11-615
no.85-59 i Csuarta Conada
c. 3


Methodology Branch



Direction de la méthodologie



Canadä'

```
Gi&|BTHOE STMTISTIQUE
    CANADA CANADA
    JAN ? 1998
    i : aramY
```

CHARACTERISTICS OF POTEVTIASVBUSHTHEOUE INDIVIDUALS BASED ON THE CLUSTER ANALYSIS OF ACTIVITIES OF DAILY LIVING
by
Gary Lazarus
June, 1985

* This is a preliminary version. Do not quote without author's permission. Comments are welcome


## Abstract

A cluster analysis was performed on the respondents who were screened in by the October 1983 Canadian Health and Disability Survey questionnaire for adults and has been documented in an earlier paper entitled "A Cluster Analysis of Activities of Daily Living fron the Canadian Health and Disability Survey". This paper examines the characteristics of the individuals within the clusters and the characteristics of the clusters across data sets.

## Résumé

Une analyse en grappe a été effectuée pour les répondants adultes sélectionnés lors de l'Enquête sur la santé et les invalidités au Canada en octobre 1983. (Cette analyse est documentée dans le rapport A Cluster Analysis of Activities of Daily Living from the Canadian Health and Disability Survey). Le présent rapport considère les caractéristiques des individus dans chacune des grappes ainsi que celles de grappes elles-mêmes vis-̀̀-vis d'autres ensembles de données.

## 1. INTRODUCTION

A cluster analysis was performed on the 12,907 individuals who were screened in by the October 1983 Canadian Health and Disability Survey (CHDS) questionnaire for adults. The clustering procedure utilized the information contained in the screening section of the questionnaire only: the seventeen activities of daily living (ADL's), the major activity limitation item (A27) and the mental handicap item (A23). Each stage of this procedure involved the identification of the screening section item that best separated the potentially disabled individuals. The individuals in the resulting clusters were then alike to the extent that they all had the identical composition of these specified values. For example, every individual in cluster 1 had trouble walking 400 metres (A10), had trouble dressing and undressing (A16), and had trouble hearing conversation with two or more persons (A25). The screening section items which had not been fixed in the clustering procedure or as a result of it were still variable, and the incidences of these variables for individuals in the cluster along with the fixed values defined the cluster centroid or the cluster's "average individual". Furthermore, it was a result of the cluster analysis that individuals within a cluster were more alike than individuals across clusters.

The first paper "A Cluster Analysis of Activities of Daily Living from the Canadian Health and Disability Survey" scaled the clusters according to the average number of activities of daily living, E(NADL), and identified each cluster according to dominant trouble orientation. A principal component analysis (using screening section and completely unable items information) then illustrated that the clusters were sensitive to ranking criteria. The scaling of the clusters according to the first principal component (a measure of overall strength) was deerned to be the most suitable of those considered in the first paper.

With reference to the individuals within the clusters, this paper attempts to answer the question "Just who are these guys, anyway?".

We seek the answer to this question in a number of ways. In section 2, we study the clusters in terms of de:nographic and disability related variables using October 1983 CHDS data, October-June CHDS weighted data and January Test 3 weighted data. The emphasis shifts from descriptive statistics to analytic statistics in section 3. Section 4 considers other scaling possibilities based on the degrees of disability and dependence. Section 5 presents closing remarks.

## 2. CHARACTERISTICS OF CLUSTERED INDIVIDUALS

The clusters are examined in order to determine the characteristics of the individuals in them. Section 2.1 concentrates on October data while section 2.2 compares the October-June weighted data with January Test 3 weighted data.

### 2.1 Descriptive Statistics - October Data

Table 2.1.1 (a) presents cluster distributions according to sex (male/female), age group (15-24/25-64/65+) and labour force status (in labour force/not in labour force). The composition of each age group level on a cluster basis is illustrated in Table 2.1.1 (b).
i) Sex

The clusters with hearing troubles are dominated by men whereas the clusters with vision trouble are dominated by women. The clusters with no significant
trouble orientation are dominated by women with the exception of cluster 26 . It is interesting that nearly two-thirds of the individuals in this cluster were screened in by the major activity limitation item alone.
ii) Age

Clusters characterized by agility troubles, "special" troubles or by no significant trouble orientation have fewer individuals 65 years of age and older than the overall sample. Clusters of individuals with mobility-oriented troubles or with mobility and agility-oriented troubles have fewer individuals in the 15-24 cohort than the overall sample. Clusters characterized by hearing and vision oriented troubles, hearing trouble, or vision troubles are relatively overrepresented by individuals aged 65 and higher.
iii) Labour Force Status

Clusters of individuals characterized by hearing and vision troubles, vision troubles, mobility troubles, and mobility and agility troubles have relatively high proportions of individuals who are not in the labour force. Clusters with no significant trouble orientation or an agility trouble orientation have relatively low proportions of individuals who are not in the labour force. Clusters of individuals with hearing troubles and relatively high E(NADL), (refer to Table 2.1.1 (b) for E(NADL) values), exhibited high percentages of individuals who were not in the labour force.

Labour Force Status is age related. Table 2.1.2 presents the percentage of individuals in the 15 to 64 age bracket who are in the labour force. Relative to the
overall sample, the percentage of individuals in the labour force is low for clusters with individuals who have mobility oriented troubles, vision troubles or "special" troubles and high for clusters of individuals with no significant trouble orientation.
iv) Characteristics

Tables 2.1.3 (a) and 2.1.3 (b) present cluster distributions according to selected follow-up items. Note that these tabulations were prepared using weighted data and excluded section B non-respondents. These itens are as follows:

C10 Have you been diagnosed by an opthalmologist as being legally blind?

With the use of an aid, are you able to listen to, and to understand, what is being said over a normal telephone?

C31C How well do you feel you are able to make yourself understood by speaking with other people?
--- Table 2.1.3 (a) shows \% who replied "not at all" ---

F02 Are you housebound?

F25 Are you prevented from leaving your residence and taking trips of more than 50 miles ( 80 km ) because of your condition or health problem?

C42 Use of mobility aid.

According to C10 and C20, cluster 2 has a higher percentage of individuals with vision trouble than cluster 5 whereas cluster 5 has a higher percentage of individuals with hearing trouble than cluster 2. The clusters in the "HV" and "H" "umbrella" groups do contain the seriously hearing impaired individuals. The clusters in the "HV" and "V" "urnbrella" groups do contain the seriously vision impaired individuals.

It is interesting to note that, within "umbrella" groups, the ranking of clusters by F 02 is not always consistent with $\mathrm{E}(\mathrm{NADL}$ ) or with F 25 (Note that the clusters in the tables are listed in descending order with respect to E(NADL) by "umbrella" group). With respect to mobility aid usage, incidences of walkers and wheeichairs separate the "MA" and " H " "umbrella" groups. It is also interesting to note the reliance of individuals in some of the " $V$ " and "HV" clusters on a cane (other than a white cane).
v) Degree of Disability

This particular degree classifies a record according to the number of ADL's a respondent is completely unable to perform (NCMPLTLY). A screened in respondent has "some disability" when NADL exceeds zero but NCMPLTLY is zero. A screened in respondent is "moderately disabled" when NCMPLTLY is one or two and "severely disabled" when NCMPLTLY is at least three. Respondents who were screened in on mental handicap alone or by the major activity limitation item alone, or both, are classed as "unknown".

Table 2.1.4 shows the cluster distribution according to degree of disability relative to the overall distribution of screened in individuals.

With respect to the overall table, it is observed that there is a strong relationship between the degree of disability and the ranking according to E(NADL). The relative strength of cluster 19 with respect to the degree of disability in the face of its weaker ranking according to E(NADL) serves as a warning with regard to using information from one section of the questionnaire alone to rank individuals.

Note further that the screened in individuals which the degree of disability could not rank, i.e. individuals who were mentally handicapped or screened in on major activity limitation alone, are in two clusters, 24 and 26. In each case, these "unknown" individuals comprise the majority of the cluster. It would be unfortunate for users to have to employ a severity indicator which is unable to encompass all disabled individuals.

## vi) Degree of Dependence

This measure reflects the ability of respondents to perform everyday tasks. The tasks are:
a) shop for groceries or other necessities;
b) get around in your own neighbourhood or area;
c) do heavy household chores, gardening or yardwork;
d) do everyday work within the home including cooking;
e) get around within your own home;
f) take personal care of youself - i.e. washing, grooming, dressing and feeding yourself.

Responses to this follow-up section item were provided on a Q-card.
a) I don't do it at all because of my condition. I do it only with the help of another person because of my condition.
b) I do it sometimes by myself, but sometimes I need the help of another because of my condition.
c) I do it by myself.

The tasks and the responses were scaled according to level of difficulty and effect of condition on performance of everyday tasks respectively. The tasks, listed in order of increasing degree of difficulty, are $E$ and $F, B$ and $D, A, C$. The responses, as shown above, were grouped according to severity of condition. The degree of dependence was then determined for a respondent as follows:
i) An (a) response to $E$ or $F$ impiled $E-F$ dependent, otherwise,
ii) $A n(a)$ response to $B$ or $D$ implied $B-D$ dependent, otherwise,
iii) An (a) response to A implied A dependent, otherwise,
iv) An (a) response to $C$ implied $C$ dependent. Individuals who were not classified as task dependent were found to be partially dependent if a (b) response had been given to at least one of the six everyday tasks.
v) Individuals who gave a (c) response to all six everyday tasks were task independent.

Table 2.1.5 presents the cluster distributions according to the degree of dependence. This is another scale which fails to rank everybody. In this case, we are unable to assess individuals who did not respond to any of the everyday task items from cos in the questionnaire. The imputation method, used on October-June data, replaced
records which exhibited total non-response to the follow-up. Hence the imputed file will have fewer records of this kind. However, the problem will persist because records with item non-response in the follow-up were not imputed.

In this section, concerns have been expressed with regards to use of the degrees of disability and dependence for purposes of ranking clusters of similarly disabled individuals. In section 4, efforts will be made to use these degrees as severity scales, and the idea of employing these degrees as instruments for the evaluation of an index rather than as scales themselves will be introduced.

### 2.2 Comparison of October-June CHDS Weighted with January Test 3 Weighted Data

Much of the analysis presented in 2.1 is now examined again but this time using the October-June weighted CHDS and January test 3 weighted data bases rather than the October CHDS data. On the one hand, October-June includes imputation of non-response to the follow-up, on the other, January Test 3 had no follow-up! Furthermore, on January Test 3, major activity limitation was covered by two items, S16 and S17:
(S16) "Is ... limited in the kind or amount of work he/she can do at his/her job or business because of a long-term physical condition or health problem?", and
(S17) "Is ... limited in the kind or amount of work he/she could do at any job or business because of a long-term physical condition or health problem?".

Table 2.2.1 presents the $E(N A D L)$ for the screened in respondents from the October-June weighted adult CHDS file and the January test 3 adult weighted adult file as well. Both files were edited.

The test 3 screen in rates were substantially higher than those recorded by the CHDS. Studies have shown that the difference is attributable to a considerable reduction in selecting "marginally - disabled" respondents, i.e. those individuals screened in on one or two ADL's or possibly the major activity limitation item(s). The overall average number of ADL's increased from 3.03 (January test 3) to 3.61 (October-June). It can be observed that the order of E(NADL) remains constant within "umbrella" groups though the numbers change in many instances.

Table 2.2.2 presents the E(NCMPLTLY) for October-June and January test 3. In this case, the numbers change in many instances and there are instances where the order changes as well. Clusters 18 and 19 flip-flop in the " 11 " "umbrella" group and clusters 27 and 29 swap ranks in the " N " "umbrella" group. These two changes in ranking serve notice that the underlying variation may not be stable from cluster to cluster within data sets or across data sets.

Table 2.2.2 also shows that the within "umbrella" group cluster order may vary between $E(N A D L)$ and $E(N C M P L T L Y)$. According to $E(N A D L)$, the clusters in "MA" "umbrella" group are ordered 8, 10, 14, 11 and 15, while according to E(NCMPLTLY), the ordering is $8,10,14,15$ and 11 in January and October-June. This illustrates the sensitivity of ordering of disabled individuals to the criteria selected.

It was shown that overall $E(N A D L)$ changed substantially from January to October-June. The overall E(NCMPLTIY) did as well, increasing from 0.74 (January) to 1.02 (October-June). According to the degree of disability, the average disabled individua! was not quite moderately disabled in January, however, the average individual was moderately disabled in October-June. A positive attribute of any severity indicator would be some degree of insulation from nonsampling effects across data bases while retaining sensitivity to real changes in the target population.

Tables 2.2 .3 (a) and 2.2 .3 (b) present the distributions of individuals within clusters according to sex, age and labour force status for October-June and January data respectively. Several changes in composition are observable. For example, cluster 4 is predominantly male in January, female in October-June. Labour force status composition does an about face in cluster 22.

Tables 2.2.4 (a) and 2.2.4 (b) present the distributions of individuals within clusters according to degree of disability for October-June and January data respectively. Table 2.2.5 presents the distribution of individuals within clusters according to the degree of dependence for October-June data. As follow-up information was not gathered by January test 3, no degree of dependence is available using January test 3 data.

The observable differences in percentages are at times quite large. We now turn to a brief discussion concerned with the determination of statistically significant changes.

## 3. ANALYSIS OF CHARACTERISTICS

The difficulties encountered in attempting to analyse these data are numerous. As variables such as sex, age group and labour force status are qualitative, chi-squared (X2) tests appear to be appropriate. However, the sample sizes are large and the chisquared test statistic is known to be related linearly to sample size. Furthermore, test procedures that do not make adjustments for the sample design may lead to erroneous conclusions. This last problem is recognized and, to some extent, alleviated by using weighted data since the weights incorporate some of the sample design. Use of weighted data exacerbates the first problem, however. In order to make the $X^{2}$ tests at at! useful, the test statistics were adjusted by the ratio of the sample total to the population total. The resulting test is more relevant but should be interpreted as an approximation.

Table 3.1 presents the results of these adjusted $X^{2}$ tests on October weighted data. The entries are the smallest levels of significance for which the test statistic was statistically significant. An alpha level of .0001 was the smallest value used. An "NS" implies that the comparison was not significant at 5 per cent. The tests contrasted each cluster's population with the remaining screened in population for sex (inale/female), age group (15-24/25-34/35-44/45-54/55-64/65+) and labour force status (employed/une:nployed/not in labour force).

It is recommended that interpretation be conservetive in atoture, i.e. signticancas should be interpreted with care. For example, one way of doing this is to recognize that the cluster distribution differs significantly from the rest of the screened in population when the test statistic is significant at .0001 . Hence, the age distribution of cluster 2 is significantly different than the age distribution of the other screened in
individuals. When the test levels exceed .0001 we do not reject the test hypothesis that the cluster's distribution is statistically similar to the distribution of the other individuals in the screened in population for the specified variable on the basis of October weighted data.

Despite our conservatisin with respect to the interpretation of test resuits, we can. on the basis of Table 2.1.1 and Table 3.1, make some fairly strong statements.

Ciusters of individuais with hearing - oriented troubles, vision - oriented troudles and hearing and vision oriented troubles as well as relatively higt values of E(NADL) possess a disproportionately high fraction of older individuats.

Cluster 24 has more young adults than average. This cluster contains 162 individals who were screened in on mental handicap alone and another 60 or so who had trouble speaking and being understood.

Intintiuals in the ciusters with ro signifitant trouble orientation exhioit a stroug tendency to be in the labour force. The cluster 25 distribution, which appears to contradict this remark, does not differ significantly from the distribution of other screened in individuals.

It is important to remember that the target population consists of noninstitutionalized adults. Hence, for example, though it appears from CHDS date the: mental handicap is not related to age, it may be true that older mentally handicapped individuals are institutionalized. Comments based on CHDS data pertain to the noninstitutionalized adult population.

The tests of significance have also been produced for October-June and January weighted data. The results of the analysis on October data would lead us to believe that many of the changes in percentages between the two data sets may be explained by sampling error.

Table 3.2 presents the results of the adjusted chi-squared tests on comparisons of the cluster distributions across data sets according to selected characteristics. An "NS" implies that the comparison was not significant at 5 per cent. The one, two and three asterisks indicate significance at $5 \%, 1 \%$ and $0.01 \%$ respectively. It is again recommended that significances be interpreted with care. Hence, the distribution of a cluster according to October-June data on a certain variable may be considered significantly different from that of the same cluster on that variable according to January data when the test statistic is significant at $0.01 \%$. So the age and labour force composition changed significantly for cluster 22 even though sex composition did not change. The clusters are generally stable with respect to these characteristics across data sets.

## 4. OTHER MEASURES OF SEVERITY

The distribution of individuals within clusters according to the degrees of disability and dependence for October-June and January data are illustrated in tables 2.2.4 (a), 2.2.4 (b) and 2.2.5. We now attempt to scale the clusters according to these degrees.

The method is fairly simplistic. Consider the degree of disability. A comparison is made between the percentages of clustered individuals and the percentages of all screened in individuals. The cluster is then ranked according to the degree(s) where the cluster is relatively strong. For example, according to October-June data, 41.5\% of
cluster 5 individuals are "moderately disabled". This is much higher than the overall figure of $23.2 \%$. Hence cluster 5 is rated "moderate" according to this data set. Table 4.1 presents the results. In some cases, decisions as to the ordering were subjective. For example, again using October-June data, $15.4 \%$ of cluster 18 individuals registered "severe" disability while $14.1 \%$ of the overall screened in population were severely disabled. Cluster 18 was ranked as "moderate", however, because the differential in moderate representation was more striking.

Many clusters rate differently according to the two data sets - a reflection of the overall change in E(NCMPLTLY), since the necessary and sufficient conditions for cluster identification did not change.

Other measures of severity can be developed using the degree of dependence as well. The procedure for determining an individual's degree of dependence was such that the individual was accorded the maximum applicable degree. It may be interesting then to rank the clusters according to the minimum dependence for which they exhibit strength relative to the overall screened in population. A listing of the clusters according to this minimum dependence criterion is given below.

## MINIMUM DEPENDENCE

## Minimum Dependence

B - D DEPENDENT

C DEPENDENT

A DEPENDENT

PARTIALLY DEPENDENT

INDEPENDENT

Clusters
$1 \quad 17 \quad 8$
(1) (16) (2)
$\begin{array}{lcccccc}3 & 4 & 9 & 14 & 11 & 15 & 19\end{array}$
(7) (13) (3) (8) (9) (10) (19)
$\begin{array}{llllll}2 & 5 & 12 & 13 & 24 & 10\end{array}$
(5) (12) (6) (11) (29) (4)
$\begin{array}{lllllll}6 & 18 & 16 & 20 & 22 & 23 & 25\end{array}$
(15) (14) (18) (22) (17) (21) (23)
$\begin{array}{lllll}7 & 27 & 28 & 29 & 26\end{array}$
(24) (25) (26) (27) (28)

21

The distribution for cluster 21 is very similar to that of the overall 12,907 screened in individuals. The numbers in parentheses indicate the rank of the cluster according to the $\mathrm{E}(\mathrm{NADL})$ scale. This table highlights the inconsistencies in the two ranking techniques. Intra-record inconsistencies between screening section responses and responses to the everyday task items have been studied elsewhere*. For the time being, it should be noted that a dependence type ordering based on follow-up information may not possess the same reliability as orderings which rely upon screening section information or "completely unable" items or both.

Another problem with this kind of ranking is that it does not allow for clusters which are distributed similarly to the total screened in population. In this case, cluster 21 is not included in the ordering.

[^0]
## 5. CLOSING REMARKS

This paper studied the characteristics of potentially disabled individuals based on the cluster analysis of responses to the screening section items of the questionnaire. The clusters allowed us to examine some very complex relationships that exist in the data. For example, we discovered that disproportionately many individuals with hearing and vision oriented troubles, vision oriented troubles or hearing oriented troubles were using a cane (other than a white cane). It turned out that disproportionately many of the individuals in these clusters were at least 65 years old. We learned that while information contained in each part of the questionnaire added to our understanding of the disabled population, no single piece provided the complete story. A ranking of the clusters according to the first principal component (a measure of overall strength), presented in the first paper, was based on the screening section information and completely unable items of the questionnaire.

The situation is simply this. Within any data set (Ocrober CHDS, October-June CHDS, January test 3), the approach to rank disabled individuals improves with the amount of information employed. Furthermore, it is important that the ranking procedure be consistent across data sets.

APPENDIX

DATA: OCTOBER UNWEIGHTED

## Cluster Characteristics

| CLUSTERS | SEX |  | AGE GROUP |  |  | LABOUR FORCE STATUS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | 15-24 | 25-64 | $65+$ | In Labour Force | Not In Labour Force |
| HV |  |  |  |  |  |  |  |
| 2 | 48.1 | 51.9 | 2.1 | 19.8 | 78.1 | 6.9 | 93.1 |
| 5 | 52.2 | 47.8 | 2.5 | 31.5 | 66.0 | 17.7 | 82.3 |
| H |  |  |  |  |  |  |  |
| 1 | 50.8 | 49.2 | 1.7 | 29.6 | 68.7 | 7.6 | 92.4 |
| 3 | 55.8 | 44.2 | 0.9 | 38.5 | 60.6 | 12.7 | 87.3 |
| 4 | 58.5 | 41.5 | 1.3 | 34.1 | 64.6 | 18.6 | 81.4 |
| 6 | 59.9 | 40.1 | 2.8 | 54.6 | 42.6 | 33.2 | 66.8 |
| 7 | 60.2 | 39.8 | 6.4 | 52.5 | 41.1 | 43.1 | 56.9 |
| V |  |  |  |  |  |  |  |
| $\overline{9}$ | 41.1 | 58.9 | 0.0 | 26.8 | 73.2 | 7.1 | 92.9 |
| 12 | 29.4 | 70.6 | 0.6 | 30.1 | 66.3 | 3.7 | 96.3 |
| 13 | 32.9 | 67.1 | 2.4 | 26.5 | 70.1 | 5.5 | 94.5 |
| 21 | 44.0 | 56.0 | 9.7 | 49.5 | 40.8 | 23.8 | 76.2 |
| S |  |  |  |  |  |  |  |
| 17 | 37.5 | 62.5 | 16.7 | 62.5 | 20.8 | 12.5 | 87.5 |
| 24 | 60.2 | 39.8 | 33.7 | 62.2 | 4.1 | 32.9 | 67.1 |
| MA |  |  |  |  |  |  |  |
| 8 | 50.2 | 49.8 | 5.7 | 45.7 | 48.6 | 5.7 | 94.3 |
| 10 | 51.0 | 49.0 | 3.3 | 70.0 | 26.7 | 21.9 | 78.1 |
| 14 | 40.6 | 59.4 | 1.1 | 50.2 | 48.7 | 8.6 | 91.4 |
| 11 | 43.4 | 56.6 | 1.8 | 53.0 | 45.2 | 15.1 | 84.9 |
| 15 | 34.7 | 65.3 | 2.7 | 52.4 | 44.9 | 16.5 | 83.5 |
| M |  |  |  |  |  |  |  |
| 18 | 31.8 | 68.2 | 1.2 | 56.6 | 42.2 | 21.4 | 78.6 |
| 16 | 57.2 | 42.8 | 2.4 | 60.0 | 37.6 | 28.8 | 71.2 |
| 19 | 31.4 | 68.6 | 3.6 | 49.3 | 47.1 | 16.8 | 83.2 |
| 20 | 48.9 | 51.1 | 4.3 | 53.6 | 42.0 | 25.9 | 74.1 |
| A |  |  |  |  |  |  |  |
| $\overline{22}$ | 50.2 | 49.8 | 4.2 | 76.3 | 19.5 | 37.7 | 62.3 |
| N |  |  |  |  |  |  |  |
| $\overline{23}$ | 44.9 | 55.1 | 7.7 | 71.9 | 20.4 | 46.9 | 53.1 |
| 25 | 28.1 | 71.9 | 4.1 | 61.3 | 34.6 | 27.8 | 72.2 |
| 27 | 32.6 | 67.4 | 11.6 | 61.7 | 26.7 | 47.4 | 52.6 |
| 28 | 35.3 | 64.7 | 4.9 | 68.6 | 26.5 | 48.0 | 52.0 |
| 29 | 34.4 | 65.6 | 8.5 | 57.9 | 33.6 | 39.1 | 60.9 |
| 26 | 52.2 | 47.8 | 12.2 | 68.3 | 19.5 | 45.3 | 54.7 |
| TOTAL | 47.5 | 52.5 | 6.6 | 55.6 | 37.8 | 31.2 | 68.8 |

TABLE 2.1.1 (b)
D.ATA: OCTOBER UNWEIGHTED

## Cluster Characteristics

## CLUSTERS

|  | ID | 15-24 | 25-64 | $65+$ | Total | E(NADL) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{H V}$ - - - $\quad$ - |  |  |  |  |  |  |
| 2 | HVWA1 | 0.5 | 0.5 | 3.0 | 1.5 | 8.57 |
| 5 | HVN1 | 0.6 | 0.9 | 2.8 | 1.6 | 4.90 |
| H |  |  |  |  |  |  |
| I | HMAl | 0.6 | 1.3 | 4.3 | 2.4 | 11.86 |
| 3 | HMA2 | 0.4 | 1.9 | 4.4 | 2.8 | 7.49 |
| 4 | HM1 | 0.5 | 1.5 | 4.1 | 2.4 | 4.83 |
| 6 | HAl | 0.9 | 2.2 | 2.5 | 2.2 | 4.76 |
| 7 | HN1 | 13.4 | 12.9 | 14.9 | 13.7 | 2.12 |
| V |  |  |  |  |  |  |
| $\overline{9}$ | VMA1 | 0.0 | 0.2 | 0.8 | 0.4 | 9.34 |
| 12 | VMA2 | 0.1 | 0.7 | 2.2 | 1.2 | 7.78 |
| 13 | VMI | 0.5 | 0.6 | 2.4 | 1.3 | 4.98 |
| 21 | VNI | 7.1 | 4.3 | 5.2 | 4.8 | 2.76 |
| S |  |  |  |  |  |  |
| 17 | SMAI | 0.5 | 0.2 | 0.1 | 0.2 | 4.71 |
| 24 | SNI | 9.8 | 2.1 | 0.2 | 1.9 | 0.48 |
| MA |  |  |  |  |  |  |
| $8$ | MA1 | 1.7 | 1.6 | 2.4 | 1.9 | 11.48 |
| 10 | MA2 | 0.8 | 2.0 | 1.2 | 1.6 | 8.95 |
| 14 | MA3 | 0.2 | 1.3 | 1.9 | 1.5 | 6.92 |
| 11 | NA4 | 0.4 | 1.2 | 1.5 | 1.3 | 6.82 |
| 15 | MA5 | 2.1 | 4.9 | 6.2 | 5.3 | 6.76 |
| M |  |  |  |  |  |  |
| 18 | M I | 0.2 | 1.4 | 1.5 | 1.3 | 4.78 |
| 16 | M2 | 1.3 | 3.8 | 3.5 | 3.6 | 4.37 |
| 19 | M3 | 2.5 | 4.0 | 5.6 | 4.5 | 3.91 |
| 20 | M 4 | 4.4 | 6.4 | 7.4 | 6.6 | 2.29 |
| $\frac{A}{22}$ | A1 | 1.1 | 2.3 | 0.9 | 1.7 | 4.61 |
|  |  |  |  |  |  |  |
| $\frac{\mathrm{N}}{} \mathbf{}$ | NI | 10.6 | 11.7 | 4.9 | 9.0 | 2.69 |
| 25 | N2 | 1.4 | 2.5 | 2.1 | 2.3 | 2.27 |
| 27 | N3 | 5.1 | 3.2 | 2.0 | 2.9 | 1.49 |
| 28 | N4 | 1.1 | 2.0 | 1.1 | 1.6 | 1.46 |
| 29 | N5 | 4.9 | 4.0 | 3.4 | 3.8 | 1.19 |
| 26 | N6 | 27.5 | 18.3 | 7.7 | 14.9 | 0.57 |

TABLE 2.1.2
\% in Labour Force of Cluster Individuals Under Age 65

| CLUSTER | No. in LF | No. under 65 | \% in LF |
| :---: | :---: | :---: | :---: |
| 2 | 13 | 41 | 31.7 |
| 5 | 36 | 69 | 52.2 |
| 1 | 23 | 95 | 24.2 |
| 3 | 45 | 140 | 32.1 |
| 4 | 58 | 110 | 52.7 |
| 6 | 96 | 166 | 57.8 |
| 7 | 763 | 1,043 | 73.2 |
| 9 | 4 | 15 | 26.7 |
| 12 | 6 | 49 | 12.2 |
| 13 | 9 | 47 | 19.1 |
| 21 | 147 | 366 | 40.2 |
| 17 | 3 | 19 | 15.8 |
| 24 | 81 | 236 | 34.3 |
| 8 | 14 | 126 | 11.1 |
| 10 | 46 | 154 | 29.9 |
| 14 | 16 | 96 | 16.7 |
| 11 | 25 | 91 | 27.5 |
| 15 | 112 | 373 | 30.0 |
| 18 | 37 | 100 | 37.0 |
| 16 | 132 | 286 | 46.2 |
| 19 | 98 | 308 | 31.8 |
| 20 | 222 | 497 | 44.7 |
| 22 | 81 | 173 | 46.9 |
| 23 | 546 | 927 | 58.9 |
| 25 | 82 | 193 | 42.5 |
| 27 | 176 | 272 | 64.7 |
| 28 | 98 | 150 | 65.3 |
| 29 | 193 | 328 | 58.8 |
| 26 | 871 | 1,548 | 56.3 |
| TOTAL | 4,027 | 8,028 | 50.2 |

TABLE 2.1.3(a)
DATA: OCTOBER WEIGHTED


DATA: OCTOBER
WEIGHTEU

## Cluster Characteristics

## CLUSTERS

CHARACTERISTICS

|  | Back or Leg Brace (C42.A) | Orthopedic Footwear (C42B) | Foot or Leg Prosthesis (C 42 C ) | $\begin{gathered} \text { Cane } \\ (C 42 D) \end{gathered}$ | Crutches (C42E) | Wheelchair $(\mathrm{C} 42 \mathrm{~F})$ | Walker $(\mathrm{C} 42 \mathrm{G})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HV (.0) |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 2 | 2.3 | 0.7 | 0.7 | 32.8 | 2.2 | 2.7 | 3.1 |
| 5 | 1.1 | 1.6 | 0.0 | 11.6 | 0.0 | 0.0 | 0.0 |
| H |  |  |  |  |  |  |  |
| $\bar{\square}$ | 6.6 | 14.4 | 1.8 | 39.9 | 7.6 | 14.6 | 13.8 |
| 3 | 6.5 | 4.1 | 1.4 | 27.6 | 0.9 | 4.4 | 4.8 |
| 4 | 3.3 | 3.2 | 1.4 | 17.7 | 1.0 | 0.1 | 0.7 |
| 6 | 5.7 | 4.4 | 1.4 | 8.6 | 1.0 | 0.2 | 0.3 |
| 7 | 0.4 | 1.5 | 0.4 | 1.5 | 0.8 | 0.2 | 0.3 |
| V |  |  |  |  |  |  |  |
| $\overline{9}$ | 15.9 | 7.9 | 0.0 | 60.9 | 0.0 | 26.6 | 22.0 |
| 12 | 7.7 | 5.1 | 0.0 | 34.1 | 3.8 | 11.8 | 4.3 |
| 13 | 4.9 | 3.2 | 1.7 | 25.2 | 2.1 | 2.7 | 2.5 |
| 21 | 1.1 | 2.1 | 1.0 | 6.3 | 0.7 | 0.7 | 0.9 |
| S |  |  |  |  |  |  |  |
| 17 | 5.7 | 0.0 | 0.0 | 15.9 | 0.0 | 0.0 | 0.0 |
| 24 | 0.0 | 1.5 | 0.0 | 0.3 | 0.0 | 0.3 | 0.3 |
| MA |  |  |  |  |  |  |  |
| 8 | 14.2 | 9.6 | 0.8 | 25.5 | 1.9 | 35.9 | 11.8 |
| 10 | 25.1 | 8.9 | 0.5 | 33.8 | 9.9 | 18.8 | 5.6 |
| 14 | 8.3 | 12.2 | 2.0 | 28.9 | 4.7 | 8.8 | 4.5 |
| 11 | 11.4 | 7.9 | 1.4 | 18.0 | 6.6 | 9.6 | 12.2 |
| 15 | 10.3 | 6.4 | 2.1 | 28.7 | 6.0 | 9.1 | 5.1 |
| M |  |  |  |  |  |  |  |
| 18 | 0.7 | 7.9 | 1.0 | 22.8 | 0.0 | 4.2 | 0.0 |
| 16 | 10.3 | 3.5 | 1.7 | 19.8 | 5.9 | 4.3 | 1.3 |
| 19 | 2.6 | 4.5 | 1.7 | 17.0 | 4.5 | 2.4 | 2.1 |
| 20 | 2.6 | 7.7 | 1.2 | 15.3 | 2.4 | 1.6 | 0.7 |
| A |  |  |  |  |  |  |  |
| $\overline{22}$ | 10.7 | 6.6 | 0.6 | 8.0 | 1.3 | 4.7 | 3.8 |
| N |  |  |  |  |  |  |  |
| $\overline{23}$ | 7.3 | 3.3 | 0.4 | 6.4 | 1.1 | 0.3 | 0.4 |
| 25 | 4.3 | 3.6 | 1.0 | 3.4 | 1.0 | 0.9 | 1.1 |
| 27 | 2.1 | 5.3 | 0.8 | 2.9 | 0.7 | 0.1 | 0.1 |
| 28 | 0.3 | 0.3 | 0.3 | 1.9 | 0.3 | 0.3 | 0.3 |
| 29 | 1.0 | 2.5 | 0.5 | 3.0 | 0.2 | 0.2 | 0.7 |
| 26 | 4.4 | 2.2 | 0.3 | 3.9 | 0.7 | 0.2 | 0.2 |
| TOTAL | 4.9 | 4.1 | 0.9 | 12.2 | 2.0 | 3.2 | 2.0 |

## Cluster Characteristics

## CLUSTERS

|  | Some | Moderate | Major | Unknown |
| :---: | :---: | :---: | :---: | :---: |
| HV |  |  |  |  |
| 2 | 29.4 | 24.6 | 46.0 | 0.0 |
| 5 | 56.6 | 34.5 | 8.9 | 0.0 |
| H |  |  |  |  |
| T | 31.7 | 19.5 | 48.8 | 0.0 |
| 3 | 39.4 | 32.1 | 28.5 | 0.0 |
| 4 | 53.4 | 31.5 | 15.1 | 0.0 |
| 6 | 69.2 | 26.3 | 4.5 | 0.0 |
| 7 | 82.5 | 16.1 | 1.4 | 0.0 |
| V |  |  |  |  |
| $\overline{9}$ | 30.4 | 14.3 | 55.3 | 0.0 |
| 12 | 29.4 | 23.7 | 46.9 | 0.0 |
| 13 | 42.1 | 32.9 | 25.0 | 0.0 |
| 21 | 60.2 | 33.7 | 6.1 | 0.0 |
| S |  |  |  |  |
| 17 | 45.8 | 29.2 | 25.0 | 0.0 |
| 24 | 28.0 | 6.1 | 0.0 | 65.9 |
| MA |  |  |  |  |
| 8 | 20.0 | 13.5 | 66.5 | 0.0 |
| 10 | 36.7 | 20.0 | 43.3 | 0.0 |
| 14 | 36.4 | 24.1 | 39.6 | 0.0 |
| 11 | 39.8 | 24.1 | 36.1 | 0.0 |
| 15 | 35.7 | 29.0 | 35.3 | 0.0 |
| M |  |  |  |  |
| 18 | 49.7 | 35.8 | 14.5 | 0.0 |
| 16 | 55.2 | 33.6 | 11.2 | 0.0 |
| 19 | 45.2 | 35.6 | 19.2 | 0.0 |
| 20 | 68.7 | 29.3 | 2.0 | 0.0 |
| A |  |  |  |  |
| $\overline{22}$ | 66.0 | 25.6 | 8.4 | 0.0 |
| N |  |  |  |  |
| $\overline{23}$ | 79.3 | 18.0 | 2.7 | 0.0 |
| 25 | 67.8 | 30.5 | 1.7 | 0.0 |
| 27 | 81.9 | 17.8 | 0.3 | 0.0 |
| 28 | 93.1 | 6.9 | 0.0 | 0.0 |
| 29 | 89.1 | 10.5 | 0.4 | 0.0 |
| 26 | 34.1 | 6.3 | 0.1 | 59.5 |
| TOTAL | 57.1 | 21.0 | 11.8 | 10.1 |

## Cluster Characteristics

## CLUSTERS

CHARACTERISTICS
Degree of Dependence

|  | Independent | Partially Dependent | C. <br> Dependent | A - <br> Dependent | $\begin{gathered} B-D \\ \text { Dependent } \end{gathered}$ | $\begin{gathered} E-F \\ \text { Dependent } \end{gathered}$ | Unable to Assess |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HV |  |  |  |  |  |  |  |
| 2 | 11.2 | 10.2 | 11.2 | 10.7 | 36.9 | 7.0 | 12.8 |
| 5 | 32.0 | 11.8 | 11.3 | 10.3 | 15.8 | 3.0 | 15.8 |
| H |  |  |  |  |  |  |  |
| I | 6.3 | 6.6 | 9.6 | 6.3 | 27.1 | 24.1 | 20.1 |
| 3 | 11.6 | 13.0 | 19.2 | 16.3 | 24.8 | 4.2 | 11.0 |
| 4 | 25.1 | 16.7 | 21.2 | 8.0 | 18.7 | 1.0 | 9.3 |
| 6 | 32.9 | 18.0 | 20.1 | 6.2 | 9.7 | 1.7 | 11.4 |
| 7 | 68.7 | 8.2 | 6.3 | 2.7 | 2.4 | 1.0 | 10.8 |
| V |  |  |  |  |  |  |  |
| $\overline{9}$ | 0.0 | 3.6 | 21.4 | 7.1 | 25.0 | 23.2 | 19.6 |
| 12 | 5.6 | 8.8 | 11.9 | 11.3 | 40.0 | 8.1 | 14.4 |
| 13 | 14.6 | 9.2 | 17.7 | 14.0 | 30.5 | 4.9 | 9.2 |
| 21 | 35.1 | 13.6 | 10.4 | 8.1 | 14.4 | 5.0 | 13.4 |
| S |  |  |  |  |  |  |  |
| 17 | 12.5 | 12.5 | 12.5 | 4.2 | 29.2 | 25.0 | 4.2 |
| 24 | 11.8 | 10.6 | 3.3 | 10.6 | 21.5 | 6.9 | 35.4 |
| MA |  |  |  |  |  |  |  |
| 8 | 1.6 | 6.1 | 4.5 | 6.5 | 18.8 | 48.6 | 13.9 |
| 10 | 6.7 | 8.1 | 17.6 | 11.4 | 28.6 | 12.4 | 15.2 |
| 14 | 6.4 | 11.8 | 22.5 | 11.2 | 30.5 | 5.4 | 12.3 |
| 11 | 7.8 | 9.6 | 21.7 | 9.0 | 25.9 | 9.6 | 16.3 |
| 15 | 8.1 | 8.9 | 20.4 | 12.1 | 33.2 | 4.3 | 13.0 |
| M |  |  |  |  |  |  |  |
| 18 | 22.5 | 17.9 | 19.1 | 10.4 | 17.3 | 4.1 | 8.7 |
| 16 | 21.2 | 21.0 | 24.5 | 10.0 | 14.0 | 1.8 | 7.6 |
| 19 | 10.1 | 16.2 | 23.7 | 10.8 | 25.8 | 1.2 | 12.2 |
| 20 | 30.6 | 19.4 | 20.4 | 7.0 | 11.4 | 1.1 | 10.2 |
| A |  |  |  |  |  |  |  |
| $\overline{2}$ | 21.9 | 22.3 | 20.5 | 9.8 | 7.0 | 7.9 | 10.7 |
| N |  |  |  |  |  |  |  |
| $\overline{23}$ | 31.2 | 20.8 | 23.5 | 6.1 | 5.6 | 1.2 | 11.7 |
| 25 | 16.3 | 19.7 | 29.2 | 14.9 | 11.9 | 1.4 | 6.8 |
| 27 | 52.6 | 13.2 | 12.1 | 4.3 | 2.2 | 1.1 | 14.6 |
| 28 | 60.8 | 18.1 | 6.4 | 2.0 | 2.0 | 0.0 | 10.8 |
| 29 | 52.4 | 13.4 | 9.5 | 3.6 | 3.0 | 1.6 | 16.4 |
| 26 | 39.6 | 20.8 | 17.9 | 3.7 | 4.9 | 0.9 | 12.1 |
| TOTAL | 32.3 | 14.9 | 16.2 | 7.1 | 13.1 | 4.0 | 12.5 |

TABLE 2.2.1
E(NADL)

| CLUSTERS | OCTOBER-JUNE WEIGHTED | JANUARY WEICHTED |
| :---: | :---: | :---: |
| TOTAL | 3.61 | 3.03 |
| HV |  |  |
| 2 | 8.74 | 8.94 |
| 5 | 4.86 | 5.27 |
| H |  |  |
| $\bar{I}$ | 11.72 | 13.13 |
| 3 | 7.49 | 7.64 |
| 4 | 4.96 | 5.21 |
| 6 | 4.88 | 4.34 |
| 7 | 2.16 | 1.97 |
| V |  |  |
| 9 | 10.10 | 10.34 |
| 12 | 7.95 | 7.79 |
| 13 | 4.97 | 5.13 |
| 21 | 2.75 | 2.57 |
| S |  |  |
| 17 | 4.87 | 3.74 |
| 24 | 0.70 | 0.35 |
| MA |  |  |
| 8 | 11.58 | 11.08 |
| 10 | 8.88 | 8.75 |
| 14 | 7.93 | 7.89 |
| 11 | 6.74 | 6.80 |
| 15 | 6.02 | 5.72 |
| M |  |  |
| 18 | 4.74 | 4.91 |
| 16 | 4.35 | 4.26 |
| 19 | 3.87 | 3.73 |
| 20 | 2.31 | 2.00 |
| A |  |  |
| $\overline{22}$ | 4.82 | 3.59 |
| N |  |  |
| $\overline{23}$ | 2.73 | 2.22 |
| 25 | 2.25 | 2.18 |
| 27 | 1.50 | 1.45 |
| 28 | 1.48 | 1.29 |
| 29 | 1.19 | 1.11 |
| 26 | 0.63 | 0.38 |

TABLE 2.2.2

## E(NCMPLTLY)

| CLUSTERS | OCTOBER-IUNE WEIGHTED | JANUARY WEIGHTED |
| :---: | :---: | :---: |
| TOTAL | 1.02 | 0.74 |
| HV |  |  |
| 2 | 3.23 | 2.67 |
| 5 | 0.93 | 0.85 |
| H |  |  |
| $\overline{1}$ | 4.63 | 5.34 |
| 3 | 1.83 | 2.34 |
| 4 | 1.13 | 1.23 |
| 6 | 0.57 | 0.76 |
| 7 | 0.30 | 0.30 |
| $\underline{V}$ |  |  |
| $\overline{9}$ | 4.14 | 3.69 |
| 12 | 3.75 | 2.60 |
| 13 | 1.50 | 1.07 |
| 21 | 0.75 | 0.77 |
| S |  |  |
| I7 | 1.18 | 1.48 |
| 24 | 0.18 | 0.03 |
| MA |  |  |
| 8 | 6.54 | 5.29 |
| 10 | 3.16 | 3.23 |
| 14 | 2.39 | 2.39 |
| 11 | 2.27 | 1.59 |
| 15 | 2.31 | 1.67 |
| M |  |  |
| 18 | 1.12 | 0.96 |
| 16 | 0.88 | 0.62 |
| 19 | 1.30 | 0.75 |
| 20 | 0.44 | 0.24 |
| A |  |  |
| 22 | 0.71 | 0.39 |
| N |  |  |
| 23 | 0.35 | 0.21 |
| 25 | 0.48 | 0.39 |
| 27 | 0.24 | 0.14 |
| 28 | 0.10 | 0.08 |
| 29 | 0.13 | 0.18 |
| 26 | 0.09 | 0.03 |

TABLE 2.2.3 (a)
DATA: OCTOBER-JUNE WEIGHTED
Cluster Characteristics
CLUSTERS SEX AGEGROUP

## LABOUR FORCE STATUS

In Labour Labour Force Force

| 4.5 | 95.5 |
| ---: | ---: |
| 13.2 | 96.8 |

7.0
93.0
14.1
85.9
16.2
83.8
31.8
63.1
42.7
57.3

## $\frac{V}{9}$

12
$\begin{array}{ll}46.8 & 53.2 \\ 30.8 & 69.2 \\ 29.1 & 70.9 \\ 40.8 & 59.2\end{array}$
15-24 25-64 65+
$\begin{array}{lll}1.7 & 16.0 & 82.3 \\ 0.8 & 31.0 & 68.2\end{array}$

| $H$ |
| :--- |
| 1 |
| 3 |
| 4 |
| 6 |
| 7 |

$\begin{array}{ccc}\text { Male } & \text { Female } \\ & & \\ 44.5 & 55.5 \\ 49.9 & 50.1 \\ & & \\ 43.7 & & 56.3 \\ 52.5 & & 47.5 \\ 52.5 & & 47.5 \\ 54.9 & & 45.1 \\ 57.9 & 42.1\end{array}$

## Cluster Characteristics

| CLUSTERS | SEX |  | AGE GROIJP |  |  | LABOUR FORCE STATUS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Fernale | 15-24 | 25-64 | $65+$ | In Labour Force | Not In Labour Force |
| HV |  |  |  |  |  |  |  |
| 2 | 49.4 | 50.6 | 1.1 | 19.1 | 79.8 | 8.0 | 92.0 |
| 5 | 54.1 | 45.9 | 4.1 | 28.0 | 67.9 | 14.6 | 85.4 |
| H |  |  |  |  |  |  |  |
| T | 40.1 | 59.9 | 4.9 | 33.3 | 61.8 | 9.6 | 90.4 |
| 3 | 58.7 | 41.3 | 0.0 | 33.9 | 66.1 | 10.1 | 89.9 |
| 4 | 36.3 | 63.7 | 1.4 | 29.7 | 68.9 | 8.8 | 91.2 |
| 6 | 58.5 | 41.5 | 0.6 | 48.6 | 50.8 | 28.5 | 71.5 |
| 7 | 61.5 | 38.5 | 6.4 | 53.6 | 40.0 | 43.9 | 56.1 |
| V |  |  |  |  |  |  |  |
| 9 | 5.1 | 94.9 | 1.3 | 32.2 | 66.5 | 1.8 |  |
| 12 | 27.7 | 72.3 | 0.0 | 27.9 | 72.1 | 6.6 | 93.4 |
| 13 | 28.0 | 72.0 | 2.5 | 27.3 | 70.2 | 3.8 | 96.2 |
| 21 | 40.3 | 59.7 | 16.3 | 47.4 | 36.3 | 30.1 | 69.9 |
| S |  |  |  |  |  |  |  |
| 17 | 72.2 | 27.8 | 0.0 | 27.8 | 72.2 | 0.0 | 100.0 |
| 24 | 51.4 | 48.6 | 22.1 | 67.4 | 10.5 | 32.9 | 67.1 |
| MA |  |  |  |  |  |  |  |
| 8 | 44.5 | 55.5 | 5.5 | 41.4 | 53.1 | 9.3 |  |
| 10 | 52.6 | 47.4 | 1.0 | 53.8 | 45.2 | 15.3 | 84.7 |
| 14 | 26.2 | 73.8 | 0.8 | 47.5 | 51.7 | 12.8 | 87.2 |
| 11 | 30.9 | 69.1 | 7.2 | 31.6 | 61.2 | 14.2 | 85.8 |
| 15 | 38.9 | 61.1 | 4.7 | 54.2 | 41.1 | 18.6 | 81.4 |
| M |  |  |  |  |  |  |  |
| 18 | 32.4 | 67.6 | 4.0 | 53.7 | 42.3 | 18.3 |  |
| 16 | 57.3 | 42.7 | 4.2 | 67.2 | 28.6 | 30.3 | 69.7 |
| 19 | 33.7 | 66.3 | 3.7 | 47.3 | 49.0 | 16.1 | 83.9 |
| 20 | 50.7 | 49.3 | 3.7 | 60.0 | 36.3 | 34.4 | 65.6 |
| A |  |  |  |  |  |  |  |
| $\overline{2} 2$ | 51.5 | 48.5 | 12.1 | 74.7 | 13.2 | 64.9 | 35.2 |
| N |  |  |  |  |  |  |  |
| 23 | 43.9 | 56.1 | 10.2 | 68.7 | 21.1 | 51.4 | 48.6 |
| 25 | 25.6 | 74.4 | 2.1 | 60.6 | 37.3 | 30.7 | 69.3 |
| 27 | 39.7 | 60.3 | 9.1 | 61.2 | 29.7 | 45.9 | 54.1 |
| 28 | 35.7 | 64.3 | 6.6 | 64.6 | 28.8 | 49.0 | 51.0 |
| 29 | 38.7 | 61.3 | 15.5 | 59.3 | 25.2 | 54.7 | 45.3 |
| 26 | 51.6 | 48.4 | 11.7 | 70.0 | 18.3 | 52.0 | 48.0 |
| Total | 46.4 | 53.6 | 7.9 | 56.5 | 35.6 | 36.5 | 63.5 |

TABLE 2.2.4 (a)

## Cluster Characteristics

## $\underline{\text { CLUSTERS }}$

CHARACTERISTICS Degree of Disability

|  | Some | Moderate | Major | Unknown | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HV |  |  |  |  |  |
| 2 | 19.1 | 20.1 | 60.8 | 0.0 | 100.0 |
| 5 | 48.8 | 41.5 | 9.7 | 0.0 | 100.0 |
| H |  |  |  |  |  |
| I | 14.0 | 23.0 | 63.0 | 0.0 | 100.0 |
| 3 | 34.0 | 35.8 | 30.2 | 0.0 | 100.0 |
| 4 | 44.4 | 39.9 | 15.8 | 0.0 | 100.0 |
| 6 | 64.7 | 31.0 | 4.3 | 0.0 | 100.0 |
| 7 | 79.4 | 19.0 | 1.6 | 0.0 | 100.0 |
| v |  |  |  |  |  |
| $\overline{9}$ | 15.6 | 16.2 | 68.2 | 0.0 | 100.0 |
| 12 | 14.6 | 22.7 | 62.7 | 0.0 | 100.0 |
| 13 | 42.6 | 28.9 | 28.6 | 0.0 | 100.0 |
| 21 | 57.0 | 35.2 | 7.8 | 0.0 | 100.0 |
| S |  |  |  |  |  |
| 17 | 62.1 | 20.7 | 17.2 | 0.0 | 100.2 |
| 24 | 31.1 | 13.8 | 0.1 | 55.0 | 100.0 |
| MA |  |  |  |  |  |
| 8 | 8.8 | 12.6 | 78.6 | 0.0 | 100.0 |
| 10 | 23.6 | 17.2 | 59.2 | 0.0 | 100.0 |
| 14 | 28.0 | 34.0 | 38.0 | 0.0 | 100.0 |
| 11 | 31.0 | 29.3 | 39.7 | 0.0 | 100.0 |
| 15 | 26.6 | 30.7 | 42.7 | 0.0 | 100.0 |
| M |  |  |  |  |  |
| 18 | 46.4 | 38.2 | 15.4 | 0.0 | 100.0 |
| 16 | 54.6 | 33.5 | 11.9 | 0.0 | 100.0 |
| 19 | 43.6 | 35.2 | 21.2 | 0.0 | 100.0 |
| 20 | 68.0 | 30.1 | 1.9 | 0.0 | 100.0 |
| A |  |  |  |  |  |
| 22 | 64.6 | 25.8 | 9.6 | 0.0 | 100.0 |
| N |  |  |  |  |  |
| $\overline{23}$ | 77.6 | 19.6 | 2.8 | 0.0 | 100.0 |
| 25 | 64.7 | - 33.9 | 1.4 | 0.0 | 100.0 |
| 27 | 79.0 | 20.7 | 0.3 | 0.0 | 100.0 |
| 28 | 91.6 | 8.4 | 0.0 | 0.0 | 100.0 |
| 29 | 88.2 | 11.6 | 0.2 | 0.0 | 100.0 |
| 26 | 35.1 | 8.2 | 0.1 | 56.6 | 100.0 |
| TOTAL | 53.7 | 23.2 | 14.1 | 8.9 | 100.0 |

## Cluster Characteristics

## CLUSTERS <br> Some

$\frac{\text { HV }}{2}$
$\frac{\mathrm{H}}{\mathrm{I}}$
3
4
6
7
$\frac{V}{9}$
12
13
21
$\frac{5}{17}$
24
$\frac{\mathrm{MA}}{8}$
10
14
11
15
$\frac{\mathrm{M}}{18}$
16
19
20
$\frac{A}{22}$
$\frac{N}{N}$
23
25
27
28
29
26
TOTAL
$\begin{array}{ll}11.6 & 18.4 \\ 15.8 & 31.7 \\ 26.7 & 39.0 \\ 36.7 & 38.1 \\ 47.4 & 21.3\end{array}$

| 11.6 | 18.4 |
| :--- | :--- |
| 15.8 | 31.7 |
| 26.7 | 39.0 |
| 36.7 | 38.1 |
| 47.4 | 21.3 |

23.6
62.9
22.1
36.3
48.7
69.0
82.9
14.6
26.7
48.0
55.6
0.0
22.3
55.2
68.5
60.2
84.3
75.8
87.0
71.4
88.8
92.7
83.2
24.4
57.0
55.2
68.5
60.2
84.3

Moderate
31.9
25.3
16.3
24.7
32.7
18.0
14.6
19.6
27.3
39.9
37.5
91.2

CHARACTERISTICS
Degree of Disability

Major
Unknown
Total
$\begin{array}{ll}44.6 & 0.0 \\ 11.8 & 0.0\end{array}$
100.0
100.0

| 61.6 | 0.9 |
| ---: | ---: |
| 39.0 | 0.0 |
| 18.6 | 0.0 |
| 13.0 | 0.0 |
| 2.5 | 0.0 |

8.8
0.0
75.4
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0
100.0


## CLUSTERS

|  | ID | Sex | Age | LFS |
| :---: | :---: | :---: | :---: | :---: |
| HV |  |  |  |  |
| 2 | HVMAI | NS | . 0001 | . 0001 |
| 5 | HVN1 | NS | . 0001 | . 0001 |
| H |  |  |  |  |
| $\overline{1}$ | HMAI | NS | . 0001 | .0001 |
| 3 | HMA2 | . 01 | . 0001 | . 0001 |
| 4 | HM1 | . 01 | . 0001 | . 0001 |
| 6 | HAI | . 001 | . 001 | NS |
| 7 | HN1 | . 0001 | NS | . 0001 |
| V |  |  |  |  |
| $\overline{9}$ | VMAI | NS | . 0001 | . 0001 |
| 12 | VMA2 | . 0001 | . 0001 | . 0001 |
| 13 | VMI | . 001 | .0001 | .0001 |
| 21 | VNI | . 01 | . 0001 | .01 |
| S |  |  |  |  |
| 17 | SMA1 | NS | NS | NS |
| 24 | Siv1 | . 001 | . 0001 | NS |
| MA |  |  |  |  |
| 8 | MA1 | . 05 | . 01 | . 0001 |
| 10 | MA2 | . 05 | . 0001 | NS |
| 14 | MA3 | . 01 | . 0001 | . 0001 |
| 11 | MA4 | NS | . 01 | . 0001 |
| 15 | MA5 | . 0001 | . 0001 | . 0001 |
| M |  |  |  |  |
| 18 | M1 | . 0001 | . 001 | NS |
| 16 | M2 | . 0001 | . 01 | NS |
| 19 | M3 | . 0001 | . 0001 | . 0001 |
| 20 | M4 | NS | . 0001 | . 001 |
| A |  |  |  |  |
| $\overline{2}$ | Al | NS | . 0001 | . 05 |
| N |  |  |  |  |
| 23 | NI | NS | . 0001 | . 0001 |
| 25 | N2 | . 0001 | NS | NS |
| 27 | N3 | . 0001 | . 0001 | . 0001 |
| 28 | N4 | . 001 | . 0001 | . 0001 |
| 29 | N5 | . 0001 | . 01 | . 0001 |
| 26 | N6 | .0001 | .0001 | . 0001 |

TABLE 3.2 Testing cluster distributions for October-June weighted and January test 3 weighted data according to selected cluster characteristics.

## Adjusted $\mathrm{X}^{2}$ Tests

## CLUSTERS

|  | Sex | Age Group | LFS |
| :---: | :---: | :---: | :---: |
| HV |  |  |  |
| $\overline{2}$ | 0.73 NS | 3.91 NS | 2.60 NS |
| 5 | 0.88 NS | 6.99NS | 0.35 NS |
| i |  |  |  |
| T | 0.59 us | 8.36 +15 | 2.63 NS |
| 3 | 2.21 NS | 11.01 NS | 2.89 NS |
| 4 | 13.48** | 16.14 ** | 6.80 |
| 6 | 0.62 NS | 11.96 * | 2.21 NS |
| 7 | 4.16 * | 7.97 NS | 9.56 ** |
| V |  |  |  |
| $\overline{9}$ | 20.39*** | 2.91 NS | 1.01 NS |
| 12 | 0.31 NS | 6.45 NS | 2.20 NS |
| 13 | 0.04 NS | 4.29 NS | 0.19 NS |
| 21 | 0.02 NS | 28.03*** | 10.39 ** |
| S |  |  |  |
| 17 | 3.17 NS | 11.67 * | 0.60 Ns |
| 24 | 4.78 * | 16.66 ** | 0.54 NS |
| MA |  |  |  |
| 8 | 1.56 NS | 11.71 * | 2.88 NS |
| 10 | 0.17 NS | 35.44*** | 5.18 NS |
| 14 | 4.92 * | 7.87 NS | 6.05 * |
| 11 | 5.58 * | 31.52*** | 0.69 N5 |
| 15 | 1.04 NS | 8.41 NS | 0.68 NS |
| M |  |  |  |
| 18 | 1.38 NS | 4.86 NS | 6.23 * |
| 16 | 0.19 NS | 11.62 * | 5.65 NS 0.49 VS |
| 19 | 4.51 * | 5.85 NS | 14.23 N* |
| 20 | 1.84 NS | 20.89 ** | 14.23 ** |
| $\frac{A}{22}$ | 0.52 NS | $26.17 * * *$ | 35.9 *** |
| N |  |  |  |
| 23 | 0.90 NS | 15.02 * |  |
| 25 | 0.04 NS | 3.47 NS | 0.47 NS |
| 27 | 7.00 ** | 20.39 ** | 6.17 * |
| 28 | 0.28 NS | 4.43 NS | 2.02 NS |
| 29 | 2.96 NS | 17.58 ** | 11.27 ** |
| 26 | 0.29 NS | 3.33 NS | 13.98 ** |

Degree of Disability

## SEVERE

MODERATE TO SEVERE
MODERATE
SOME TO MODERATE
SOME
UNKNOWN

|  | January |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SEVERE | 1 | 9 | 8 |  |  |
| MODERATE TO SEVERE | 2 | 3 | 41210 | 14 | $11 \quad 1518$ |
| MODERATE | 13 | 17 |  |  |  |
| SOME TO MODERATE | 5 | 6 | 211619 | 22 | 25 |
| SOME | 20 | 23 | 272829 | 7 |  |
| UNKNOW | 24 | 26 |  |  |  |

198
$\begin{array}{lllllllll}2 & 3 & 4 & 12 & 10 & 14 & 11 & 15 & 18\end{array}$
1317

26

## TV OUS




[^0]:    *Lazarus, Gary and Morin, Jean-Pierre. Canadian Health and Disability Survey: Evaluation of the October 1983 Survey of Adults, I.A.S.M.D., November 1984.

