THE PSYCHOLOGY OF CAR-POOLING\textsuperscript{1}
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ABSTRACT

Behaviourally, car-pooling elicits behaviour resembling transit-rider behaviour. Results of interviews with car-poolers are described. The psychology of car-pooling suggests that continued success hinges on flexibility and on mutual accommodation, that is, on maturity. The resistance to trying car-pooling resides principally in the reserve people feel to encountering and negotiating with strangers. Computers and bureaucratic procedures are minimally useful in overcoming this reserve but personalization of pool management may make an impact.

\textsuperscript{1}Prepared for the Ontario Ministry of Transportation
INTRODUCTION

Car-pooling is shared transportation. It has no exotic technology associated with it. It demands acceptance of a degree of regimentation and loss of a degree of personal autonomy. In these ways it resembles transit.

Car-pooling ordinarily requires commitment of an individual to a group of travelers. It is a social arrangement. The length of each trip and the degree of physical proximity during the trip place additional demands on the riders.

The temporary nature of pooling relationships presents more drawbacks. The efforts needed to form, coordinate, maintain, and gracefully terminate a pooling arrangement — and the effort to go through the cycle once again — deter many from pooling.

A curious feature of pooling is its lack of a special language or familiar terms. This may be compared to many kinds of recreational activities — curling comes to mind — which are social activities whose participants have a rich common language and a developed etiquette. I suspect that in the future, poolers will likewise develop this bond of special language and customs.

A STUDY OF CAR-POOLERS

Outline

Since car-pooling has many psychological elements in common with present transit as well as with trends of the future, it seemed worthwhile to undertake a study of people who travel by car-pool. If we could gain some insight into the significant psychological features of pooling, we would be better prepared with future transit designs as well. A sample of poolers related to the Ministry of Transportation, including some who did themselves not work for that ministry, provided the database.

The interview schedule covered a number of areas, treated in outline below.

- Area 1. Present pooling arrangements: details of mode of operation, mileages, times, rules, and money handling
- Area 2. The pooler's history of travel: three past cycles of travel were recorded
- Area 3. Personal advantages and disadvantages of pooling
- Area 4. The interpersonal aspect of pooling: resolution of conflicts, satisfaction with present arrangements and rules
- Area 5. Suggested helps and inducements that might be employed in programs in the future.
A notice was placed in the Ministry newsletter, asking for poolers to phone the research team. In addition, copies of a notice were placed on bulletin boards at several locations about the Ministry.

Twenty-four poolers contacted the research team. Of these, all but one was scheduled for interviews. The individual not available, coincidentally, had sent us a detailed letter describing his pooling and thus his views were considered with the data from interviews.

Interviews were structured. The two interviewers who collected the data overlooked each other's technique for a few sessions thus adding to the replicability of the research technique. Interviews lasted from 15 minutes to an hour, the length varying with the experience and knowledge of the pooler. Interviewers asked open-ended questions. When the person's initial response ended, scheduled probes were then started.

**Results**

**Area 1. Present pooling arrangements**

Two styles of pooling were represented in our sample. One style is mutual pooling by agreement of individuals. This has several levels of formality. The most advanced level involved minimum of long-term pre-arrangement. For example, the driver for the next day is chosen on the preceding trip home. Those who pool this way are the “easy riders.” They don't keep balance sheets and they don't pay any mind to their spouses when they complain that “How come Harry doesn't drive as often as you!”

The second style of pooling is commercial. It is a special sort of commercial venture in that profit is so low that it appears to suggest that it is performed more for social/psychological reasons than for profit. It seems feasible to organizers to charge riders the equivalent transit cost and yet make carrying passengers worthwhile for the driver-entrepreneur.

Pooling is in large part induced by the consequences of travel distance — a result known from previous studies.

Poolers ordinarily arrive at work rather early and thus often enjoy a cup of coffee together.

**Area 2. Prior history of travel**

Many poolers had traveled this way for a very long time. It seems to be quite possible to pool for extended periods, such as throughout a work career, and still be content.

There seems to be a large proportion of poolers who were previously public transit users. Psychologically, these two modes are more alike than say, pooling and car driving. Car driving is minimally mature and is otherwise behaviourally different, as argued elsewhere in this paper.
Area 3. Advantages and disadvantages of pooling
The most frequently mentioned advantage of pooling was the money savings. Also, frequently mentioned was the nervous relief permitted a person travelling as a passenger. A variety of other advantages were mentioned occasionally. For instance, opportunity to discuss specific work problems or to get advice on career matters were benefits mentioned.

The interpersonal pleasures of pooling were not much mentioned. It may be that a structured workplace interview is not a good research setting for investigating these subtle issues, should they be important.

Disadvantages were principally in the area of constraints on freedoms. By and large these were hypothetical in nature. For example, not having use of a car to drive out for lunch, or, what would happen in case of emergency at home were often mentioned.

The other main class of disadvantages had to do with personal discipline. Typically, there is the obligation to rise from bed on time each morning or to be acceptably civil to peers after a hard night on the town.

Additionally, a number of poolers in more managerial positions complained that they felt stressed when engaged by their superiors in discussions which over ran the closing hour of work. Such instances were not common and most of those who had this problem had successfully worked out means of resolution. It is important to note that car-poolers experienced few real disadvantages. In promoting pooling, inoculation against hypothetical concerns is the indicated approach.

Area 4. Interpersonal Relations
Poolers do not admit to interpersonal frictions. Often a story of a long ago hassle or perhaps a single instance of a nasty pooler will be recalled.

This result surprised us. Upon further inquiry we would be told that differences of opinion frequently arose, but these never led to conflicts. In other words, those social skills that keep relations smooth were strongly represented among our group.

Some poolers claimed that rules and a constitution were necessary elements of a good pool. Indeed, some pools had moderately elaborate rules for the substitution of driving days. However, for the million-and-one daily points of potential disagreement, there was little formal or pre-defined policy but much agreement based on amicable discussion. A frequent comment was that the pool is too important to cause trouble over some minor point. Indeed, it may set the wrong tone to formalize arrangements when, in fact, casual negotiation leads to wiser group decisions.

To learn about conflict resolution, we asked all respondents about choosing the radio station. There wasn't a single pool in which choice of station was an issue. Ordinarily, the driver chooses and no one complains. If someone wishes to listen to another station, the radio is changed or a brief discussion might be held. This type of social bargaining can be labeled maturity.
There are endless strategies used to maintain satisfaction. If one pooler feels impinged upon by another, he may take additional privileges for himself, thus restoring his psychological feelings of fairness. *In “training” prospective poolers, these strategies must be taught.*

**Area 5. Helps and inducements which might be tried by government**

There were few serious suggestions for ways in which the government might promote pooling. Most poolers joked about free gasoline or other give-aways. A number of poolers thought that there should be an arrangement for connecting poolers. They mentioned bulletin boards or similar exchange places.

We must understand that successful pools might need might an occasional new member. Therefore, finding names on a bulletin board would suffice for their needs. Similarly, these individuals would have had the social poise to phone complete strangers. In other words, for these poolers no more than rudimentary help is needed.

**Discussion**

**Varieties of car-pooling**

- **Formality**
  
  The most formal arrangement is found in car-pools in which a driver accepts payment from passengers. Less formal ordinarily are the pools that arrange monthly calendars and have constitutions directing member behavior. Less formal yet are the pools in which the driving for the coming day is decided on the trip home. This last variety of pool represents a high level of social sophistication in that members have the ability to negotiate with one another on a fluid basis. Finally, there is *ad hoc* pooling or hitchhiking. This activity fulfills the conception of the future Temporary Society (Benne and Bennis) best because it represents the highest evolution of fluid social arrangements. More on hitchhiking appears later.

- **Terminals**
  
  Terminals are generally homes, at one end of the trip and work places, at the other. This is not always the case. Some commercial pools meet members at designated corners. Often poolers will each drive to a parking lot or to the daily driver's home and proceed together afterwards. Highway interchange pooler lots have been slow-tracked in some Canadian jurisdictions. We learned of some pools with remarkably high solo/pool mileage ratios. This is an easily instituted innovation that might be set-up in conjunction with commuter pool or registered pool plans.

- **Payment**
  
  Commercial pools often charge the same amount as public transit would. Consensual pools generally share equally. Occasionally, a non-driver will participate in a consensual pool. Generally, the payment made in lieu of driving is quite nominal. *It would seem that other forms of reciprocity would be possible beyond those of payment or exchange of driving.*
The only instance of this we found was the occasional non-driving woman, welcomed for free to an all-male pool in order to help leaven the atmosphere.

Cohort
The members of a pool may travel with one another for many years. Truly flexible cohorts are uncommon and probably suggest ultimate limitations on human adaptability.

Vehicles
It was surprising to find that a number of very small cars were in use for pools. This suggests that (a) poolers think of themselves as practical folks, (b) close physical proximity to others is well tolerated, and (c) there really must be a mature conviction that pooling together is better than driving alone.

Our sample did not include any vans although some are used in Ministry pools. In Sudbury, for example, there are many home-brew commercial pools that use vans.

Maturity and travel
Maturity is an important construct for the transportation psychologist. A clarification of this term is in order. Maturity, as it is normally reflected in transportation behaviour, involves a number of faces. The first face is interpersonal bargaining.

In interpersonal bargaining people “negotiate” with one another. The result tends to be, like in horse trading, you get a horse you want and you get rid of a horse you don't want. More concretely, in car-pooling, you may have to rise a little earlier on the day on which you drive the others, but you save money and get driven on other days. Or, as another example, walking to the driver's house in the morning but getting door-to-door drop-off service. On transit you give up the luxury of tuning your own radio but you gain the reduction of stress from not having to hassle through traffic and locate parking.

The next face of maturity involves the deferment of gratification. This sounds like a rather antique concept. Yet it has a reality that surpasses time. I should say first that I am not arguing that any sensible person should, purely as a matter of ecological principle, forgo important gratifications. For some people, saving the earth in a future century isn't as important as freedom to choose their radio station this morning. Rather, mature people choose those gratifying instances which hold the most meaning and avoid short-term gratifications which, in the long term, interfere with more desired gratifications. Driving a car, it seems to me, is an embodiment of short-term gratification and worthwhile in proportion. You step out your door into a waiting slave. Drive now, pay later.

Of course, no one can demonstrate that maturity is a morally desirable way of acting. The type of maturity I am describing leads to a number of desirable social results. For example, more money for other needs, improved air quality, happiness in getting along with others, less annoyance getting to work, reduced drain on resources, etc. If you like these consequences, perhaps you would endorse the maturity life-style. In short, it is a moral stance evaluated in terms of good personal and social effects.
Study bias

In evaluating the results of this study, an important methodological consideration must be kept in mind. The respondents were volunteers. They were offering to meet researchers who they didn't know and to reveal information about themselves.

It would be expected that the resulting volunteer sample would be more outgoing and socially advanced than the remainder of the pooling population. At the present moment, with no other psychological study of poolers available, there is no way to evaluate the effect of this bias. All poolers were government employees. However, the sample included a range of occupations and levels of responsibility and both men and women.

A PROPOSAL FOR FUTURE DEMONSTRATIONS

Because of the obvious benefits to the transportation network, car-pooling demonstrations are recurrently initiated. The effectiveness of past car-pooling demonstrations has been quite discouraging although the re-current enthusiasm to try new software and other fresh tech-fixes remains high. This suggests that demonstrations are undertaken with insufficient understanding of the behavioural basis on which individuals are attracted to and maintain participation in car-pooling. To test the sufficiency of understanding of the present report, we encourage the following car-pooling demonstration considerations. It is a car-pooling logic differing in a number of ways from the many efforts already attempted.

Past schemes have been extremely impersonal. Yet, we have found that the single most strongly voiced hesitation about car-pooling seems to be reluctance to go out on a “blind date.” Yet past demonstrations, because of their impersonality, have done nothing to reduce this concern. There is another way in which past schemes have worked in a way at variance with the best psychological understanding. The point of work rather than at the home point of origin has served as the reference location. It is our impression that strong social bonds are important to car-pooling. Relying only on the friendship bonds found at an office excessively restricts the potential number of riding groups.

What we need to make pooling a success is human intervention. Someone should be made responsible for arranging car-pools or, at the least, to have live assistance at hand. It is not very hard for someone to personally examine and to set up files for dozens of car-pools and hundred of individuals seeking pool accommodation. The Pool-Boss should have a small budget for promotion. I suspect that the most effective promotion would get travelers together in the home community. Not only could potential pool-mates meet but alternate groups, work-late back-up groups, and many special sorts of pools could be formed. This builds on the inherent brotherhood and sisterhood of neighbours.

There is no reason why anyone living in Georgetown or Newmarket should drive to work alone. It is common to hear that a person would gladly pool, if suitable arrangements could be made.
The problem is that matching involves some subtleties that exceed the capabilities of computers but that are readily handled by an effective Pool-Boss. I have in mind subtle judgments about travel routing and perceived distances as well as psychological matching. On the other hand, computers are forever making calls about simple stuff that is wrong and that, in the first instance, would have been simple to do right if a human had been supervising.

The Pool-Boss has much to teach prospective poolers. For example, there is sick-leave etiquette. Good poolers plan their “sick-leave” far enough in advance to avoid inconvenience to their pool mates. He or she must teach poolers how to best tolerate waiting for a member who is unavoidably delayed.

An important element of making pools work is the entry and exit procedures. No little tact is needed in bringing together anxious potential pool-mates. The initial ride and subsequent success can be enormously influenced by the attitudes and expectations that are brought to the event. There are mental sets that are sure to cause a stillbirth of a potential pool while there are other, wiser approaches, which allow for possibilities not dreamt of by automated systems (that is, if computers are actually dreaming while screen-savers are playing).

The manager of a group of pools can do many services for their constituents. They can arrange for switches of riders during vacations or other unusual circumstances. They can plug together travelers who might be working late one night of the week.

Computers are poor at promotional schemes. A good Pool-Boss, by contrast can recruit many poolers by having a say in the design or finishing touches on new housing subdivisions. Our respondents related instances of how they arranged for pool travel before moving to a new home. Just as we are now engaged in transit-ready design for new Ontario towns, we should likewise make our designs compatible with software solutions — such as pooling. Incidentally, atrium type buildings are especially helpful for pooling and demand responsive service.

**AD HOC CAR-POOLING**

*Ad hoc* car-pooling is better known as “hitchhiking.” It is shared travel — just like car-pooling — but it is of the most temporary nature. Is there something to learn from hitchhiking travel behaviour?

There is no need to discuss in detail the many advantages and disadvantages of this sort of near-spontaneous pooling. Briefly, the advantages are speed, convenience, cost, and travel companionship. The disadvantages are unreliability, potential personal danger, and often, the challenges of performing illegal behaviour. Good hitchhikers can maximize the advantages and minimize the disadvantages through numerous strategies.

In some casual research conducted personally and by inquiries to frequent *ad hoc* poolers, I found that hitchhiking nearly always is better transit than public transit. It is certainly more comfortable and ordinarily faster.
Various schemes such as the Renssalaer Plan, have been proposed to institutionalize hitchhiking. It is interesting to note that these schemes tend to be sensible efforts at overcoming the psychological issues in pooling. They largely ignore the usual minimally helpful computer tech-fix ideas. This makes very good sense to me. *Ad hoc* poolers are sophisticated social folks. They have sensitivity to the psychological.

Pooling is a new area. It is different in many ways from the traditional work of this Ministry or like organizations. It therefore demands new outlooks and approaches that may be out of keeping with the traditional way of working. It seems to me that this organization has experienced repeated failures when faced with areas of nontraditional work. The mental structures and flexible organizational arrangements demanded must be developed if this organization is to function effectively in developing the transportation modes of the future.

**CONCLUSIONS**

The chief hindrance to car-pooling is the difficulty of establishing contact with potential poolmates in a manner that is suitable. It is essential to have a human being mediate pooler contacts.

An adequate appreciation of advantages and disadvantages of pooling is needed in order to develop correct promotional techniques and to provide inoculation against commonly experienced hesitations.

The behavioural traits that contribute to longevity as a pooler should be explained to prospective poolers and encouraged in the course of pooling. The potential benefits of good guidance in proper pool behaviour are considerable.