 27, 1999: A8).

In order to properly assess the magnitude of the homeless issue, reliable statistics are required. Statistics play an integral role in the description and analysis of any social problem as the reaction of policy-makers is dependent on the extent of the issue – the number of people affected and whether the proportions are believed to be increasing, decreasing or remaining static (Hutson and Liddiard, 1994: 30).

Whereas historically the homeless were believed to be composed of one homogenous group, today the population

“is overwhelmingly average, drawn from all walks of life, all social and economic strata, males and females, singles and families, young children and old, from a wide cross section of ethnic and racial backgrounds.” (O’Reilly-Fleming, 1993: xiv)

Within this heterogeneous population youth are one of the fastest growing groups with youth homelessness on the rise in all major Canadian cities (Golden, 1999: 19). However, the actual size of the homeless youth population is still difficult to determine due to a lack of reliable and valid statistics. “It is difficult to determine, with certainty, how many people are homeless at a given time in Ottawa-Carleton.” (Region of Ottawa-Carleton, 1999: 20-21). This absence of accurate data can be attributed to the fact that a limited number of studies focusing on enumerating and/or estimating homeless youth have been conducted. Without data, policy-makers are lacking a proper perspective of the magnitude of the problem and consequently cannot implement appropriate programs to help this population. Therefore, the research issue being addressed in this thesis is: **How can an accurate count of the homeless youth population in the Ottawa-Carleton region be attained?**

It is my contention that an accurate count of the homeless youth can be achieved despite the highly mobile nature and constantly changing composition of this population. However, this count cannot be based solely on enumeration techniques, as many previous studies have done, but must also include some element of estimation in order to be more complete. Once reliable and valid data are collected on unaccompanied youth, we may then set about developing services to better help these individuals. An accurate count and a profile of their characteristics will help guide policy-makers,

educators, politicians, social service agencies and even the general public to alleviate the problem of street kids in our society by illustrating where the emphasis/solutions are needed. Obtaining reliable data is a starting point to addressing the problem.

Before an appropriate technique for counting the target population can be discussed, the definitional issues must be clarified. As the following analytical framework illustrates, there is direct relationship between the operational definition used and the estimate produced.

Source: Corday & Pion, 1991: 592

Based on this framework, I will begin by discussing the operational definition being applied to the target population. Second, a brief synopsis of existing enumeration techniques will be provided, including a summary of associated problems. Third, I will discuss the estimation technique being incorporated and then outline the methodology being proposed that will yield weekly estimates of the unaccompanied youth population. These weekly estimates will provide a more accurate picture of the extent of the unaccompanied youth “problem” in the Ottawa-Carleton region than a sole count for an entire enumeration period.

CHAPTER 2: THE POPULATION BEING STUDIED - TERMINOLOGY

One of the most challenging yet essential tasks anyone conducting research on the homeless must contend with is defining the target population. Answering the question “What members of society comprise the homeless population?” is not easy. The heterogeneous nature of the population makes the process of defining the *homeless* difficult. The definition(s) applied by the researcher(s) affects the methodology used to measure the *homeless* population and the accuracy of the counts (Wright et al., 1998: 36). Furthermore, defining the term conceptually is not sufficient as the operationalization of the concepts is a key factor in any research. These two components of a definition are not mutually exclusive.

“Decisions about operational definitions and the methodologies employed are driven by the conceptual definitions and intended uses, either explicitly or implicitly.” (Straw, 1995: 330).

Consequently, before I design a methodology to count the younger cohorts of the homeless population I will summarize the conceptual definition(s) applied to the group. I will then discuss how the target population will be operationalized for the proposed methodology.

2.1 Homeless Youth, Runaways, Street Kids and System Kids - The Conceptual Differences

Of the various components of the homeless population, the youth are the most difficult to distinguish from their non-homeless peers (Hagan & McCarthy, 1997: 1). In the downtown core of any major city, differentiating those youth who are *hanging out* from those who are truly homeless is difficult. Part of this difficulty can be attributed to the youth subculture. This culture dictates the appropriate style of dress, type of music, certain behaviours and vocabulary used. Homeless or not, most youth subscribe to the

same “culture”, making it difficult for researchers to distinguish between the various subcomponents of the population. Part of the definitional problems can also be attributed to the tendency among social scientists to conceptualize homeless youth solely as runaways, focusing on the factors causing them to leave home rather than on the consequences of being on the streets (Hagan & McCarthy, 1997: 7). As a result, very little information is available about this population – including the absence of a harmonized definition of the various categories of homeless youth. Any number of terms have been used interchangeably to refer to this population such as *street kid*, *runaway*, *squeegie kid* and *deviant*. It is possible that the populations called *runaways* and *street kids* contain the same individuals as those described as *homeless youth* (Brannigan & Caputo, 1992: 16), although each of these subgroups has some exclusively identifiable characteristics. The one characteristic common to all these groups is the lack of a permanent address (Hagan & McCarthy, 1997: 11). Beyond that commonality, the composition of homeless youth is quite heterogeneous.

Paul Shane (1996: 4-6) identifies 4 groups to which the youngest age groups of the homeless population may belong. First are homeless families with children which he termed *familial*. *Unaccompanied youth*, including both runaways and system kids (those taken into custody by the state) is the second group. *Street youth* is the third group and *babies* the fourth. For the purposes of my research I am focusing my discussion on *unaccompanied youth*, which incorporates homeless youth (including throwaways), runaways, street kids and system kids. Youth belonging to the familial category are not likely to share common experiences with unaccompanied youth and are consequently excluded. While these are not 4 mutually exclusive categories (Bradley, 1997: 16), I will

briefly discuss each one, describing their respective characteristics, in an attempt to highlight the conceptual variability associated with the term *unaccompanied youth*.

2.1.1 *Homeless Youth:*

According to the Runaway/Homeless Committee of the City of Calgary, a *homeless youth* is defined as

“...a person under the age of 18 years who absents him or herself from home or place of legal residence for 24 hours with the permission of parents or legal guardians. The homeless youth cannot return home.” (Michaud, 1988: 74).

The use of the term *homeless* designates a definite separation of the youth from their family because the individual cannot return home and/or is not wanted at home (Robertson, 1991: 35). Often these youth do not know where their parents are and have no means of locating them. In the case of a *throwaway/castaway/pushout*, the parents or legal guardians have ejected the youth from a stable living environment, making it clear that the individual is no longer welcome in their home.

2.1.2 *Runaways:*

The second group of unaccompanied youth, on which the bulk of the research has been conducted, are *runaways*. A runaway has been defined by the Runaway/Homeless Committee of the City of Calgary as

“...a person under the age of 18 years who absents him or herself from home or place of legal residence for 24 hours without the permission of parents or legal guardians. The runaway youth can return home.” (Michaud, 1988: 74).

The obvious differences between a homeless youth and a runaway is the issue of parental consent and the ability of the latter to return home if so desired.

There are 2 types of runaways: "running from" and "running to". "Running from" has been labeled *reactive runaway* or *escapist runaway* and incorporates those youth who are escaping from unresolved personal and/or family problems. "Running to" has been labeled as *spontaneous runaway* or *romantic adventurer*. As opposed to the escapist, these youth are motivated by pleasure seeking, fun or adventure. Runaways can also be classified as *real runaways*, those who intend to escape and stay away, versus *gesture runaways* who use the behaviour as a plea for help and often return voluntarily (Brennan, 1980: 192-193).

2.1.3 *Street Kids:*

The third category of unaccompanied youth, *street kids*, are defined by the inter-NGO (Non-Governmental Organization) as

“...any boy or girl who has not reached adulthood for whom the street (in the widest sense of the word, including unoccupied dwellings, wastelands, etc.) has become her or his habitual abode and sources of livelihood and who is inadequately protected, supervised or directed by responsible adults.” (Coleman-Lundy, 1995: 5).

These youth spend most of their time on the streets, unsupervised. Some may have contact with family, but are left to their own devices for survival (Shane, 1996: 6). Street kids tend to shy away from institutions designed to help them, such as shelters and soup kitchens. For many, this behaviour stems from a mistrust of the adult population as well as the lack of privacy and personal space in the hostels (Hagan & McCarthy, 1997: 43).

One distinction that must be made is between “*youth on the streets*” and “*youth of the streets*”. Those belonging to the first category work at street-based jobs but return to their families at night or on weekends. “Youth of the street” are those individuals who have fragmented family ties, sleep in locations not meant for human habitation, such as

doorways, bus shelters and heat vents, and often engage in illegal survival strategies (Hagan & McCarthy, 1997: 8). It is the physical location in which the youth sleep, not where they work, that determines membership in the homeless population.

2.1.4 *System Kids*:

The final group of unaccompanied youth are *system kids* who have been rotated through a variety of placements in the social service and child welfare system (Bradley, 1997: 16). While system kids are living in a foster home or institution they are not considered homeless because of the presence of a semi-permanent or permanent accommodation. If the youth runs away from the system, has been discharged directly to the streets or has been referred to a runaway program or emergency shelter, he or she is then classified as homeless (Bradley, 1997: 16). Brannigan and Caputo (1992: 11) use the more appropriate term *absconders from care* to refer to individuals who leave the system prematurely. Another term that has been applied to these youth is *doubly homeless*, referring to the double barrel effect of being taken from their homes by the system and then taking to the streets when the placement becomes intolerable (Kurtz et al., 1991: 309).

2.2 Unaccompanied Youth - The Operational Definition

In the preceding discussion I summarized the conceptual characteristics of the various groups that comprise the *unaccompanied youth* category. While I am not discounting the merit of conceptual issues, the operational definition is more important for the purposes of designing a methodology.¹ The fact that the youth is located in a temporary accommodation is what classifies them as homeless. Conceptual definitions serve a purpose in methodological research as they

"...can guide decisions to include or exclude an individual by limiting or expanding the target population to be counted." (Corday & Pion, 1991: 598).

For my research, the conceptual definitions are used to identify those categories of individuals who should be considered unaccompanied youth: homeless youth (including throwaways), runaways, street kids and system kids. However, it is the setting in which these youth are living (part of the operational definition) that determines eligibility for the methodology being proposed in Chapter 4.

David Mackenzie and Chris Chamberlain developed an operational definition of homelessness during the course of their research with youth in Australia. In order for the youth to be classified as homeless he or she must be living in some type of temporary accommodation including: 1. the street or any other location not intended for human habitation; 2. temporary accommodation (doubled up with friends or temporary shelters); 3. emergency accommodations (a refuge or crisis accommodation); 4. longer term supported accommodation for homeless people such as hostels and youth housing; or 5. living in single rooms in boarding houses without their own bathroom, kitchen or security of tenure (Mackenzie & Chamberlain, 1995: 23). The authors (Chamberlain & Mackenzie, 1992: 289) refined their operational definition to exclude those youth living in single rooms in private boarding houses because the majority of unaccompanied youth lack the financial resources to pay for this type of accommodation. Therefore, an accurate enumeration of this target population may be attained by focusing on those youth on the streets, living in other locations not intended for human habitation, in accommodations such as shelters, hostels and crisis centres and those "squatting" with friends (the doubled-up homeless).

One concern with the operational definition offered by Mackenzie and Chamberlain is the use of the word "living". In general this word typically implies temporal permanence. Most people will live in one location for a period of time. However, by requiring a permanence of the living situation some unaccompanied youth would be excluded. For example, runaways would be excluded from the unaccompanied youth category because of the tendency of these individuals to return home within a week of their departure (Shane, 1996: 5). As well, a youth who is only on the street for one night would not be considered homeless because of the lack of permanence despite the fact that he or she is living in a temporary accommodation during the enumeration period. Consequently, for the purpose of my research the word "living" is not being interpreted as a permanent state. Whereas some surveys sample based on "de jure" - the person's usual place of residence (e.g. the Canadian Census), I favour a "de facto" operational definition in the methodology being proposed. This "de facto" definition will involve surveying individuals based on where they are sleeping the night of the enumeration rather than their usual place of residence². If the youth are on the street or in a shelter during the enumeration period, they will be classified as unaccompanied and included in the count, regardless of the reason why they are there or the length of time spent homeless.

2.3 The Age Factor

In order to properly define the target population, the issue of age must be addressed. Studies of unaccompanied youth can incorporate any number of broad age ranges. Use of the word youth does not help limit the age frame. *Youth* is a very broad concept that refers to a particular subculture involving: distinctive fashion and tastes,

social relationships centered on friendships and peers, the idea of leisure instead of work and individual experimentation (which incorporates challenging adult values) (Jary & Jary, 1995: 738). Youth is the period between childhood and adulthood. Given the vagueness of this concept, a more definitive time frame is required.

Conceptually, the age of unaccompanied youth is generally defined to be between 12 and 17 since 18 is the legal age of majority at which time one becomes responsible for one's own actions. At the lower end of the age range, researchers have designated 12 as the transitory point between childhood and adolescence. However, in their study of runaways and throwaways in Connecticut, Adams et al. (1985: 717) used the age of 11 as their starting point for inclusion. At the upper end of the age range, many of the services available for unaccompanied youth extend to young persons up to the age of 24 (Brannigan & Caputo, 1992: 11). According to Hagan and McCarthy (1997: 11)

“Youth is a period of transition that is especially challenging and problematic on the street and is often prolonged to an age when youth in different circumstances would be considered adults.”

This concept of prolonged youth justifies the inclusion of individuals up to the age of 24 for both institutional policies and research. Brannigan and Caputo (1992: 11) incorporate both the transitory point between childhood and adolescence (youth) and the concept of prolonged youth by suggesting the use of an age range from 12 to 24 which should cover the heterogeneity of the unaccompanied youth population.

While a 12 year age range is recommended, the operational definition depends on the type of study being conducted, the location and the purpose of the data being collected. In certain regions, shelters for youth will admit individuals up to the age of 24 while in other locations the age limit is much lower. Even within the same region,

variation in age ranges exist. For example, in the Ottawa-Carleton region, the Salvation Army Young Men's Shelter is intended for patrons between the ages of 16 and 19 (Salvation Army Brochure) while the Young Women's Shelter run by the Youth Services Bureau caters to females between the ages of 12 and 20 (Youth Services Bureau). The YMCA runs a "Second Stage Housing Program" designed to help youth between the ages of 16 and 19 who are "at risk" and in need of housing (Lundrigen, 1999) while the Youth Services Bureau operates a similar program for individuals between 16 and 21 years of age (Youth Services Bureau). These examples demonstrate the variation in the operational definition of age that can exist within one region. In order to ensure that this age variation is incorporated in my methodology, I am defining *unaccompanied youth* as everyone between the ages of 12 and 20 who meet the de facto living criteria. The remaining issues associated with the methodology, including site selection, sampling and the estimation procedure are discussed in Chapter 4.

CHAPTER 3: THE METHODOLOGIES: ENUMERATION AND ESTIMATION

Studies designed to determine the number of homeless employ one or a combination of two primary methodologies: enumeration and/or estimation. Often studies that begin with enumeration shift to estimation as the researchers attempt to correct or compensate for inadequacies in the data (Bentley, 1995: 4-5). Enumeration can also be classified as the *service-based techniques* for measuring the homeless, because the primary focus is on institutions intended to provide “services” to the population. The majority of studies that have been conducted on the homeless and/or street kids in both Canada and the United States use one or a combination of the enumeration techniques that will be discussed in the following section. With the emphasis on enumeration, the majority of researchers have ignored the benefits of estimation in studying the homeless. The purpose of this chapter is to review the methodologies that have been used to count the homeless and/or unaccompanied youth in order to develop one all-encompassing technique that will facilitate the collection of reliable statistics and help to raise public awareness about the population.

3.1 Enumeration Techniques

3.1.1 Survey of Expert Opinion/Key Person Expert Opinion Surveys

One technique used to count the homeless is a *Survey of Expert Opinion* which involves obtaining information from representatives of different levels of government, housing associations, researchers, shelter operators, etc. (Bentley, 1995: x). One major problem associated with this method is the issue of reliability. Unfortunately, it is common for certain groups to either inflate or deflate the numbers according to their specific needs. Government officials may provide estimates that are lower than reality in

order to make the homeless problem appear to be less severe; in contrast, shelters may inflate the numbers because their funding is determined by the size of the client population. With conflicting statistics, which numbers should be assumed to be accurate? Another disadvantage of these surveys is the issue of duplication (Peressini et al., 1996: 5). It would be difficult for the researchers using this technique to guarantee that the same homeless individual(s) is(are) not counted twice. For example, if the researcher was relying on soup kitchen and shelter workers for the data, there is a distinct possibility that the same patrons frequent both institutions. Consequently, a method of identification must be developed to ensure that double counting does not occur, since duplication would contribute to an inflated count.

Despite the problems associated with surveying experts, there are certain advantages. In their study, Caputo, Weiler and Kelly (1994 a: 10) worked closely with the community and experts in order to ensure that the researchers obtained an accurate image of the situation of the homeless youth in Saskatoon; and that the findings of the research were incorporated into existing programs. In the Ottawa Case Study, also conducted by Caputo et al. (1994 b), research activities were integrated into existing projects and initiatives. The use of key-person surveys to conduct community-based research has three main advantages. First, because of the continuously changing nature of our society and the ongoing restructuring of social institutions, it has become difficult for researchers and policy-makers to keep abreast of current developments. Therefore, community partnerships can be used to inform the research. Second, in the traditional method of social research, researchers collect data but contribute little to the community. By collaborating with community organizations the researchers are able to contribute

directly to the community being studied (Caputo et al., 1994 b: 24-25). Third, expert opinions help to inform the initial stages of research by identifying locations where the youth may be found, by advertising the study or by providing advice.

3.1.2 *Published Reports*

A second approach involves the use of *published reports* pertaining to the level of homelessness in particular areas and projecting to provincial or national levels (Bentley, 1995: x). The use of published reports for subsequent research involves the interpretation of secondary data (sources). This approach is problematic for the following reasons. First, published reports are most likely based on data that have been collected with one or more other enumeration techniques. Any problems with the manner in which the original data were collected are only being perpetuated with secondary analysis. Second, depending on the author or sponsoring agency, these reports may be prone to the same problem of unreliable data mentioned in section 3.1.1. Third, there are problems associated with the process of taking numbers for a specific region and imputing them to a larger area. Peressini et al. (1996: 6) have appropriately labeled this technique: “Heroic Extrapolations”.

3.1.3 *Shelter Counts*

Shelter counts is another method of enumerating the homeless (Bentley, 1995: x). A problem with this technique is that, as previously mentioned in section 3.1.1, shelter funding is dependent upon the number of patrons served. The greater the number of clients, the more funding the shelter will receive. Therefore, shelters may have a tendency to inflate the numbers in their administrative systems, making the data unreliable. A second problem with the use of shelter counts is specifically related to

enumerating unaccompanied youth. Most of these youth do not use shelters and soup kitchens (Peressini et al., 1996: 71) which means that they will be excluded from the statistics. Consequently, the count of unaccompanied youth will be low and invalid if solely based on shelter information.

3.1.4 Police Records

A count of arrest records or observations of the homeless by police is another service-based technique. The problem with this technique is that the numbers would only represent a small proportion of the homeless (Bentley, 1995: x). Despite the public perception that the homeless are deviant, most tend to shy away from authorities and avoid getting into trouble with the law. When researchers study unaccompanied youth, *police records* may be a little more useful because runaways are registered. However, as I outlined in section 2.1, runaways are only one segment of the unaccompanied youth population and statistics pertaining to one group cannot be generalized to others. As well, some parents do not report their child(ren) as missing. Consequently, not all runaways are included in the police database(s). Therefore, while this technique is a starting point, additional methods must be used if an accurate count is to be obtained.

3.1.5 Personal Observation and Street Counts/Windshield Street Surveys and Censuses

The next two methods are *personal observation* and *street counts* (Bentley, 1995: x). These two encompass the majority of surveys that have been conducted to date. These methods involve locating, identifying and enumerating the homeless by sight while canvassing both the streets and other places known to attract them such as bus stations and abandoned buildings (Peressini et al., 1996: 6). The advantages of these methods are: the process is relatively inexpensive; the method bypasses the problem of

developing an instrument to screen out those who do not meet the definition of homeless being applied (when used to measure the entire population); and there is no direct communication between researcher and subjects. The disadvantages include severe identification problems, biased results because only the visible homeless are included (the method excludes those in shelters, hostels or doubling-up with someone else) and only the most basic sociodemographic data are provided because there is no communication between the researcher and the subjects (Peressini et al., 1996: 6). As well, in order to be able to locate the homeless on the streets there is usually an element of risk involved because the researcher is required to enter unsafe areas late at night/early morning. In Rossi's study of the homeless in Chicago, off-duty police officers were recruited to accompany the observers and precede them into abandoned buildings, open hallways and other dangerous locations (Rossi, 1989: 227) while in the 1990 U.S. Census S-night enumeration there were instances when the observers never got out of their vehicles for fear of their safety. In fact, because of security issues, many sites were not canvassed at all for homeless individuals (Wright & Devine, 1992: 362) which elicits concerns about the completeness of the data collected.

Trust is another issue that must be addressed by individuals conducting street surveys of the unaccompanied youth population. In order for researchers to be able to count street kids, the population must be visible. However, the concept of self-preservation dictates that many street kids will try to avoid meddlesome, inquiring strangers and particularly adults for fear that these individuals may be undercover police officers, religious zealots or evangelists whose sole purpose is to either force these youth to return home or to be placed in government care (Hagan et al., 1997: 240). In their

study John Hagan and Bill McCarthy overcame this problem by using a researcher who was non-threatening and could easily gain access to the street to advertise the study and screen potential respondents (Hagan et al., 1997: 241). This screening process is a necessary step for research conducted on street kids, as the nature of this population may make it difficult for researchers to identify those youth who are homeless from the rest of the group.

3.2 Estimation Techniques

One major problem with these service-based techniques for measuring the homeless is that none of them extend to estimating the total population. An ideal technique for estimating the number of homeless, or more specifically unaccompanied youth, has yet to be developed and employed but is a necessary component of any attempt to measure this population. Because street kids are a highly mobile population, tend to blend in with the youth subculture and shy away from adults (Peressini et al., 1996: 71-72), there will almost always be some proportion of the group that is not counted. The use of estimation techniques will also help to enhance the reliability and validity of the data by eliminating errors caused by either undercounting or double counting. The undercount represents that segment of the population that has not been included. As mentioned previously, the uncounted segment may be substantial for the unaccompanied youth population because they tend to shy away from the institutions designed to help them such as shelters, soup kitchens and drop-in centres. With double counting, the same subject is included twice - a common error in certain enumeration techniques discussed in the previous section. For those studies that do try to prevent double counting, the process is time-consuming (as in the study conducted by John

Hagan and Bill McCarthy (1997: 244) where only one enumerator was used), and/or the population is limited in numbers (e.g. the study conducted by T. Caputo et al. (1994 b: 53) only interviewed 32 youth). As a result, there is a need for the inclusion of estimation procedures in order to obtain an accurate count of street youth. The two related estimation techniques being incorporated in this thesis to complement the service-based techniques are: the Capture-Recapture Method and the Chandra Sekar-Deming Method of Estimation for Statistically Underdeveloped Areas.³

3.2.1 *Capture-Recapture/Chandra Sekar-Deming Methods of Estimation*

The *Capture-Recapture Method* was developed by population biologists for the study of highly mobile animal populations. This method has now been extended to include any population that is difficult to measure.

“The Capture-Recapture is a technique used to estimate the size of populations that are difficult to find and count, or populations that are in motion and cannot be counted all at one time.” (Sudman et al., 1988: 994)

The basic premise associated with this method is that two or more subsequent attempts are made to observe (capture) the population being studied. On the first capture (M) the participants are tagged; in the animal kingdom this process involves physically marking the animal so that the researcher will be able to determine on a later capture those that have already been observed. The observations must be taken in such a way that there is an equal chance for all members of the population to be captured (Sudman et al., 1988: 944). A second independent capture (n) is taken at a later date and the number of recaptures (m) are recorded. The size of the population (N) missed in both captures can then be estimated using the formula $N = Mn/m$ (Hedrick, 1984: 166). If numerous recaptures are taken in subsequent samples, then not only can the size of the population

be estimated but also the number who habitually occupy a specific site (Blower, Cook & Bishop, 1981: 27).

A similar estimation method was developed by C. Chandra Sekar and W. Edward Deming in which a mathematical theory is used to calculate an estimate of both the total number of events that occur in a specific period and the completeness of registration. The method was first applied to an inquiry that was conducted in February 1947, in an area known as the Singur Health Centre in India, to estimate the number of births and deaths between 1945 and 1946 (Chandra Sekar & Deming, 1949: 101-104). The formula employed and the principle behind it are identical to the Capture-Recapture Method (Greenfield, 1975: 52) in that both techniques calculate the total population by conducting two independent observations, determining the number of subjects captured in both and estimating for those not enumerated in either count. This technique may be presented as a contingency table.

Figure 1: Estimation Technique

		<u>OBSERVATION 2</u>		
<u>OBSERVATION 1</u>		OBSERVED	NOT OBSERVED	TOTAL
	OBSERVED	C	N_1	$C + N_1$
	NOT OBSERVED	N_2	X	$N_2 + X$
	TOTAL	$C + N_2$	$N_1 + X$	Predicted T

From Figure 1:

N_1 is the population enumerated at time 1

N_2 is the population enumerated at time 2

C is the count of resampled individuals

X is the number of individuals missed in both enumerations (the estimate)

The number of individuals missed in both samples is estimated as those captured in one sample multiplied by those enumerated the second time divided by those sampled in both observations.

$$X = N_1 N_2 / C \quad (1)$$

From this method, the population enumerated in the individual observation periods can also be calculated using the following formulae:

$$R_1 = C + N_1 \quad (2)$$

$$R_2 = C + N_2 \quad (3)$$

where

R_1 is the total for observation 1

R_2 is the total for observation 2

Based on these calculations, the predicted total population (Predicted T), including the estimated proportion missed in both observations (X) can be calculated as:

$$\text{Predicted } T = C + N_1 + N_2 + X \quad (4)$$

When researchers apply this method, comparisons of estimates derived from different sources constitute essential checks on the quality of the results (Shryock et al., 1976: 504). Therefore, it is best to have at least two different types of capture methods for the observations (i.e. census, survey, street enumeration, etc.).

Some basic assumptions must hold in order for the estimation to be valid. The first assumption is that every member of the population must have the same probability of being captured during the observation period. Second, there is an assumed independence between the two counts and third, a closed-model exists where the composition of the population being studied does not change between the two observation periods (Sudman

et al., 1988: 994-995). Changes in population composition can lead to biased results. If the composition of the population changes between the observations, an open population model must be used requiring a minimum of 4 samples in order to derive an accurate estimate (Darroch, 1959: 349). Multiple samples are used to measure changes in population size due to natural increase and/or net migration (Hedrick, 1984: 168). Changes in population composition (P.C.) for the sample can be calculated using the following formula:

$$P.C. = N_k - N_{k-1} \quad (5)$$

where

N_k is the number of individuals in one observation

N_{k-1} is the number of observed in the preceding enumeration

(Darroch, 1959: 350)

For the first observation period there are no new entrants (Jolly, 1965: 226). Therefore, the count is considered to be the base population. If N_k is greater than N_{k-1} , population gain has occurred. When there is population loss, N_k will be less than N_{k-1} . However, in the process of measuring changes in population composition, no distinction is made between the sources of the new subjects or how others leave the population (Schwarz & Arnason, 1996: 861).

For the first two observations, the estimated proportion of the previously enumerated population who should remain from one sample to the next cannot be calculated. This proportion (s^*) must be calculated for subsequent enumerations using the formula:

$$s^* = C_{i+1}/(N_{i+1} - C_{i+1}) \quad (6)$$

(Source: Blower et al., 1981: 35)

One limitation that exists with the calculation of this adjustment factor is the issue of time. Those individuals who enter the population after the last sampling occasion but

leave before the next enumeration will be excluded (Schwarz et al., 1996: 1183). As a result, the adjustment may not be 100% accurate but is considered statistically reliable for the calculation of population estimates. Applying this adjustment will yield the number of previously enumerated individuals who should be available for recapture on the next occasion (Predicted $M_{(i+1)}$).

$$\text{Predicted } M_{(i+1)} = N_i s^- \quad (7)$$

(Source: Blower et al., 1981: 39)

The population estimate for a given week can then be calculated as:

$$\text{Predicted } T_{i+1} = (N_{i+1} * \text{Predicted } M_{i+1}) / C_{i+1} \quad (8)$$

(Source: Blower et al., 1981: 39)

For the open population model, some of the basic assumptions must be revised. Given that the composition of the population being studied is likely to change, a new assumption is adopted in which all previously sampled individuals who are still alive at the time of one census are equally likely to be enumerated in that census (Cormack 1964: 430). The term "alive" can be interpreted to mean that the subjects are still members of the population being studied. As well, Jolly (1965: 223) identified three mutually exclusive behavioral possibilities that may be exhibited by the subject which are different from the closed population model. The subject may be enumerated/re-enumerated, not be enumerated/re-enumerated or leave the population by dying or permanently emigrating. In a closed population model this third possibility does not exist. However, because gains and losses can occur during the course of a study for almost any population, researchers refocused their attention towards the implementation of open population models (Schwarz et al., 1993: 1181). I believe this open-model is one of the most effective techniques for estimating the number of street kids in the Ottawa-Carleton

region because of their high mobility and the constantly changing composition of the population.

3.2.2. Examples of Estimation in Practice

Throughout my extensive literature review I have identified a few studies to-date that attempt to make use of some type of estimation when counting the homeless. However, none of the studies have used the Capture-Recapture method of estimation.

One example of a study that incorporated estimation was conducted in the Los Angeles Skid Row Region. The primary objective of the study was to allow for the administration of intense and lengthy interviews in order to obtain qualitative data rather than to yield estimates of the population size (Burnham & Koegel, 1988: 120). A secondary goal was to obtain a representative sample of the homeless in the skid row region of Los Angeles (Burnham & Koegel, 1988: 121). The researchers pursued this goal by estimating the relative proportion of the homeless population who make use of various facilities over the period of a month. The facilities were divided into three mutually exclusive categories: beds, meals and indoor congregating areas. The diversity of the three categories serving as capture methods gave every homeless individual in the region an equal probability of being selected into the sample. The estimates were adjusted for double counting of the population – those individuals who made use of more than one facility (Burnham & Koegel, 1988: 121-123).

One problem that the researchers encountered in the process was the issue of identifying the target population. Certain members of the non-homeless population made use of some of the facilities such as meals. Therefore, the researchers had to develop a method of identifying homeless individuals from the entire population, in order to ensure

that their estimates were accurate. A second capture procedure was conducted in January 1985 (initial capture had been in July 1984) in which individuals were screened to determine if they met the criteria for being classified as homeless. The authors found the results of the two captures to be quite similar, despite the seasonal variation associated with the collection periods (Burnham & Koegel, 1988: 136). By conducting the research in 2 different seasons, summer and winter, the researchers were able to have more confidence in developing an estimate that was representative of the entire homeless population. Any discussion of the homeless population must take into account seasonal fluctuations in order to be complete.

One limitation that was noted by the researchers is that individuals who did not make use of beds, meals or indoor congregating areas were excluded from the estimate (Burnham & Koegel, 1988:147). This is a severe limitation for a study of unaccompanied youth because, as mentioned earlier, homeless youth do not tend to make use of the social services intended to help them. Therefore, any study of homeless youth must include street counts in order to yield more accurate estimates of the size of the population. Had the researchers incorporated their captures into the Capture-Recapture method, an estimate of the "missed" segment of the population would have been possible. As discussed previously, with the Capture-Recapture method the number of subjects who were excluded from either enumeration can be estimated in order to yield a more accurate count of the target population.

The sampling frame outlined in the 1988 Burnam and Koegel study of the Los Angeles Skid Row was implemented in a Canadian context by T. Peressini and L. McDonald for the City of Calgary. Peressini and McDonald conducted a survey of the

homeless in the East Village of Calgary between 1990 and 1991. They modified the sampling frame used by Burnam and Koegel in order to derive a sample for their study. As previously discussed, the original methodology involved sampling the homeless in 3 mutually exclusive sectors: beds, meals and indoor congregating areas. After preliminary examination, Peressini and McDonald determined that it would be redundant to sample indoor congregating areas because the sole facility offering this service also supplied beds and meals (McDonald & Peressini, 1992: 65-66). By eliminating indoor congregating areas, the researchers were reducing some of the risk of double counting as any individual identified as homeless in this location would already have been sampled in one or both of the remaining sectors. The researchers also determined that it was not necessary to sample from other congregating areas such as the public library and city hall (Peressini, 1995: 56). The Calgary homeless survey, based on this sampling frame, was conducted between May and August 1991 (McDonald & Peressini, 1992: 74). A quota of the individuals available in each of the sectors, who met the screening requirements, were sampled. The bed stratum was sampled first. The meals enumeration was conducted as a means of determining the amount of overlap between the two sectors (Peressini, 1995: 57-58). A count for each of the locations surveyed was compiled. If an individual was found to have slept in more than one shelter during the designated period, the researchers counted this person as $\frac{1}{2}$ for each of the two shelter categories (Peressini, 1995: 59). These counts were then used to calculate a set of differential weights. These weights were added to the data as a means of generalizing the sample to the entire Calgary homeless population. In the generalization process, an estimate of the size of the homeless population was derived (Peressini, 1995: 64-65).

The first problem with this population estimate is that it is based solely on the proportion of individuals making use of beds and/or meals. No consideration is given to the proportion of the homeless who never partake of either of these facilities. Consequently, the estimate is likely to be low as the street component of the homeless is not included. A second problem with this estimate is the issue of seasonal variation. The designated period for the survey was the month of February (Peressini, 1995: 59). For an estimate of the homeless population to be completely accurate and useful for policy makers, seasonal variations must be considered.

A third study using a variation of estimation was conducted on school-aged children in Michigan for the 1993-1994 school year. The estimate was based on the official count of children and youth enrolled in the public school system, by county, as of November 1993 (Douglass, 1997: 175). Based on this enrolment figure, two separate estimates were calculated. The first was an estimate of the number of known homeless children and youth in the school districts. These "known" individuals were identified using school district counts. As a result, no standardized operational definition of homeless children or youth was applied in the process of obtaining the counts (Douglass, 1997: 176). The absence of a concrete definition is highly problematic and contributes to concerns about the reliability and validity of the estimates. How one county defines homelessness may vary greatly from the definition applied by another region. This variability in the definition and operationalization of key terms may result in not all homeless children and youth being captured in the estimate and/or too many non-homeless children being included in the data.

Within the same study a second estimate was calculated based on the number of homeless children and youth in a particular geographic region as a function of the probability that they are attending school. For this estimate, the information was supplied by homeless service providers (Douglass, 1997: 175-176). This estimate may be more accurate and reliable because the service providers tend to have a more uniform definition of the target population. Although, regional variation in the definition applied will still exist bringing the validity of the estimate into question. The overall estimate of the total homeless children and youth population is a function of the two calculations mentioned above.

$$\text{Total homeless children and youth} = \frac{\text{homeless children and youth in school}}{\text{perceived percentage of total homeless children and youth in school}}$$

The total homeless children and youth population is equal to the members of this population registered in the formal education system divided by the probability of these children and youth attending school (Douglass, 1997: 179). This estimate may not be accurate because of the issues of validity and reliability pertaining to the numerator. If one number in the equation is not reliable and/or valid, then neither is the result. The researchers should have taken more care to overcome some of the definitional issues pertaining to homeless children and youth before designing an estimation procedure. As well, in the development of both estimates no precautions were taken to avoid duplicate counts (Douglass, 1997: 180). The inclusion of double counted children and youth results in an inflated estimate that is invalid and unreliable.

Another problem with this estimation is that the sole focus is on children and youth in the formal education system. According to the legal system, all children must

remain in school until a given age (e.g. school attendance is mandatory in Ontario until the age of 16). However, the existence of the law does not guarantee that all children and youth will adhere. In order to be able to attend school the child must have a fixed address. However, those children who are members of homeless families may not have the opportunity to attend school for any number of reasons such as the lack of a fixed address, continuous mobility and the fact that trying to find a means to live takes precedence over formal education. As a result it is quite probable that there is a proportion of homeless children who do not participate in the formal education system.

There may also be a lack of participation on the part of unaccompanied homeless youth. For many of these youth formal education is no longer relevant as it will not ensure their survival. Street skills are a more highly valued commodity and are not taught in the formal education system. In addition, while problems in school may not have been the primary reason the youth are homeless, there is a strong correlation (see Bass, 1992, Caputo et al., 1994 and Hagan & McCarthy, 1997). Many youth who are having problems at home also have problems in school. Consequently, the youth comes to view the education system as part of the problem and no longer believes that participation is a priority. As well, the youth are likely to encounter problems when attempting to re-enter the educational system after dropping out (Golden, 1999: 54). Therefore, an estimation of the number of homeless youth based solely on participation in formal education is likely to be extremely low. Methods for enumerating and estimating the number of unaccompanied youth must incorporate multiple settings.

A fourth example of estimation in practice is discussed by Martha Burt. This method provides an estimation for the number of homeless during one year. There are

four steps involved in creating this estimate. First, a “point in time” estimate of the number of homeless people is obtained. From this original estimate the number of people who have been homeless for one month or less is extracted. The purpose of this extraction is to identify the segment of the target population who became homeless in the past month. This extracted number is multiplied by 11 in order to obtain the number of people who will become homeless during the rest of the calendar year. These projections are then added to the estimate of those homeless during the first month (step 1) in order to obtain a crude count (Burt: 42). However, this process of estimation, which has been tried on data from the Urban Institute’s 1987 National Study of Urban Homeless Service Users, is problematic. First, no guidelines/procedures are provided outlining how the preliminary estimate is derived. Consequently, if this initial estimate is flawed, the final count will be invalid and unreliable. Building an estimate based on another estimate rather than an actual count is not a statistically sound method for obtaining reliable results. This technique is also based on the assumption that people only enter the homeless community **once** in a month. This is an idealistic view of the situation, particularly with respect to unaccompanied youth. A youth may run away from home and return more than once in any specific month or the youth may become homeless, go home and then re-enter the community another month. Even the author, Martha Burt (43), calls this “...a dubious assumption given the recent research evidence of frequent movement in and out of homelessness”. The final problem with this estimation technique is the fact that seasonal variability is not taken into account. The number of homeless individuals may vary greatly depending on the season. The harshness of the weather in the winter months can affect the number of homeless people. Consequently, if the

number of people becoming homeless in a given month is calculated based on winter data, this number may be too low for the summer months. Any methodology designed to create an accurate estimate of any segment of the homeless population must be based on enumerations taken during different seasons. Once seasonal variations are incorporated into a methodology, the estimate produced is more likely to be accurate.

A fifth example of estimation was conducted by R. Fopp in 1988. Fopp set out to estimate the number of homeless young people in Australia. For his estimate the core category of subjects were those young people who were unemployed and not members of families as these individuals were considered to be the primary "at-risk" group. This estimate was based on data from the Labour Force Survey which is problematic as only usual residents of private dwellings are included. Consequently, all individuals who are members of recognized homeless groups were excluded. These recognized groups include: people in boarding houses, in youth refuges, hostels and other types of emergency accommodations, staying temporarily with friends or relatives (doubled-up) and those on the streets (Mackenzie & Chamberlain, 1992: 18). Given the nature of the groups excluded, the estimate produced by Fopp is neither reliable nor valid. As I have already mentioned, many unaccompanied youth do not belong to private dwellings - whether by choice or not. The lack of a permanent address will exclude these youth from being included in the Labour Force Survey. While an analysis of the number of youth "at-risk" of becoming homeless is valuable for social service agencies and other related institutions, such an estimate must be recognized for what it is. The fact that these individuals are "at-risk" of becoming homeless does not guarantee that they will ever join the unaccompanied youth population. Consequently, had Fopp not set out to produce an

estimate of the number of homeless youth but rather an estimate solely of the "at-risk" population, the result would have been more credible. But, by basing his estimate primarily on a limited sample of the "at-risk" population and those aged 12-15 who requested assistance from the Supported Assistance Accommodation Program (SAAP) (Mackenzie & Chamberlain, 1992: 17), Fopp excluded a significant and relevant proportion of the population.

Despite the existing flaws with the estimate, one component of the methodology that is beneficial for other researchers is the sampling technique. By using multiple enumeration methods, the researcher was taking care to ensure that the estimate would be more reliable. As I have already discussed in Section 3.1, the use of only one enumeration technique is problematic. In order to produce a more reliable and valid estimate a multiple method approach is required. In this example the multiple methods approach incorporated information from the Labour Force Survey and SAAP. Unfortunately, these two methods are quite similar in nature as both focus on indicators of homelessness. For this estimate to have been more statistically sound the enumeration techniques needed to be more varied in nature, i.e. information from the SAAP and a street count. This variation would have helped broaden the scope of the population being studied and ensured that the estimate reflected more than just the "at-risk" population.

3.3 Summary Of Gaps In Existing Research

While there have not been a significant number of studies conducted on the homeless population and more specifically street kids, those that do exist provide some valuable insight into both the results yielded and the methods used. By examining previous studies, future researchers can improve upon the methods used. In the

discussion of both the enumeration and estimation techniques, I have shown the value of particular methods that have been used to study the various segments of the homeless population. I have also illustrated existing gaps/flaws in the research that has been conducted. While a number of studies have attempted to incorporate both enumeration and estimation techniques, none have been successful in yielding accurate and reliable results. As I have already discussed in the preceding section, some studies fail to take into account seasonal variation. In a country such as Canada, where extreme changes in climate are experienced from one season to the next, it is important for researchers to take measurements in such a way that these variations may be assessed. Other studies exclude key segments of the population in the operationalization of the concepts. As well, both the Burt and Fopp estimates fail to incorporate a variety of enumeration techniques. By limiting an estimate to only one type of enumeration technique the results are much more likely to be unreliable. For example, the findings yielded by certain enumeration techniques such as shelter counts tend to be a product of the purpose of the survey.⁴ Therefore, by using a variety of enumeration techniques some of the potential bias of the results is likely to be eliminated, yielding an accurate and reliable estimate.

CHAPTER 4: THE METHODOLOGY BEING PROPOSED

There are a number of different techniques that have been and continue to be used to measure the homeless. Some of these methods are better than others at overcoming the obstacles involved in enumerating a highly mobile and constantly changing population. In order to achieve perfect coverage, every unaccompanied youth, including those who are hidden, doubled-up with friends and/or relatives and those in institutional settings must be located and identified. While this technique should yield a perfect count, there are problems associated with the process that make it impossible to achieve. For instance, how do you count people who cannot and/or do not want to be found or identified? As a result of the difficulties associated with issues of identification, researchers must apply alternative methods of obtaining a reliable and valid count of the population such as a combination of enumeration and estimation. While a number of studies attempted to incorporate some types of estimation in the measurement of the homeless (see Burnham & Koegel, 1988, Douglass, 1997 and Burt for examples), none have perfected the technique. Consequently, I am proposing a methodology that includes both enumeration and estimation in order to provide a point-in-time count of the unaccompanied youth population of the Ottawa-Carleton region. All components of the methodology, including site selection, sampling, data collection and estimation, are described in detail in the remainder of this chapter.

4.1 Site Selection

One of the first steps involved in enumerating the homeless is to determine where this count will take place. Some studies based their counts solely on one enumeration site, while others used a variety of locations. The site selection for a study of the

unaccompanied youth population must incorporate more than just shelters, soup kitchens and drop-in centres because some individuals tend to stay away from such institutions. Consequently, I am proposing that two different enumeration techniques be incorporated: *shelter counts* and *street counts/windshield street surveys and censuses*.

The shelter selection process is facilitated by the fact that there are only a limited number of services intended for the unaccompanied youth population of Ottawa-Carleton. While a few youth may be found in adult-based institutions, the proportion is insignificant with respect to the overall count. In the case of an emergency (e.g. all the youth-oriented shelters are full to capacity) an adult-based shelter will allow the unaccompanied youth to remain in the shelter. However, normally, most adult-oriented shelters will try to transfer the unaccompanied youth(s) to appropriate facilities. Therefore, the shelter count will be limited to 3 locations: the Salvation Army Young Men's Shelter, the Young Women's Emergency Shelter and the YMCA-YWCA.

The Salvation Army Young Men's Shelter provides 24-hour emergency shelter to men between the ages of 16 and 19. The shelter's mission "...is to provide physical, emotional and spiritual support to homeless youth" (Salvation Army). This shelter is the best service-oriented choice for locating and identifying unaccompanied male youth. The Young Women's Shelter, run by the Youth Services Bureau of Ottawa-Carleton, is intended for young women between the ages of 12 and 20. Like its male counterpart, this shelter is open 24 hours per day (Community Information Centre of Ottawa-Carleton, 1999: 92) but is intended primarily for unaccompanied female youth. The third location where unaccompanied youth may be found is the emergency housing of the YMCA-YWCA of Ottawa-Carleton and, more specifically, the Second Stage Housing Program.

This program provides accommodations for youth between the ages of 16 and 19 (although 20 year olds may also be accepted) who are at risk and in need of housing. This program is more permanent than the previous two shelters discussed in that there is generally a 4 month commitment made by the youth. However, the program also has 6 beds intended for emergency overflow from the Young Men's and Women's shelters (Lundrigen, 1999). Despite the more permanent nature of the Second Stage Housing Program, the occupants are still members of the unaccompanied youth population according to the operational definition being used (see Chapter 2). Individuals living in longer term supported accommodations for homeless people such as youth housing are still considered homeless because of the absence of permanency in the situation. Based on their respective descriptions, these three locations are suitable candidates for the shelter component of the enumeration of unaccompanied youth in Ottawa-Carleton.

Site selection for the street count is more difficult given the size of the Ottawa-Carleton region. While there may be some migration of the homeless from the downtown core to the suburbs, an enumeration concentrated within the downtown core should capture the majority of the population (Brannigan & Caputo, 1992: 157). Within the vast region of the downtown core, it is likely that unaccompanied youth will be located in particular areas, limiting the size of the enumeration area. A *"Survey of Expert Opinion/Key Person Expert Opinion Survey"* can be used to identify the street locations that must be covered for the enumeration to be achieved. The use of experts will help to identify the street locations where unaccompanied youth are typically found. These experts will include the street outreach workers from Operation Go Home and the Youth Services Bureau who provide a range of services to low-income, high-need, high risk

youth 12 years of age and older in the Regional Municipality of Ottawa Carleton. The two organizations are the most knowledgeable concerning the location and identification of unaccompanied youth.

The local police may also supply some pertinent information. In Peter Rossi's study of the homeless in Chicago, the police department supplied a rating of how likely it was for homeless individuals to be found in a particular census block (Rossi, 1989: 227). The use of census blocks made the process of street identification and sampling easier. In Canada, Statistics Canada does not refer to Census Blocks but rather Enumeration Areas. The use of Enumeration Areas (E.A.'s) will provide a distinct grid, reducing the likelihood of two enumerators canvassing the same area. A second example of the use of police to identify street enumeration locations is the study of homeless aboriginal people in Regina, Edmonton, Toronto and Montreal. In this study the police assisted in designating inner city areas and locations where aboriginal people lived (La Prairie, 1994: 19). While the police alone may not be able to identify all the relevant locations, a combination of sources will ensure a better coverage rate in the street enumeration.

4.2 Sampling And Contact

The process of sampling the unaccompanied youth population is more difficult than traditional survey methodology. "Homeless people do not fit neatly into conventional house-hold sampling frames" (Dennis, 1991: 704). These surveys involve a random sample based on address. By definition, the homeless do not have a permanent address on which they can be sampled. Consequently, an alternative sampling method must be employed. The sampling frame for this methodology incorporates two completely different sectors: the streets and shelters. Because the purpose of this

methodology is to yield as accurate a count of the unaccompanied youth population as possible, everyone who might possibly fit the criteria of the operational definition (outlined in chapter 2) encountered in these two sectors will be screened. All individuals who meet the screening criteria and are identified as members of the unaccompanied youth population will be surveyed and enumerated.

The issue of contact is important when canvassing any component of the homeless population. For the shelter component, enumeration would occur once the patrons are admitted for the evening. The actual time would vary from shelter to shelter depending on their policy. Determining the time in which to sample the street component is more difficult as many youth who do not belong to the unaccompanied category, according to the operational definition, may still be on the streets into the early hours of the morning. This trend is particularly true for weekends when youth do not have to attend school the next day. Consequently, I do not recommend conducting any of the street enumerations on the weekend (including Friday night). Rossi decided, in his study of the homeless in Chicago, that contact needs to be made after midnight for the street component since that is the period when there is the largest separation between street people and those with homes. Therefore, the street survey was conducted between 1:00 a.m. and 6:00 a.m. (Rossi, 1989: 87). The American Census S-night enumeration narrowed the timeframe even further by conducting the street survey between 2:00 a.m. and 4:00 a.m. (Wright & Devine, 1992: 358). Given the fact that youth may stay out later than their adult counterparts, I propose that street contact be made between 3:00 a.m. and 5:00 a.m. on the assumption that most of the individuals on the street at that point in time will belong to the unaccompanied youth category. With this proposed timeframe, the

issue of waking those individuals who are asleep must be addressed. Many respondents may not take kindly to being woken from their slumber in order to complete a questionnaire. However, as I mentioned, conducting the survey too early in the evening may contribute to identification problems. As well, even if the enumerations were conducted at midnight, there may still be youth who are asleep and will have to be woken. Given the nature of the population being studied and the lack of resources at their disposal, one way to overcome this issue of waking sleeping individuals is to provide them with some type of compensation such as hot coffee. This compensation would be provided to every individual encountered and screened, even if they do not meet the criteria of the operational definition of unaccompanied youth and are not included in the enumeration.

Both the shelter and street enumeration will be conducted in two different times of the year in order to assess seasonal variation. According to Brannigan and Caputo (1994: 15), the size of the Ottawa street youth population depends on the season. Therefore, assessing seasonal variations may have policy implications. For the Rossi study, the first enumeration was conducted from February 22 to March 7, 1986 (the winter) and the second from September 22 to October 4, 1986 (the fall). Based on these two different seasons, there were variations in the occupancy rates of the shelters: 74% in the winter compared to 39% in the fall (Rossi, 1989: 88). Other studies also identified seasonal variations. Therefore, I am proposing that the enumeration be conducted in the winter (e.g. February) and summer/fall (e.g. August/September) in order to measure any seasonal variation that might exist.

Not only would seasonal fluctuations be considered but also monthly variations. There tends to be a large difference in shelter occupancy between the beginning and the end of the month. At the beginning of the month, welfare cheques are distributed, giving the homeless some money to spend. For some this money is spent on accommodations. However, the money may run out by the end of the month, so these individuals are back in the shelters and/or on the streets. In order for the researcher(s) to be able to properly monitor monthly changes an initial count should be conducted in the first week of the month for both the street and shelter components. Then additional counts should be taken again (both street and shelter) for each of the remaining weeks so that changes in population size throughout the month can be calculated.

4.3 Data Collection Methods

As I mentioned in the previous section, once contact is established, all people encountered must be interviewed. A process of screening will establish if these individuals meet the operational definition of unaccompanied youth outlined in Chapter 2 (see Appendix A for the Questionnaire). This screening will involve establishing where the individual is spending the night. For the shelter component this question would be redundant as the answer is obvious. However, for the street component the living situation of the youth needs to be established since not all individuals encountered may be unaccompanied. For example, a youth may be sitting at a bus shelter waiting for someone to pick him or her up and therefore should not be enumerated. This screening must also determine whether the potential respondent satisfies the age criteria of the survey. Often the process of determining someone's age is difficult - some people look older than their chronological age and others look younger. Therefore, the age of every

individual encountered, except for those who are obviously too old, must be determined. This screening is not necessary for the shelter component since all occupants should be between 12 and 20 years of age, given that the ages of the population to which the shelters cater are the basis for the operational definition being used in this methodology. However, in order to guarantee that the population sampled meets the operational definition, the shelter occupants will be screened for age anyway.

Because the proposed methodology involves an initial count and subsequent recounts, a method of "tagging" the respondents must be developed. This "tagging" will be a means of identifying those individuals who have been previously enumerated. In the animal population, for which the Capture-Recapture Method of Estimation was originally developed, the process of "tagging" is simpler. A physical identifier, such as a plastic band around the foot, is attached to the animal. However, for human population the process of "tagging" becomes more difficult because they cannot be physically marked. Instead, each participant will be assigned a unique identifier. According to Peressini et al. (1996: 39), the most common unique identifier used incorporates month, day and year of birth, gender, race and initials. The identifier I am proposing will incorporate initials, first and last, birth date (century/year/month/day) and sex. This identifier will be based solely on demographic information being collected in the questionnaire and will not require the individual to remember a number, supply additional information or keep anything on their person. The use of an identifier based on this information is the best method of "tagging" because the probability of obtaining the same results to the questions on subsequent recaptures is high. Most youth are likely to remember their name and birth date from one enumeration to the next. Given that the target population is

human, there is always an element of risk such as non-truthful and varying responses being given in each enumeration. For the unaccompanied youth population this element of risk may be higher. However, since the youth have nothing to gain by supplying non-truthful answers, this identification method is more sound than requiring the individual to retain some type of physical "tag".

Each respondent will be compensated for participating in the enumeration process. In the Rossi Study (1989: 229) respondents were paid \$1 for the initial screening and \$4 if they met the criteria of being homeless, while Caputo et al. (1994 b: 53) paid respondents \$5 for participating in the study. I am proposing that monetary compensation be avoided since there is a chance that the money may be used to buy alcohol and/or illegal substances. An alternative to money is to provide the participants with a voucher for a meal. This method of compensation would ensure that the unaccompanied youth gets food – a resource they are often in need of since there is a tendency amongst this population to avoid soup kitchens. The youth would be supplied with a voucher for each sample in which contact is established **and** they meet the screening criteria. Therefore, a youth who is included in more than one sample (recaptured) will receive additional vouchers - one for each enumeration. It is possible that the numbers for subsequent samples, beyond the first, may be higher as the respondents inform their friends that food vouchers are being distributed. This "word of mouth" may draw some of the hidden homeless or those individuals who are "doubled-up" onto the street and in contact with the enumerators. Consequently, the numbers on subsequent captures may be a more realistic portrayal of the actual size of the unaccompanied youth population in the Ottawa-Carleton region. There is also the chance

that a youth may not be truthful in order to pass the screening and receive the food voucher, resulting in an inflated count. However, because the enumeration will be conducted between 3:00 a.m. and 5:00 a.m., most youth encountered should belong to the “unaccompanied” category for that night. As previously mentioned, this is the time at which there is the greatest separation between those individuals with a home and those without.

4.4 Method Of Estimation

As discussed in section 3.2.1, the method of estimation being proposed is Capture-Recapture (also known as Mark, Release, Recapture - MRR). While this method of estimation was initially conceived for a closed population, it has been adapted to estimate open populations. For the unaccompanied youth population of the Ottawa-Carleton region, an open model is more applicable. The unaccompanied youth population is highly mobile and there are constant changes in composition. New youth become unaccompanied (according to the operational definition outlined in Chapter 2) while others leave the group, either returning home, finding permanent accommodations, becoming too old to be included or dying. Because of these population characteristics, the method of estimation being proposed incorporates the open population model.

In order to be able to accurately estimate for the size of an open population, 4 independent captures must be conducted (see section 3.2.1 for a discussion of the open population method). As I outlined in section 4.2, these 4 captures would be conducted once a week for a month. Each capture would incorporate the data collected in both the shelter and street sectors. A total number of unaccompanied youth enumerated in both sectors (N_i) would be compiled for each week, where $i = 1$ to 4 representing the weeks

during which the enumeration is conducted. Following each enumeration, every unaccompanied youth will be assigned a unique identifier, as outlined in section 4.3. For the first enumeration, there will not be any respondents who have been previously sampled. Consequently, the count of resampled individuals (C) for week 1 will be equal to 0. However, for weeks 2, 3 and 4, the number of resampled individuals can be calculated, yielding C_2 for week 2, C_3 for week 3 (which would include any youth captured in the previous enumerations – weeks 1 and/or 2) and C_4 (includes any youth enumerated in weeks 1,2 and/or 3).

Changes in population composition (P.C.) can be calculated, using the four samples (N_1 , N_2 , N_3 and N_4). We know from formula 5 in section 3.2.1 that net changes in population composition can be calculated as $P.C. = N_k - N_{k-1}$. For week 1, there is no change in population size. However, for the remaining 3 weeks in the enumeration period, the changes in the size of the unaccompanied youth population can be calculated as follows:

$$P.C.(\text{week } 2) = N_2 - N_1$$

$$P.C.(\text{week } 3) = N_3 - N_2$$

$$P.C.(\text{week } 4) = N_4 - N_3$$

These calculations will highlight weekly fluctuations in the size of the unaccompanied youth population. As mentioned in section 3.2.1, if N_k is greater than N_{k-1} , there is population gain indicating that more youth became unaccompanied (according to the operational definition outlined in Chapter 2) in the course of a week. If N_k is less than N_{k-1} , population loss has occurred indicating that some youth left the “unaccompanied” population during the week.

The proportion of the previously enumerated population who should be available for resampling (s) can be calculated for weeks 3 and 4 using formula 6 described in section 3.2.1. Based on this proportion, the number of tagged individuals who should be available for enumeration on the next occasion can be calculated (Predicted $M_{(i+1)}$ from formula 7 in section 3.2.1). This predicted value is not calculated for weeks 1 and 2 because there are no references against which to calculate the adjustment. For week 3, the number of people who should be available for enumeration is calculated as:

$$\text{Predicted } M_3 = N_2 s$$

and for week 4:

$$\text{Predicted } M_4 = N_3 s$$

After all these calculations are made, the size of the unaccompanied youth population can be estimated.⁵ Using formula 4 in section 3.2.1, the size of the unaccompanied youth population is estimated for weeks 1 and 2 combined.

$$\text{Predicted } T_{1-2} = C + N_1 + N_2 + X$$

For the remaining weeks, the population estimate can be calculated as:

$$\text{Predicted } T_3 = (N_3 * \text{Predicted } M_3) / C_3 \quad \text{for week 3}$$

$$\text{Predicted } T_4 = (N_4 * \text{Predicted } M_4) / C_4 \quad \text{for week 4}$$

Based on these calculations, the size of the unaccompanied youth population is estimated for 4 weeks in the month (Predicted T_{1-2} , Predicted T_3 and Predicted T_4) although for the first two weeks the estimate is combined. These estimates will provide a more comprehensive understanding of the size of the unaccompanied youth population. As well, these estimates will be more sensitive to the variation in the size of the population that occurs throughout the month. This enumeration and estimation procedure will be

performed once in the winter and once in the summer/fall to determine any existing seasonal variations. The final result will be more accurate statistics pertaining to the size of the unaccompanied youth population.

4.5 Questions of Reliability

The numbers obtained using this methodology will be more reliable and yield a more accurate picture of the extent of the problem. However, in order for the reliability of the methodology to be demonstrated, the results must be tested. The “test-retest method” is one way to measure reliability. Researchers will be able to assess the *stability reliability* of the methodology by administering the same technique twice to the same population,. Obtaining the same results both times is an indication that the method is reliable (Neuman, 1997: 138). In order to be completely confident in the reliability of the methodology, this test-retest process should be conducted each week of the proposed month during the first enumeration period. The process involves two teams of enumerators canvassing the same areas in different patterns so that they are not covering the same area at exactly the same time. There is no need for double canvassing within the shelters since the enumeration for that sector will only be conducted once all clients have been admitted for the evening. Consequently, the shelter counts can be considered reliable. The shelter count will be added to the numbers obtained by each of the teams enumerating the street, yielding two counts (N_i) for each week: N_i for team 1 and N_i for team 2. The method of estimation outlined in section 4.4 will be applied separately for each of the counts obtained by the teams. Assuming the methodology is reliable, the weekly population estimates produced will be quite similar for the two teams. Given that the questionnaire will be administered by both teams, the creation of unique identifiers

will allow the researchers to assess not only the overlap between two separate weeks (C) but also the proportion of youth canvassed by both teams within the same enumeration period. If the methodology is reliable, the number of unmatched youth (those enumerated by one team but not the other) will be extremely low.

Two major concerns associated with this *test-retest* method are respondent burden and the issue of cost. Both enumeration teams will have to provide compensation to the respondents in order to counteract the effect of respondent burden. This double compensation makes the procedure more costly. However, the reliability of the methodology will only have to be established once. Consequently, only one team will be required for the second enumeration conducted in the other season. I believe that the benefits of developing a reliable methodology for counting unaccompanied youth outweigh the increased cost. While this is the procedure being proposed for establishing the reliability of the methodology, over time alternative methods may be developed that are more cost-effective.

4.6 Discussion of Variables Being Examined

While the primary objective of this methodology is to yield more accurate numbers pertaining to the unaccompanied youth population, a secondary goal is to obtain some basic socio-demographic information. This socio-demographic information will have significant policy implications. While the size of the unaccompanied youth population is important to service providers, a gender breakdown is even more relevant. The shelters intended for this segment of the homeless population are gender specific. Consequently, it is important for the service providers to know both the size and gender distribution of the target population.

Age is also an important characteristic. The respondent's birth date is being requested in order to be able to create the unique identifier. As a method of verification the respondent will also be asked to provide their age. If the age provided does not correspond with the birth date, then a question of validity concerning the information supplied by the respondent will be raised. If the youth misreported their age, do they legitimately meet the operational criteria of an unaccompanied youth? Unfortunately, there is no way to ensure that respondents supply truthful information.

A final characteristic that is being measured in the survey (Appendix A) pertains to the mobility of the youth. By asking whether the youth has been interviewed on a previous night, patterns of mobility can be assessed. If the youth replies yes to this question, then he or she is part of the surviving unaccompanied youth population from one enumeration to the next. A response of "no" would indicate that the youth is a new entrant to the population. Question 8-2, where the youth was sleeping on the night last interviewed, may help to identify mobility trends between the shelters, streets and temporary accommodations, such as doubled-up with friends and/or relatives. The homeless population is known, by researchers and relevant stakeholders, to be highly mobile in nature. Assessing the nature of this mobility may help policy-makers to direct their initiatives to the proper locations/institutions. For example, a finding that many unaccompanied youth are leaving the shelters for the streets could be an indication of a problem with the shelter system. Consequently, changes would be required in the shelter system in order to keep the youth off the streets.

While I am not proposing that the survey include additional issues, there are many different topics pertaining to the unaccompanied youth population that could be studied at

the same time that the count is obtained. In my methodology I have outlined the procedure for identifying, locating and contacting the unaccompanied youth population of the Ottawa-Carleton region. Using this methodology, researchers could examine secondary issues such as ethnic composition, education, health and family. Many studies (see Bass, 1992; Hagan & McCarthy, 1997 for examples) have identified a number of issues related to why youth end up on the streets. Many of these causes are either family or education related, indicating that, in a more detailed study, these are important issues to focus on. However, for the methodology being proposed in this thesis these are secondary issues.

4.7 Outstanding Issues

Even though the proposed methodology should yield more accurate and reliable data, there are still outstanding issues that need to be addressed in future research. The first "problem" is that the method will yield a point-in-time count rather than a yearly estimate. However, the process of obtaining a yearly estimate would be extremely time-consuming and costly and would not be guaranteed to be 100% accurate. Therefore, a point-in-time count provides stakeholders with sufficient information to be able to ascertain the magnitude of the issue. By proposing that the methodology be conducted in both the summer and winter, the impact of seasonal variations may be estimated.

The issue of cost is another problematic area. There are numerous costs associated with the methodology being proposed. However, the financial expenditures could be limited through the solicitation of donations. The food vouchers being offered as compensation should be donated by local establishments, eliminating one of the major costs associated with most studies of the homeless. The study will be more likely to

receive the required funding if costs are kept to a minimum. Homelessness is gaining increasing recognition as a serious problem with many Canadian cities having declared the issue a national disaster. Therefore, the funding should be made available to obtain accurate and meaningful data about this subset of the population. While the methodology proposed is intended to enumerate the unaccompanied youth population, with slight modifications it can be applied to any segment of the homeless.

The third potentially problematic area is the issue of undercounting. In the proposed methodology, steps are being taken to eliminate double counting with the development of a unique identifier. Those youth who remain hidden from enumeration or doubled-up with friends and/or family will be missed in the count. However, by combining estimation with enumeration a substantial proportion of those missed in any of the observations will be estimated for and included in the final total. As well, the "word of mouth" effect concerning the compensation being provided may bring some of these youth out of hiding, increasing the coverage rate.

Therefore, while some issues may still exist with the proposed methodology, the overall result should be more accurate than previous studies. The use of Capture-Recapture to estimate the total size of the unaccompanied youth population in the Ottawa-Carleton region should yield the most reliable data to date.

CHAPTER 5: CONCLUSION

The unaccompanied youth component of the homeless population is growing (Golden, 1999: 19). However, the rate of growth is unknown because of a lack of reliable and valid statistics. The methodology that has been proposed will help to overcome many of the obstacles associated with counting the unaccompanied youth population. An accurate point-in-time count of the unaccompanied youth population can be attained using a clearly outlined operational definition and a combination of enumeration and estimation. While there still exist certain outstanding issues that must be addressed in future research, this methodology is an improvement over the existing techniques used to study the homeless. However, the question that must now be addressed is: Why do we need more reliable statistics?

There exists a strong correlation between statistics and policy. Consequently, an accurate methodology for counting unaccompanied youth will serve a multitude of purposes. First, the statistics derived using this methodology will provide social agencies with a more accurate understanding of the extent of the problem and an indication of the likely demand for services on a daily basis (Mackenzie & Chamberlain, 1992: 16). This understanding will help the agencies to allocate their resources in an appropriate manner. Second, reliable statistics will guide the governments (federal, provincial and municipal) to allocate funding appropriately. If the unaccompanied youth component is the largest growing segment, then governments can target funding to help improve the situation of this population. Perhaps more money needs to be allocated to education programs geared to giving these youth the skills necessary to obtain employment, rather than to soup kitchens. The government is slowly beginning to introduce incentives aimed at youth

employment but there is still a long way to go. A more accurate picture of the situation should encourage governments to speed up their plan. Thirdly, data derived from a study using the proposed methodology will help to increase public awareness of the plight of the unaccompanied youth. Everyone has their own ideas about the extent of the problem – most of which are based on the proportion of unaccompanied youth who are visible (e.g. squeegee kids). However, the true size of the population is currently unknown. More public outcry should force the public sector to acknowledge the extent of the problem and implement solutions. There is no need for the unaccompanied youth population of today to become the homeless adults of tomorrow.

NOTES

¹ For certain types of research understanding why the youth is homeless is essential. For example, in determining a means of intervention/prevention in the occurrence of youth homelessness service providers must first comprehend why the phenomenon occurs in order to be able to put the emphasis where it will be most useful (e.g. family, school, peers).

² While a “de facto” operational definition is more meaningful in a study of unaccompanied youth, or the homeless population in general, this approach could be considered problematic. The primary problem pertains to the fact that the Census, which is the most comprehensive study of the Canadian population, is based on a “de jure” method of enumeration. It would be logical for a census of the homeless population, or any of the subpopulations, to be included with the Canadian Census that is conducted every 5 years. However, before these two enumerations could be conducted simultaneously, the issue of a “de facto” versus a “de jure” approach would have to be reconciled.

³ Historically the Capture-Recapture method was developed long before the Chandra-Sekar Deming technique. The first analysis of capture-recapture data is usually attributed to Lincoln in the 1930’s, although it has been suggested that the method should be credited to Petersen for work done in 1889. The method was used even further back in 1783 by Laplace to estimate the population of France in the 18th Century from the register of births and the number of births in parishes of known size (Blower et al., 1981: 28). Therefore, the method developed by C. Chandra Sekar and W. Edward Deming in the 1940’s was not original but based on techniques that had already been proven effective in the estimation of the size of both animal and human populations.

⁴ For a more detailed discussion, see Section 3.1

⁵ If the unaccompanied youth population was closed, the process of estimating the total would be less complicated. The total of those observed on the streets and in the shelters who met the criteria of the operational definition would be N_1 . A unique identifier would be developed for each of these individuals. This initial capture would be conducted at the beginning of the month. A second observation would take place at the end of the month. Once again the total of all individuals enumerated in the shelters and on the streets (N_2) would be calculated. The unique identifiers for the individuals in observation 2 would be created and then matched to the identifiers from the first sample to identify those youth who were enumerated both times (C). Once these three pieces of information are calculated, the proportion of the population missed (X) can be estimated. Based on this estimate, the total unaccompanied youth for a closed population (Predicted T) for that month can be calculated.

Appendix A

Survey of Unaccompanied Youth in Ottawa

Sample Consent Letter:

(To be read by the enumerator before the beginning of the interview)

Hi, I'm *(name of enumerator)* and I am working on a survey of unaccompanied youth in Ottawa. This survey is being sponsored by *(name of sponsoring agency)*. The principal investigator for this survey is *(name of principal investigator)* and he/she may be contacted at *(phone number of principal investigator)* if you should have any questions.

The intent of this survey is to collect data pertaining to the number of unaccompanied youth (includes homeless youth, runaways and street kids) in the Ottawa-Carleton region. An accurate count is an important step to designing programs intended to help this population.

This survey should take no more than 10 minutes to complete and you will be compensated for your time. There are two parts to the survey – Part I consists of a few basic questions designed to determine your eligibility for this survey. If you meet the screening criteria you will be asked a few additional questions. Your participation in this survey is completely voluntary but greatly appreciated. I would like to assure you that all information collected will be kept strictly confidential.

Please sign this form to indicate that you consent to taking part in this survey. *(inform the respondent that the signature can be any type of mark if they are unable to sign their name)*

(signature of respondent)

UNACCOMPANIED YOUTH QUESTIONNAIRE

1. **Date of Enumeration:** ____/____/____
(Year / Month / Day)

2. **Time of Enumeration:** *Please check the time to the nearest hour. If the time is past the half-hour (30 minutes) please check the next hour e.g. if the time is 02:40 check 03:00.*

☐ 01:00	☐ 07:00	☐ 13:00	☐ 19:00
☐ 02:00	☐ 08:00	☐ 14:00	☐ 20:00
☐ 03:00	☐ 09:00	☐ 15:00	☐ 21:00
☐ 04:00	☐ 10:00	☐ 16:00	☐ 22:00
☐ 05:00	☐ 11:00	☐ 17:00	☐ 23:00
☐ 06:00	☐ 12:00	☐ 18:00	☐ 24:00
-

PART I – Screening Questions:

Instructions:

Please ask every potential respondent the following two questions.

3. **What is your current age as of your last birthday? (please mark (✓) only one):**

- a. ☐ 11 or younger
- b. ☐ 12
- c. ☐ 13
- d. ☐ 14
- e. ☐ 15
- f. ☐ 16
- g. ☐ 17
- h. ☐ 18
- i. ☐ 19
- j. ☐ 20
- k. ☐ 21 or older

4. Where are you sleeping tonight (night of this enumeration)? *(please mark (✓) only one):*

- a. ☐ The street/any location not meant for human habitation (e.g. bus shelter, doorway, heat vent etc.)
- b. ☐ Shelter (e.g. the Young Men's Shelter and the Young Women's Shelter)
- c. ☐ Youth Housing (e.g. YMCA "Second Stage Housing Program")
- d. ☐ Temporary Accommodation (doubled – up with friends and/or relatives)
- e. ☐ Home with Parent(s) or Legal Guardian
- f. ☐ Relative's Home (semi-permanent to permanent)
- g. ☐ Friend's Home (semi-permanent to permanent)
- h. ☐ Foster Home
- i. ☐ Independent Living Situation (includes apartments, rooming houses etc.)
- j. ☐ Other

*If the respondent has answered "b" through "j" for Question 3 **and** "a" through "d" for Question 4 then continue with **Part II**. If one of the answers does not meet the criteria for the operational definition then thank the respondent for their time.*

PART II – Unaccompanied Youth Characteristics:

Instructions:

Please ask every individual who met the required criteria from "PART I – Screening Questions" the following questions:

5. Initials of Respondent *(to be used in the creation of a Unique Identifier):*

(/)
(first / last)

6. Birth Date of Respondent *(to be used in the creation of a Unique Identifier):*

(19/ / /)
(century / year / month / day)

7. Sex of Respondent *(please mark (✓) only one):*

- M ☐ Male
- F ☐ Female

8-1 Have you been interviewed for this survey on a previous night? (please mark (✓) only one):

Y ☐ Yes

N ☐ No

If the answer to this question is "Yes" please ask question 8-2. If the answer is "No" please go to the end of the interview.

8-2 Where were you sleeping on the night when you were last interviewed for this survey? (please mark (✓) only one):

- a. ☐ The street/any location not meant for human habitation (e.g. bus shelter, doorway, heat vent etc.)
- b. ☐ Shelter (e.g. the Young Men's Shelter and the Young Women's Shelter)
- c. ☐ Youth Housing (e.g. YMCA "Second Stage Housing Program")
- d. ☐ Temporary Accommodation (doubled – up with friends and/or relatives)
- e. ☐ Home with Parent(s) or Legal Guardian
- f. ☐ Relative's Home (semi-permanent to permanent)
- g. ☐ Friend's Home (semi-permanent to permanent)
- h. ☐ Foster Home
- i. ☐ Independent Living Situation (includes apartments, rooming houses etc.)
- j. ☐ Other

End of Interview:

Thank the respondent for their time and provide them with the compensation (food voucher).

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