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Single Source – The Problem Solver

By **Geoffrey Smith, Strategic Director-Multi Media Development**
Roy Morgan Research
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Introduction

Two recent articles in the American press have highlighted some of the problems that have been dogging advertisers for decades. In both cases, the problem is one of getting value out of research.

An Advertising Age article[1] states that by matching names in Nielsen's TV **diaries** with names of new car buyers the authors discovered that the viewing habits of a number of new-car buying segments differ significantly from average household viewing habits. Deborah Anderson, director of Nielsen's New Media Services, is attributed with the comments that car marketers are reaching too many non-buyers with their national broadcast TV buys and the auto marketers are basing those TV buys on viewer demographics.

The thrust of the article is that if car makers were able to buy TV airtime based on car buying behaviour rather than simple demographics then a different program set would be chosen. The opportunity to save money or increase impact could be as much as 70% compared to a buy based on household viewing.

> ***Observation***
>
> A small proportion of the population buys a new car in any year and there are dozens if not hundreds of make/model options to choose from. Because of this huge diversity of options it should be intuitive that at the model level of buying, chances are that most models are not bought by people that closely resemble the average TV viewer.
>
> Access to Single Source data (combining purchase behaviour with media consumption) highlights these differences and allows advertisers to capitalise on the opportunities and to avoid high cost media that miss the mark. Far from being a "new" development, clients of Roy Morgan Research have benefited from these insights for more than two decades. It is only new to our competitors.

A New York Times article[2] states a litany of problems with the current media sweeps TV rating system including:

- All 210 TV markets are only covered three times a year in November, February and May;
- Stations are accused of stacking the sweep months with high rating programs to artificially boost their recorded performance;

[1] Advertising Age, April 24, 2000: "Auto TV ads miss likely prospects: J.D. Power study". (See Appendix 1.)
[2] New York Times, April 24, 2000: "Who Needs the Sweeps: TV's Periodic Race for Ratings Seems to Have Lost Its Purpose". (See Appendix 2.)

- Approximately $24 billion is spent on advertising in markets covered by sweeps;
- Sweeps rely on a diary method of data collection which is perceived as antiquated and biased;
- Diary participation rates are cited as being as low as 30% and David Poltrack, executive vice president of research for CBS, is attributed with the comment that in a random sample, which the sweep survey is, anything under a 50% cooperation rate could be called "statistically invalid"; and
- Nielsen is cited as testing a meter based solution in Boston as a demonstration of how to solve the above-mentioned problems.

Observation

There is surely some irony in reading two articles published on the same day where one criticises Nielsen's TV diary methodology (the sweeps article) and the other highlights the utility achieved from Nielsen's TV diary (the car article).

This paper explores some of the issues raised with diaries based on the Australian experience and highlights how the insights obtained from a well constructed single source survey far outweigh the perceived methodology drawbacks associated with diary collection. Indeed we seek to dispel some of the perceived drawbacks with using the diary collection method.

Continuous Vs Sweeps

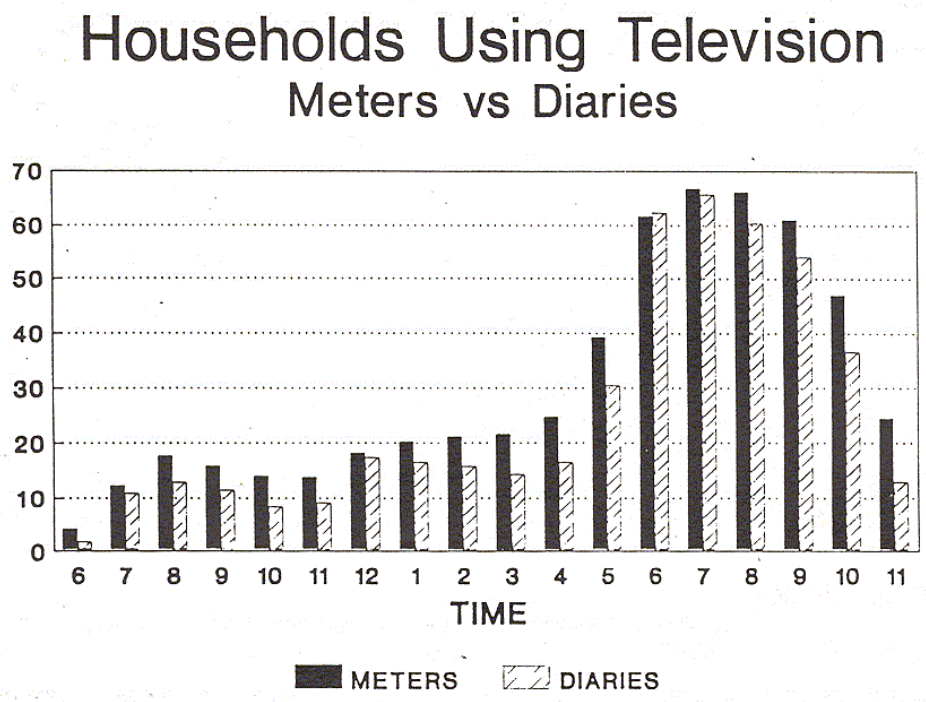
The key issue for an advertiser will always be whether the media research is reliable enough to either save money or make money. For advertisers the sweep TV rating system is fatally flawed not because it uses a diary but because it only covers three sweeps and so can be manipulated by the media to stack the results.

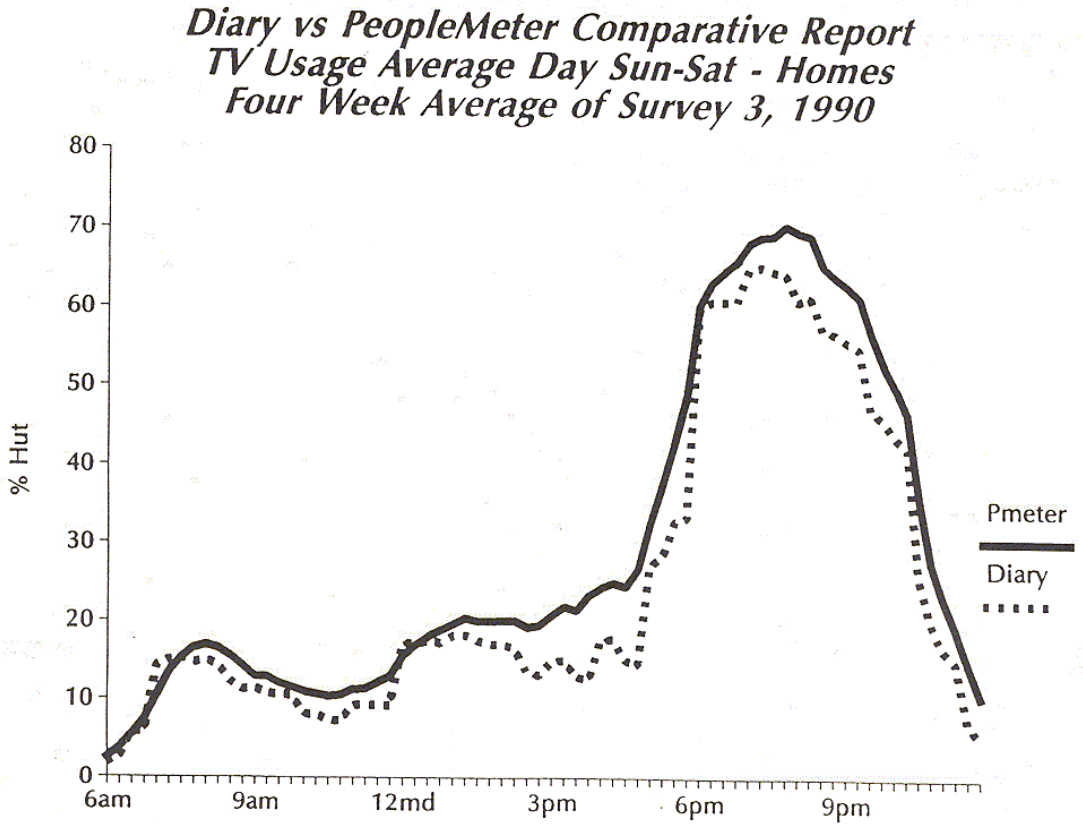
The New York Times article draws attention to the obvious tactic of loading up the sweep months with premium programming. But consider the more subtle possibilities of media conglomerates running lighter promotional campaigns (or ceasing promotional activity altogether) for their own print, radio and other media during the sweeps in order to further enhance the attractiveness of TV during these key months. Or using these same media to heavily promote their TV stations during the sweeps, or doing both at once.

The possibilities for manipulating the survey outcomes are significant and can almost all be removed by simply conducting the survey continuously. The New York Times article suggests that if the 'diary' method sweeps are replaced by meters there will be a large drop in reported ratings. The experience in Australia suggests that if that occurs then **it will not be the result of shifting from diaries to meters.** A.C. Nielsen and AGB ran meters in Australia in parallel with the diary system as part of the tender process in 1990. Both companies published results that indicate diaries tended to **understate** TV ratings, not overstate, as suggested by the New York Times article. (See Chart 1 on the following page.)

Any drop in TV ratings is much more likely to be the result of continuous surveying (and so removing the opportunity to load up the survey months with special programming).

Chart 1





There is so much evidence that TV diaries produce results **very similar** to TV meters. We have tabled some of the results at the time the Australian currency changed from TV diaries to TV meters. One of the key areas of interest to advertisers is Sun-Sat 6.00pm to midnight. In this area the change from TV diaries to TV meters produced very small differences (running a Z test for significance showed no significant change from TV diaries to TV meters for station shares by market or station shares by demographic). The table below shows the share of instances measured and the magnitude of change:

Change in Market Share for 3 Networks (year-on-year)
From TV Diaries (1990) to TV Meters (1991)

For Commercial Stations Across 19 Demographics 6.00pm to Midnight*

Market	**≤ 1 share point change**	**> 1 ≤ 2 share points change**	**> 2 share points change**	**Total ≤ 2 share points change**
Sydney (1.2 million households)	58%	32%	10%	**90%**
Melbourne (1.1 million households)	47%	30%	23%	**77%**
Brisbane (600,000 households)	40%	37%	23%	**77%**
Adelaide (400,000 households)	32%	35%	33%	**67%**
Perth (400,000 households)	23%	30%	47%	**53%**
5 Capital City Total (3.7 million households)	40%	33%	27%	**73%**

* Note there are only three commercial networks in the above comparison so average market share is 33.3% or put another way, a 2 point share change for a station is only a difference of plus or minus 6% on average.

There are 3 commercial stations and 19 demographics in this analysis so for every market there are a total of 57 instances measured. A score of 58% in the "Sydney" row under the "less than or equal to 1" column means that across 19 demographics and three commercial stations in 58% of the instances the difference recorded for station share against this market was less than or equal to one.

The next table looks at the changes by demographic:

Change in Market Share for 3 Networks (year-on-year)
From TV Diaries (1990) to TV Meters (1991)

For Commercial Stations Across 19 Demographics*

Demographic	≤ 1 share point change	> 1 ≤ 2 share points change	> 2 share points change	Total ≤ 2 share points change
All Homes	53%	40%	7%	**93%**
Grocery Buyers*	53%	40%	7%	**93%**
GB 18-39*	47%	40%	13%	**87%**
Socio-economic AB*	33%	53%	13%	**87%**
All People	47%	40%	13%	**87%**
People 18+	47%	47%	7%	**93%**
People 16-39	47%	27%	27%	**73%**
People 25-39	40%	40%	20%	**80%**
People 25-54	40%	40%	20%	**80%**
Men 16-24	27%	27%	47%	**53%**
Men 25-39	27%	20%	53%	**47%**
Men 40-54	33%	33%	33%	**67%**
Men 55+	33%	20%	47%	**53%**
Women 16-24	47%	33%	20%	**80%**
Women 25-39	53%	27%	20%	**80%**
Women 40-54	53%	20%	27%	**73%**
Women 55+	33%	20%	47%	**53%**
Children 5-12	27%	13%	60%	**40%**
Teens 13-17	20%	40%	40%	**60%**

*These definitions changed from 1990 to 1991. “Grocery Buyers” in 1991 replaced “Household Shoppers” in 1990, “Grocery Buyer 18-39” in 1991 replaced “Housewives 15-39” in 1990, “Socio-economic AB” in 1991 replaced “Professionals” in 1990.

There are 3 commercial stations and five mainland markets in this analysis so for every demographic there are a total of 15 instances measured. A score of 53% in the "All Homes" row under the "less than or equal to 1" column means that across five markets and three commercial stations that in 53% of instances the difference recorded for station share against this demographic was less than or equal to one.

For details of the raw counts, share figures and source data, see Appendices 3-5.

Since the changeover from TV diaries to TV meters for the industry currency occurred we have made a number of comparisons between the results obtained from Roy Morgan Research TV diary measurements and A.C. Nielsen TV meter ratings. The results are much closer than has been suggested by the contributor’s to the New York Times article. In 1998 we found that **84% of results** taken from the Roy Morgan TV diary were **within 95% confidence intervals** of Nielsen ratings using TV meters[3].

[3] Roy Morgan TV Diary Ratings Vs Nielsen TV Meter Ratings (Melbourne Data) February 20, 1998. (See Appendix 6.)

Conclusions
There is speculation that if the US sweeps replace the current TV diary system with TV meters then the audience estimates will decline significantly. We believe that is highly likely but equally likely to occur if the current sweeps are simply replaced by continuous TV diary measurement.

There is ample evidence that the current sweeps are loaded with premium programming.

There is ample evidence, much of which has been detailed in this report, that TV diaries can produce results very close to TV meters.

There is sound reason to believe that replacing the current sweeps with continuous TV diary tracking would produce lower but more reliable audience estimates of "average viewing" patterns.

Cooperation Rates
Other issues were raised in the New York Times article as hurdles that needed to be overcome. David Poltrack, Executive Vice-President of Research for CBS, noted the question of cooperation rates and he is attributed with the comment that "anything under a 50 percent cooperation rate could be called "statistically invalid". This comment is made in the light of a statement by the New York Times that "cooperation rates have descended to 30 percent and below in some cities".

The reader of the New York Times article is left with the impression that TV diaries have a lower acceptance level than TV meters and that as a result the audience estimates are less reliable or even "statistically invalid." Both of these may be true but no evidence is cited, and in any case, neither of these impressions is directly related to the methodology of using diaries.

The two issues to consider are:

Is a 30 percent cooperation rate low or high?

Does the cooperation rate directly affect the statistical validity?

On the first point, it is not widely publicised what level of cooperation is achieved for acceptance of in-home television meters. Roy Morgan Research had a 50/50 joint venture with A.C. Nielsen in the early nineties and was actively involved in setting up the Australian panel for TV measurement using meters. Based on our experience then and feedback from industry experts about the current status in Australia, **a figure of 30% to 40% cooperation is normal for TV meter homes!**

Regarding US cooperation rates Erwin Ephron and Stuart Gray stated in their paper delivered at the AFR/ESOMAR conference in Florida, May this year[4] that "Counting refusals and mechanical problems in cooperating households, the Nielsen NTI response rate (% cooperation x % in-tab) is now below 40%". Clearly the response rate for the sweeps is no more or less of an issue than for any national survey using any methodology and is not directly related to the fact that the sweeps use a diary collection method.

[4] "Why We Cannot Afford to Measure Viewers" by Erwin Ephron and Stuart Gray, ARF/ESOMAR conference, Florida (U.S.), May 2000 (See appendix 7)

Our experience with TV diary based surveys in Australia, New Zealand and the US suggests that cooperation rates are more a function of recruiting and incentive policies than whether TV diaries are the method of data collection. For the statement in the New York Times article to have any significance you would need to know the cooperation rate for US TV meter homes and any other well accepted US media currency and they would all need to have a cooperation rate much higher than 30%. From the evidence we have seen, ***30%-40% is normal in the US***.

The second point is a statistical truth out of context. Cooperation rates are very important for random sample surveys where the sample is **unweighted.** The problem with the statement by David Poltrack is that all mainstream media surveys weight their results to reflect the population. This allows for under or oversampling of given subsets and weights the results to a known universe. Typically surveys are weighted by age, sex and geographic region.

Let's look at an example of how this works. Say it is known from census data that 10% of the population in Boston are men aged 14-24. Then say in a media survey of Boston only 8% of the sample are men aged 14-24. If the only results published were based on the unweighted sample then clearly men 14-24 will be under represented. If the survey is weighted by age and sex for Boston then each 14-24 year old male will be given a weight of 1.25 when scaling the results up to the known universe. This has the effect of creating proportional representation for men 14-24 in spite of the known undersampling.

Conclusions

The cooperation rate for the Nielsen TV meter currency in the US metropolitan markets is about the same as the cooperation rate for the Nielsen TV diary sweeps used in the US regional markets.

Cooperation rates have more to do with recruitment and incentive policies than with the use of diaries or meters.

Because respondents are usually weighted by age, sex and geography cooperation rates play a minor role in the statistical validity of media surveys.

Television coincidentals, used to check the TV meter based results, attest to the validity of studies based ≈30% cooperation.

Reliability Vs Utility

The two press articles cited at the beginning of this paper raised questions about reliability and utility of data. The Advertising Age article makes the point that knowing the specific viewing habits of new car buyers (utility) is more salient to the car manufacturers and their advertising agencies than the widely accepted meter ratings. The New York Times article quotes a number of industry spokespeople who express concern about the accuracy of the sweeps but in the end inertia and maintaining the status quo look to be the only outcomes likely from the debate.

Marketers need both reliability and utility from their research but they also need a third element. They need the first two at an affordable cost. The sweeps debate is likely to continue because few of the stakeholders will be willing to dig deeper into their pockets to find out that the TV ratings are actually lower than currently reported by the sweeps. Ephron & Gray also noted in their paper "New systems for advertising accountability need single source media and product purchase data".

Roy Morgan Research has been collecting media consumption and product consumption using a self-completion diary in both Australia and New Zealand for five years now. In that time all of our clients have scrutinised product and brand shares, purchases and consumption figures from our survey and compared these with industry benchmarks. A number have conducted detailed comparisons between the industry currency for TV ratings and our TV diary ratings. International clients like Colgate have spent a great deal of time assessing the reliability and utility of the data collected and it has always proven to be both accurate and useful.

As with all research, the key to understanding its utility is in understanding its biases. The sweeps debate seems to be ignoring the biases of TV meters, highlighting the biases of TV diaries and throwing in a couple of incorrect conclusions for good measure.

Clients of Roy Morgan Research have known for many years that while it may be useful to know how many 16-24's are watching a TV program, it is much more useful to know how many buyers of their products are watching their TV program.

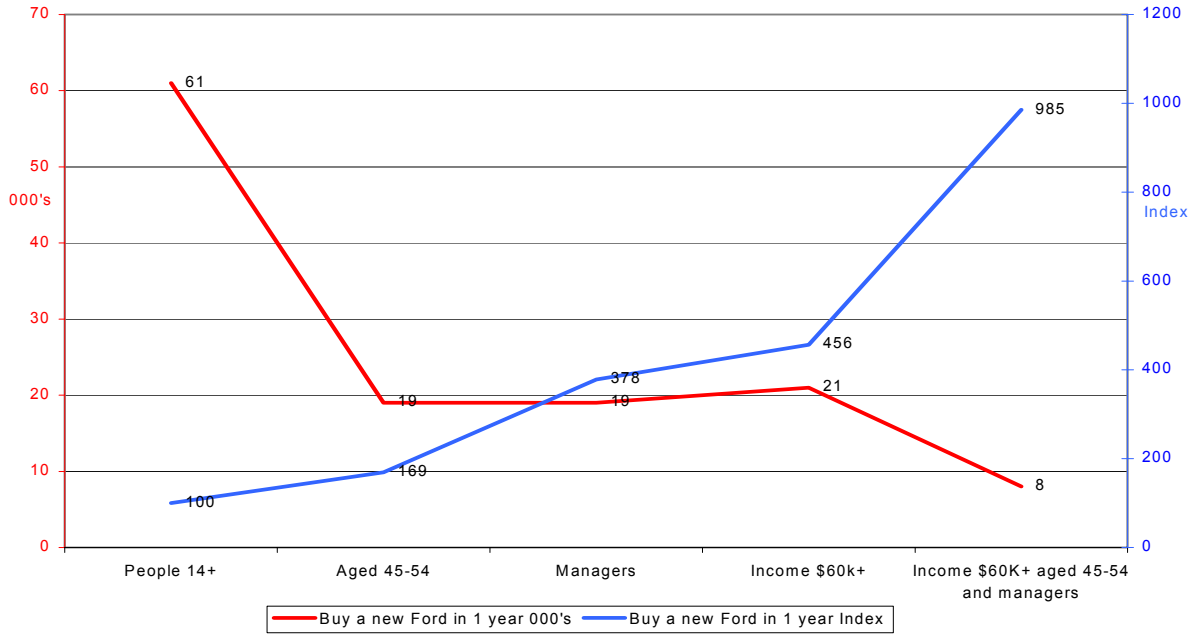
Utility Example[5]

An A.I.D. analysis using age, sex, income, education and occupation reveals that the best demographic proxy for new Ford buyers is "people aged 45-54 whose income is A$60,000+ and whose occupation is a manager". This demographic group has a propensity nearly ten times greater than the average person aged 14+ for intention to buy a new Ford within the next 12 months.

"All People 14+" is not a very good proxy for new Ford buyers. Targeting people aged 45-54 increases the proportion of people within the description who are likely to be new Ford buyers. Similarly "managers" and "earns A$60,000+" both contain greater proportions of new Ford buyers. Putting all three together to make a composite target increases the proportion of new Ford buyers dramatically. The problem with this approach is that whilst the proportion of new Ford buyers within the target demographic increases ***as we add additional demographic layers, the proportion of all new Ford buyers that are represented decreases***.

"Managers aged 45-54 earning A$60,000+" is arguably a description of the people most likely to buy a new Ford but it represents only 13% of all intending new Ford buyers. The graph following illustrates the point.

[5] All figures and results quoted in this example are based on Australian data covering the 12 months April 1999 to March 2000 and are based on a sample of 55,000 people aged 14+.



For advertisers using demographic proxy targets to select their TV programs it should be clear from the above that targeting "new Ford intenders" is likely to generate a different list of "hot" programs compared with targeting "managers with income A$60K+ aged 45-54".

Reach and Index identify where the largest numbers (Reach) and the greatest proportion (Index) of a target audience can be found.

Top 5 Reach for intending new Ford buyers	Top 5 Reach for managers with income $60K+ aged 45-54
Seachange Sun (ch 2)	Seachange Sun (ch 2)
Sixty Minutes Sun (ch 9)	Walking with Dinosaurs Sun (ch 2)
National Nine News M-F (ch 9)	ABC News M-F (ch 2)
National Nine News Sa, Su (ch 9)	ABC News Sa, Su (ch 2)
Walking with Dinosaurs Sun (ch 2)	The Vicar of Dibley Mon (ch 2)

Top 5 Index for intending new Ford buyers	Top 5 Index for managers with income $60K+ aged 45-54
The Footy Show Sun (ch 9)	Business Sunday Sun (ch 9)
Talking Footy Mon (ch 7)	ABC News M-F (ch 2)
Business Sunday Sun (ch 9)	Small Business Show Sun (ch 9)
Sunday Sun (ch 9)	Sunday Sun (ch 9)
Football-Around The Grounds Sat (ch 7)	Foreign Correspondent Tue (ch 2)

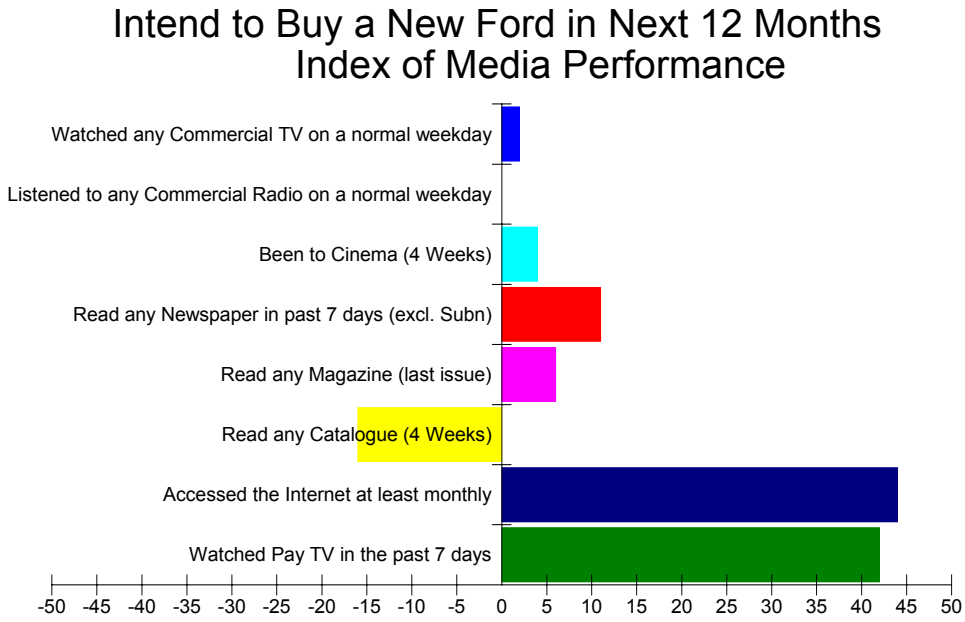
From the preceding tables the interesting thing is not that some programs are listed in both columns, it is the ones that are missing from either column. The program choices based on demographics may well miss the opportunities offered by the National Nine News for achieving high reach against intending new Ford buyers because there are 17 other programs that rate higher against "managers with income A$60K+ aged 45-54". So the problem here is that advertisers may pay too much and miss the real bargains.

For high index programs the situation is much worse, where the number one program against intending new Ford buyers is The Footy Show. If we go looking for this program on a ranking of high index programs for "managers with income A$60K+ aged 45-54" there are 120 programs ahead of it. If demographics are all you have to work with then The Footy Show will never make it to a TV schedule because it gets lost in the demographic morass.

Users of Roy Morgan Single Source data can drill even deeper by understanding the viewer's involvement with TV programs. They do this to fine tune program selection by looking at the best of the best. For example the starting point may be to examine high rating programs and then from a ranked list choose the best. The "best" may be based on one of two key measures, "I really love this program" and/or "I especially choose to watch this program".

Assume that the media planner starts with a shopping list of top twenty programs ranked on reach. A demographic list like "managers with income A$60K+ aged 45-54"will provide a very different ending point compared to a behavioural list like "intend to buy a new Ford in the next twelve months". Picking the five highest reaching programs for each of the involvement measures results in lists with **NO** overlap between the demographic and behavioural selection.

Of course the bigger question is "should TV be used at all and if so, how important is it?" Single Source measurement provides the opportunity to create the "big picture" overview seen below:



From the above it is clear that in the Australian market, Pay TV and the Internet are both prime candidates for consideration in any multi media plans.

Conclusions

Reliability and utility are both important with cost being the ultimate limiting factor. Exponential increases in cost for incremental increases in reliability or utility have no precedent for success or acceptance anywhere in the world.

TV diaries can enable quantum leaps in the utility of data collected with virtually identical levels of reliability to TV meters or other collection methods, at similar and often lower cost. Roy Morgan Single Source allows advertisers to ***identify real opportunities*** that demographics overlook and to ***avoid overpriced media*** where pricing is based on demographics rather than buyers/consumers of the advertiser's products.

Additional measures like TV program involvement can only take on significant meaning to advertisers when tied to behaviour measures like purchase, consumption or intention. Diaries provide a cost-effective means of providing powerful insights on a continuous tracking basis.

To gain real multi media insights requires true single source information. Given the existence of conflicting main media currencies, an independently run diary-based tracking system (such as that offered by Roy Morgan Single Source) is the only way that advertisers, the media and agencies will gain big picture insights.

The final arbiters of accuracy, utility and cost are always those who spend their money buying research. Roy Morgan Research has an extensive list of national and international clients who have subscribed to our Single Source research for many years.

The Twenty Four Billion Dollar Question

The New York Times article quotes an estimate of $24 billion being spent on advertising annually in markets covered by sweeps. The question for advertisers must be whether that money is being well spent or could it be better spent in other media or other markets or both? The problem is that the survey is commissioned by those receiving the $24 billion rather than by those spending it.

For sound business decisions to be made the available research needs to be accurate, relevant and independent of any bias imposed by those commissioning the research. This last point is crucial because if the results are not independent of whoever is purchasing the research then it ceases to be research and becomes a PR tool. The sweeps in their current form clearly suffer a number of biases.

The solution is for advertisers to take control of this $24 billion issue by either commissioning research directly or subscribing to an independent syndicated service. The latter is now available from Roy Morgan Research in Australia, New Zealand and USA, providing unmatched utility, accuracy and independent results all at syndicated prices.

Summary

- The two press articles cited at the beginning of this paper highlight a common problem for users of research around the world – getting useable information at an affordable cost. Disparate surveys and methodologies leave users arguing about the relative merits rather than moving forward with actionable insights.

- A degree of misinformation has been publicised about the relative accuracy, cooperation rates and reliability of diary based surveys in the US. Indeed all the claims may be correct but the cause does not lie in the fact that diaries have been used.

- Well executed diary-based surveys can provide results comparable to industry benchmarks for sales, consumption, market share and media usage. Roy Morgan Research has a long history of providing accurate data using diaries, as attested by the many client and industry comparisons conducted over the years by our many advertiser and government clients.

- The US TV measurement sweeps are the victim of a trade-off between maintaining the status-quo, keeping the cost down and clear opportunity for end-users to bias the results. Simply collecting the data on a continuous rather than sweep basis will provide more accurate and credible results. Roy Morgan Research is currently collecting such data for the US markets.

- True Single Source data provides more insight per research dollar expended than any other form of research. Roy Morgan Research is true Single Source and can provide insights and answers not just for the markets covered by the sweeps but for the whole of the US.

For further information about this paper, Roy Morgan Research or the opportunities provided by Single Source, please E-mail geoffrey.smith@roymorgan.com.

Appendix 1

Auto TV ads miss likely prospects: J.D. Power study

Research uses Nielsen ratings to learn viewing habits of buyers

By Jean Halliday

An auto consultantcy and Nielsen claim they have a better mousetrap for car marketers trying to reach buyers on national broadcast TV.

J.D. Power & Associates teamed with Nielsen Media Research to develop the so-called Auto Viewing System, which they said improves reach to prospects of specific new car or truck segments.

During the pilot study in 1999, the names in Nielsen diaries were matched with new car and truck buyer registration data from researcher Polk Co.

"We studied car and truck buyers, and matched them up with the shows they watch," said Tom Healey, a partner at J.D. Power.

OVERBUYING

The results show that car marketers are reaching too many non-buyers with their national broadcast TV buys, said Deborah Anderson, director of Nielsen's New Media Services. The auto marketers are basing those TV buys on viewer demographics, she added.

"The beauty of this is we don't have to contact consumers," she said. "It's just list matching."

The plan is to study roughly 150,000 Nielsen diaries three times a year.

A small percentage of all U.S. adults buys a new sport-utility vehicle every year, Mr. Healey said. But the data from the pilot study showed sport-utility buyers have different TV viewing habits than non-buyers.

"Non-buyers outnumber buyers, so the car companies are targeting far too many non-SUV buyers within their media buys," he said.

Data from the new system collected in November revealed that "Felicity" ranked 10% better as a medium to reach mini-SUV buyers, such as Toyota Motor Sales USA's RAV4. Meantime, "Cops" ranked a 17% poorer buy to reach purchasers of full-size SUVs like the Chevrolet Suburban from General Motors Corp.

Those data also showed "Frasier" rated a 35% better reach to buyers of lower mid-domestic cars, such as the GM's Buick Regal. In contrast, the same program was rated a 17% poorer reach to buyers of compact pickup trucks, such as the Ford Motor Co.'s Ford Ranger.

MARKETER INTEREST

Mr. Healey and Ms. Anderson are just starting to peddle the new targeting system to car marketers, so most hadn't heard about it.

When *Advertising Age* explained the concept to a car marketing executive and an executive from a car ad agency, both expressed interest.

"I'm interested in anything that would help me buy more efficiently," said Arthur Bud Liebler, senior VP-marketing at Daimler-Chrysler. But he added he'd only be interested if it was priced right. If the cost was too high, it would offset the savings.

Mike Vogel, president-CEO of the Southfield, Mich., office of FCB Worldwide, said, "There have been all kinds of proposals over the years." He mentioned a targeting plan that merged TV and magazine audiences for a total rating point more than a decade ago that didn't deliver.

"If it really can do what they say it can, I'd be interested," he said. □

What consumers watch

Selected TV shows that had substantially better and/or worse ratings in homes with new vehicles than in all homes in November 1999.

Show	Segment	% better/ worse
Frasier	Lower mid domestic	+35%
	Compact pickup	−17%
Face the Nation	Near luxury	+43%
	International luxury	−25%
Spin City	Mid sporty car	+73%
	Compact pickup	−20%
Felicity	Mini SUV	+10%
	Lower midsize import	−42%
Will & Grace	Lower mid domestic	+31%
	Fullsize van	−10%
Cops	Basic large	+20%
	Fullsize SUV	−17%
Star Trek: Voyager	Fullsize pickup	+24%
	Lower mid import	−16%
Jag	Basic large	+11%
	Traditional luxury	−12%
Buffy the Vampire Slayer	Entry sporty	+25%
	Luxury SUV	−27%

Source: J.D. Power & Associates

Appendix 2

April 24, 2000, Monday
Business/Financial Desk

Who Needs The Sweeps?; TV's Periodic Race for Ratings Seems to Have Lost Its Purpose

By BILL CARTER

The television ratings **sweeps** are -- in the words of network and advertising executives -- archaic, silly, destructive and hopelessly inaccurate.

The **sweeps** -- three special ratings periods in November, February and May when Nielsen Media Research measures all 210 television markets across the country -- are widely charged with distorting the business of television and cheating viewers of regular access to the best programming.

They are cited as the reason why network programs alternate between bursts of highly competitive, high-profile programming -- from the sublime (the finale of "Seinfeld") to the ridiculous ("**Who** Wants to Marry a Multimillionaire?") -- and long droughts with reruns.

The system, upon which rides about $24 billion in local advertising a year, dates back half a century, and the methodology even further back, to the days of radio. Yet it has never been seriously threatened with change.

But recently some network executives have begun to protest loudly against the forced competition of the **sweeps**, a system they use because of the **needs** of their local and affiliated stations. Nielsen will soon test a local version of its national rating system in Boston, an effort the research company hopes will lead to an overhaul of the **sweeps**.

At the same time, a growing antipathy between networks and affiliates could eventually undermine the importance of the system.

"It is such an antiquated way of doing business," said Leslie Moonves, the president of CBS Television. "On the edge of a technical revolution, we're using a system that belongs to the dinosaurs. It's ludicrous."

The **sweeps** are indeed based on a system that only Samuel Pepys, the 17th

century London diarist, could love: long-hand inscription at a time when Internet users are being identified and quantified by everything down to preference in California chardonnays.

Participating viewers are asked to fill in a booklet that indicates **who** they are and what they watched in a given week. The **sweeps** are strictly for the benefit of local stations, mainly the smallest ones, which reach less than 40 percent of the total television audience.

Networks ratings are measured daily by an electronic survey called people meters, which gives nationwide information both on viewing and audience demographics. In the 48 biggest cities, Nielsen also operates a second daily survey that measures household viewing, but not specific audience demographic details like the age of viewers and income levels. That detailed information about local markets is vital to advertisers. For those large cities and the smaller ones, it is obtained only from the diaries handed out in sweep months.

For that reason, stations urge their networks to stockpile programming weapons for November, February and May, hoping for a spillover effect on their own programs, like late local newscasts. The stations then sell commercials for the next quarter based on their sweep numbers.

The latest ratings sweep starts Thursday, and the broadcast networks are, as usual, armed to the teeth with mini-series ("Arabian Nights," "The 70's" and "Jesus"), big movies ("The John Denver Story" and "Growing Up Brady") and special stunts (opening tombs in the Egyptian desert and Bruce Willis guest-starring on "Friends").

In contrast, for the last two months, the same networks were buried in such programming as a television movie remake of "Picnic," events like the "American Comedy Awards" and repeat episodes of shows like "Two Guys and a Girl."

"The **sweeps** force you to do things that are antithetical to your own best interests," said Sandy Grushow, the chairman of Fox Entertainment. Chief among these, he said, is the squeeze the **sweeps** puts on each network's store of original episodes of popular series.

Because the **sweeps** demand all original programming, the networks burn up 12 episodes of their best series during the three sweep months. Most shows produce 22 to 24 new episodes in total each year. Mr. Grushow noted that with the need to start each season in September with about five straight new episodes, a network is left with only five to seven original episodes of most of its series to fill the entire months of December, January, March and April.

The result is "deep valleys of repeats" right in the middle of the television season, said David F. Poltrack, the executive vice president of research for

CBS.

"We've done studies that show viewers actually get ticked off at us when they run into all these repeats," he said. "The **sweeps** force us into a situation where we drive our viewers away at other times of the year."

So why do the **sweeps** continue to exist? And why are they still conducted by means used when Jack Benny was America's favorite radio star?

The answer, according to executives at the networks, advertising agencies and the Nielsen company itself, comes down to little more than: It is the way the business has always been run and nobody has the money or the will to change it.

The **sweeps** process in television goes back to the late 1950's when a previous rating company, Arbitron, introduced it as a way for local stations to get ratings information.

Until the mid-1970's, **sweeps** were not notable for the outlandish programming gambits they are known for today. But in the 1970's affiliates began switching networks, looking for stronger partners, and networks began paying more attention to affiliate demands for strong sweep performances.

To conduct the sweep, Nielsen mails out thousands of diaries, containing grids with blank spaces to be filled in with pencil or pen. Even if viewers agree to participate, "they don't fill the diary out in real time," Mr. Poltrack said, "It doesn't have anything to do with the way people watch television anymore. Now you sit there and watch two or three things at once. Any channel surfing you do never gets measured this way."

Nielsen executives said most participants simply filled out the diary at the end of the week by recall. The participant is most likely to record the shows usually watched -- the late news on Channel 12, for example -- whether he or she actually did or not.

Howard Nass, the executive director of local broadcast for TN Media, the biggest buyer of local advertising time on television, said, "It just blows my mind that we buy advertising based on this."

To make matters worse, cooperation rates for diary-keeping have plummeted, as the Nielsen vice president of communications, Jack Loftus, acknowledged. "It's become a big problem." he said.

The cooperation rates have descended to 30 percent and below in some cities. Mr. Poltrack of CBS said that in a random sample, which the sweep survey is, anything under a 50 percent cooperation rate could be called "statistically invalid."

The fact that both networks and local stations also pump up their schedules in sweep months (local stations often broadcast such fare as five-part news series on the latest in swimwear and some literally give away money during newscasts) only adds to the potential for skewing the sweep numbers. The programs that advertisers buy for succeeding months generally bear little or no resemblance to the ones on display in the **sweeps** month.

Still, all local advertising sales are based on **sweeps** numbers. Mr. Nass put the total spent this year on that advertising at $24 billion.

He argued that with all that money changing hands, some, perhaps one percent of the total, should be set aside to create a new, more accurate rating system. But several executives said cost was at the root of why the system might be difficult to replace.

Nielsen believes its current technology could solve the problem: the same people meter used to measure national audience could be installed at the local level. In September, the company will conduct a demonstration of the local version of the meters in Boston. Once Nielsen wires about 450 homes there, the detailed information advertisers crave will be available overnight.

Some advertising clients are participating in the cost of the demonstration, Mr. Loftus said, but Nielsen is footing most of the bill. None of the local broadcast stations are taking part.

"They know their ratings are going to go down," Mr. Loftus said.

The reason is the remaining pre-eminence of broadcast stations. In a system that depends mainly on week-old recall, broadcast stations tend to fare better than they would in a system that measures viewing electronically, minute by minute. "The established stations always go down outside the diaries," Mr. Loftus said. "Cable goes up."

No television executives from local stations speak up to defend the sweep process, Mr. Loftus said, because it is universally accepted as archaic. "In private, some local station managers do argue that we should keep the sweep," Mr. Loftus said. "But they're not going to say that publicly."

Nielsen has plans to roll out this local people-meter system to 10 cities if the Boston demonstration goes well, Mr. Loftus said. But Mr. Poltrack was skeptical. "No station group is going to fund it," he said.

Mr. Loftus said pressure might be brought by advertisers to go to this system. But even if it expands to some of the bigger cities, he conceded it would likely never be considered affordable in the smallest cities. "Would you ever see people meters in Duluth?" he asked. "I doubt it."

Still, the introduction of a local meter system in a few big cities could help

propel change, or so some of the current system's most ardent opponents hope. Mr. Moonves is one of them. "The sweep is going to end in the next five years," he said.

The reason, he said, will be "technology combined with the changing relationship between networks and affiliates."

That relationship is becoming more fractious. As part of a move to improve their business models, the networks are seeking tougher terms from the affiliates. And they are increasingly selling their programs to secondary outlets that they own, like cable channels. This is alienating affiliates **who** want exclusive rights to the shows.

ABC, a unit of the Walt Disney Company, started up a soap opera cable channel that will replay episodes of its programs on a same-day basis. Last week, NBC, a division of General Electric, over affiliate opposition, announced plans to rebroadcast its evening news program on stations owned by the Pax Network, in which NBC has an investment.

One senior network executive, speaking on condition of anonymity, said: "The networks don't give a hoot about the affiliates anymore. People are just going to tell them, the heck with you. We're going to do this our way. That will be the end of the sweep."

For the moment, however, a network could not easily kick the **sweeps** habit because its own local stations also depend on the diary system. The stations are still a network's largest profit centers.

"How do we get away from this?" Mr. Moonves asked. "The owned stations get on board." They could do that by signing on to Nielsen's local people-meter system.

Karen Kratz, the director of communications for Nielsen, said, "When the bigger cities go to the people-meter system, the sweep is gone."

Organizations mentioned in this article:
Nielsen Media Research

Related Terms:
Television; Ratings and Rating Systems; Advertising; Prices (Fares, Fees and Rates)

Appendix 3

Sunday to Saturday 6.00pm to midnight share point difference diaries to meters*

Demographic	Less than or equal to 1	Greater than 1, less than or equal to 2	Greater than 2
Sydney	33	18	6
Melbourne	27	17	13
Brisbane	23	21	13
Adelaide	18	20	19
Perth	13	17	27
Total	114	93	78
Shares	40	33	27

* There are 3 commercial stations and nineteen demographics for every mainland market in this analysis so for every market there are a total of 57 instances measured. A score of 33 in the "Sydney" row under the "less than or equal to 1" column means that across three commercial stations and nineteen demographics there were 33 instances where the difference recorded for station share against this market was less than or equal to one.

The "total" is the number of all instances across the five markets that fall within each range.

The "share" is the proportion of all instances that fall within each range

Appendix 4

Sunday to Saturday 6.00pm to midnight share point difference diaries to meters*

Demographic	Less than or equal to 1	Greater than 1, less than or equal to 2	Greater than 2
All Homes	8	6	1
Grocery Buyers	8	6	1
GB 18-39	7	6	2
Socio economic AB	5	8	2
All People	7	6	2
People 18+	7	7	1
PPL 16-39	7	4	4
PPL 25-39	6	6	3
PPL 25-54	6	6	3
Men 16-24	4	4	7
Men 25-39	4	3	8
Men 40-54	5	5	5
Men 55+	5	3	7
Women 16-24	7	5	3
Women 25-39	8	4	3
Women 40-54	8	3	4
Women 55+	5	3	7
Children 5-12	4	2	9
Teens 13-17	3	6	6
Total	114	93	78
Shares	40	33	27

* There are 3 commercial stations and five mainland markets in this analysis so for every demographic there are a total of 15 instances measured. A score of 8 in the "All Homes" row under the "less than or equal to 1" column means that across five markets and three commercial stations there were 8 instances where the difference recorded for station share against this demographic was less than or equal to one.

The "total" is the number of all instances across the nineteen demographics that fall within each range.

The "share" is the proportion of all instances that fall within each range

Appendix 5

AS AT: 08-Nov-91		SUN-SAT 6:00PM-12:00MIDNIGHT SYDNEY "All Station Shares" Seven	Nine	Ten	TWO	SBS	SUN-SAT 6:00PM-12:00MIDNIGHT "Commercial Station Shares" Seven	Nine	Ten
ALL HOMES	1991	28.2%	31.9%	21.5%	15.2%	3.2%	34.6%	39.1%	26.3%
	1990	29.1%	32.3%	23.0%	13.0%	2.6%	34.4%	38.3%	27.3%
GROCERY BUYERS	1991	28.3%	33.0%	19.0%	16.6%	3.1%	35.3%	41.1%	23.6%
HOUSEHOLD SHOPPER	1990	29.5%	33.5%	21.1%	13.5%	2.3%	35.1%	39.8%	25.1%
GROCERY BUYER 18-39	1991	29.3%	33.2%	24.2%	11.1%	2.2%	33.8%	38.3%	27.9%
HOUSEWIVES 15-39	1990	30.5%	33.3%	24.4%	9.8%	2.0%	34.6%	37.8%	27.7%
SOCICO-ECONOMIC AB	1991	25.7%	31.6%	19.8%	20.0%	2.9%	33.3%	41.0%	25.7%
PROFESSIONALS	1990	25.6%	32.6%	21.2%	17.5%	3.2%	32.2%	41.1%	26.7%
ALL PEOPLE	1991	28.5%	32.3%	21.6%	14.7%	2.9%	34.6%	39.2%	26.2%
	1990	29.9%	32.8%	23.4%	11.7%	2.3%	34.7%	38.1%	27.2%
PEOPLE 18+	1991	27.5%	33.0%	20.1%	16.2%	3.2%	34.2%	40.9%	24.9%
	1990	28.7%	33.7%	22.2%	13.0%	2.5%	34.0%	39.8%	26.2%
PEOPLE 16-39	1991	28.9%	32.4%	24.6%	11.3%	2.7%	33.6%	37.8%	28.6%
	1990	29.6%	33.5%	25.7%	9.2%	2.0%	33.3%	37.7%	29.0%
PEOPLE 25-39	1991	28.2%	32.9%	23.2%	12.7%	3.1%	33.4%	39.0%	27.5%
	1990	29.0%	33.7%	24.4%	10.6%	2.2%	33.3%	38.7%	28.0%
PEOPLE 25-54	1991	28.2%	33.0%	21.7%	14.0%	3.0%	34.0%	39.8%	26.2%
	1990	29.0%	33.5%	23.4%	11.7%	2.4%	33.7%	39.0%	27.3%
MEN 16-24	1991	29.6%	32.3%	25.9%	9.7%	2.6%	33.7%	36.8%	29.5%
	1990	29.1%	33.8%	29.3%	6.2%	1.6%	31.6%	36.7%	31.8%
MEN 25-39	1991	26.8%	33.8%	23.4%	12.7%	3.3%	31.9%	40.3%	27.8%
	1990	26.9%	33.5%	25.5%	11.4%	2.6%	31.3%	39.0%	29.7%
MEN 40-54	1991	26.1%	31.9%	21.3%	17.4%	3.4%	32.9%	40.3%	26.8%
	1990	27.4%	32.6%	23.4%	13.8%	2.9%	32.9%	39.1%	28.0%
MEN 55+	1991	24.7%	31.7%	16.1%	22.1%	5.4%	34.0%	43.8%	22.2%
	1990	26.0%	33.5%	19.2%	17.6%	3.7%	33.1%	42.5%	24.4%
WOMEN 16-24	1991	31.4%	30.6%	29.7%	7.0%	1.3%	34.2%	33.4%	32.4%
	1990	32.9%	32.1%	28.3%	5.6%	1.1%	35.2%	34.4%	30.4%
WOMEN 25-39	1991	29.4%	32.0%	23.0%	12.7%	2.9%	34.8%	37.9%	27.3%
	1990	31.0%	33.9%	23.4%	9.8%	1.8%	35.1%	38.3%	26.5%
WOMEN 40-54	1991	30.5%	34.4%	18.8%	13.7%	2.6%	36.4%	41.1%	22.4%
	1990	30.3%	34.1%	20.9%	12.4%	2.2%	35.5%	39.9%	24.5%
WOMEN 55+	1991	26.6%	34.3%	14.2%	22.1%	2.8%	35.4%	45.7%	18.9%
	1990	29.3%	34.1%	17.7%	16.3%	2.6%	36.1%	42.0%	21.9%
CHILDREN 5-12	1991	36.0%	25.0%	31.0%	7.2%	0.9%	39.1%	27.2%	33.7%
	1990	38.8%	26.2%	30.2%	4.1%	0.7%	40.8%	27.5%	31.7%
TEENS 13-17	1991	34.3%	29.3%	29.5%	5.5%	1.3%	36.8%	31.5%	31.7%
	1990	34.2%	28.5%	31.6%	4.9%	0.8%	36.3%	30.2%	33.5%

		SUN-SAT 6:00PM-12:00MIDNIGHT				MELBOURNE	SUN-SAT 6:00PM-12:00MIDNIGHT		
AS AT:		"All Station Shares"					"Commercial Station Shares"		
08-Nov-91		Seven	Nine	Ten	TWO	SBS	Seven	Nine	Ten
ALL HOMES	1991	30.0%	31.1%	20.9%	14.4%	3.6%	36.6%	38.0%	25.5%
	1990	30.4%	32.1%	23.0%	12.0%	2.5%	35.5%	37.6%	26.9%
GROCERY BUYERS	1991	29.0%	32.5%	19.1%	15.7%	3.7%	35.9%	40.3%	23.7%
HOUSEHOLD SHOPPER	1990	29.8%	33.1%	22.1%	12.6%	2.5%	35.0%	39.0%	26.0%
GROCERY BUYER 18-39	1991	31.3%	31.8%	22.5%	11.5%	3.0%	36.6%	37.1%	26.3%
HOUSEWIVES 15-39	1990	32.2%	33.4%	24.6%	8.1%	1.7%	35.7%	37.1%	27.3%
SOCICO-ECONOMIC AB	1991	26.0%	29.1%	19.8%	21.2%	3.9%	34.7%	38.8%	26.5%
PROFESSIONALS	1990	28.5%	32.6%	20.4%	15.4%	3.2%	35.0%	40.0%	25.0%
ALL PEOPLE	1991	30.4%	31.9%	20.7%	13.6%	3.3%	36.7%	38.4%	24.9%
	1990	30.6%	32.7%	23.5%	10.8%	2.3%	35.2%	37.7%	27.0%
PEOPLE 18+	1991	29.5%	32.4%	19.7%	14.8%	3.6%	36.2%	39.7%	24.2%
	1990	29.6%	33.4%	22.3%	12.1%	2.6%	34.7%	39.2%	26.1%
PEOPLE 16-39	1991	31.7%	32.1%	23.6%	9.9%	2.7%	36.3%	36.7%	27.0%
	1990	31.9%	33.4%	25.4%	7.6%	1.7%	35.2%	36.9%	28.0%
PEOPLE 25-39	1991	31.2%	32.9%	21.7%	11.8%	2.4%	36.4%	38.3%	25.3%
	1990	31.7%	34.0%	23.6%	8.8%	1.9%	35.5%	38.1%	26.4%
PEOPLE 25-54	1991	30.0%	32.6%	21.0%	13.6%	2.9%	35.9%	39.0%	25.1%
	1990	30.8%	33.7%	23.0%	10.3%	2.3%	35.1%	38.5%	26.3%
MEN 16-24	1991	32.5%	32.0%	25.7%	5.7%	4.0%	36.0%	35.5%	28.5%
	1990	31.9%	33.2%	28.4%	5.1%	1.4%	34.2%	35.5%	30.4%
MEN 25-39	1991	32.2%	33.6%	20.7%	10.9%	2.6%	37.3%	38.8%	23.9%
	1990	31.1%	34.1%	23.2%	9.5%	2.1%	35.2%	38.6%	26.2%
MEN 40-54	1991	28.0%	31.0%	20.3%	16.5%	4.2%	35.3%	39.1%	25.7%
	1990	29.5%	33.1%	21.7%	12.6%	3.0%	35.0%	39.3%	25.7%
MEN 55+	1991	26.1%	33.0%	15.7%	19.7%	5.5%	34.9%	44.1%	21.0%
	1990	26.9%	32.5%	18.7%	17.7%	4.3%	34.4%	41.7%	23.9%
WOMEN 16-24	1991	33.1%	28.4%	29.9%	6.1%	2.6%	36.2%	31.1%	32.7%
	1990	32.7%	31.3%	30.2%	4.8%	1.0%	34.7%	33.2%	32.0%
WOMEN 25-39	1991	30.3%	32.3%	22.7%	12.5%	2.2%	35.6%	37.9%	26.6%
	1990	32.3%	33.9%	24.0%	8.2%	1.6%	35.8%	37.6%	26.6%
WOMEN 40-54	1991	29.0%	33.4%	19.6%	15.1%	2.9%	35.3%	40.7%	24.0%
	1990	29.4%	33.5%	22.8%	11.8%	2.5%	34.3%	39.1%	26.6%
WOMEN 55+	1991	28.9%	32.2%	14.8%	19.6%	4.5%	38.1%	42.5%	19.4%
	1990	27.0%	33.6%	19.0%	17.3%	3.1%	33.9%	42.2%	23.9%
CHILDREN 5-12	1991	39.2%	28.4%	25.2%	5.9%	1.4%	42.3%	30.6%	27.2%
	1990	38.4%	27.2%	30.4%	3.3%	0.7%	40.0%	28.4%	31.6%
TEENS 13-17	1991	35.3%	27.2%	29.8%	5.6%	2.1%	38.3%	29.5%	32.3%
	1990	34.7%	29.4%	31.0%	4.1%	0.8%	36.5%	30.9%	32.6%

AS AT: 08-Nov-91		SUN-SAT 6:00PM-12:00MIDNIGHT "All Station Shares" Seven	Nine	Ten	TWO	BRISBANE SBS	SUN-SAT 6:00PM-12:00MIDNIGHT "Commercial Station Shares" Seven	Nine	Ten
ALL HOMES	1991	30.2%	30.4%	23.2%	13.9%	2.2%	36.1%	36.3%	27.7%
	1990	29.4%	32.6%	23.7%	12.7%	1.6%	34.3%	38.1%	27.6%
GROCERY BUYERS	1991	29.8%	31.7%	20.1%	16.4%	2.0%	36.5%	38.8%	24.6%
HOUSEHOLD SHOPPER	1990	29.7%	33.9%	21.7%	13.2%	1.5%	34.8%	39.8%	25.4%
GROCERY BUYER 18-39	1991	32.0%	32.6%	24.3%	9.9%	1.2%	36.0%	36.6%	27.4%
HOUSEWIVES 15-39	1990	31.1%	33.6%	25.9%	8.3%	1.1%	34.4%	37.1%	28.5%
SOCICO-ECONOMIC AB	1991	27.2%	29.2%	22.4%	17.5%	3.6%	34.5%	37.0%	28.4%
PROFESSIONALS	1990	25.7%	34.5%	22.4%	15.3%	2.1%	31.2%	41.8%	27.1%
ALL PEOPLE	1991	30.6%	31.1%	22.5%	13.9%	1.9%	36.3%	36.9%	26.8%
	1990	30.1%	33.1%	23.9%	11.5%	1.4%	34.6%	38.0%	27.4%
PEOPLE 18+	1991	29.4%	31.9%	21.2%	15.3%	2.1%	35.6%	38.7%	25.7%
	1990	29.1%	33.8%	22.7%	12.7%	1.6%	34.0%	39.5%	26.5%
PEOPLE 16-39	1991	31.9%	31.9%	25.6%	9.0%	1.4%	35.7%	35.7%	28.6%
	1990	30.6%	33.4%	27.1%	7.7%	1.2%	33.6%	36.6%	29.8%
PEOPLE 25-39	1991	31.4%	32.6%	23.8%	10.5%	1.7%	35.8%	37.2%	27.1%
	1990	29.9%	34.3%	25.6%	8.9%	1.3%	33.3%	38.2%	28.5%
PEOPLE 25-54	1991	30.1%	32.2%	22.3%	13.3%	2.1%	35.6%	38.0%	26.4%
	1990	29.5%	34.5%	24.1%	10.5%	1.5%	33.5%	39.1%	27.4%
MEN 16-24	1991	32.4%	31.5%	28.9%	6.1%	1.0%	34.9%	34.0%	31.1%
	1990	30.8%	31.6%	31.1%	5.5%	1.0%	32.9%	33.8%	33.2%
MEN 25-39	1991	30.3%	32.8%	24.1%	10.8%	2.0%	34.7%	37.6%	27.7%
	1990	28.3%	34.2%	26.9%	9.0%	1.6%	31.6%	38.2%	30.1%
MEN 40-54	1991	27.5%	31.1%	21.0%	17.0%	3.4%	34.5%	39.1%	26.4%
	1990	27.5%	34.2%	23.4%	13.0%	1.9%	32.3%	40.2%	27.4%
MEN 55+	1991	25.4%	31.8%	18.4%	21.4%	3.0%	33.6%	42.1%	24.3%
	1990	26.2%	33.3%	18.8%	19.3%	2.4%	33.4%	42.6%	24.0%
WOMEN 16-24	1991	33.9%	29.1%	31.1%	5.1%	0.8%	36.0%	31.0%	33.0%
	1990	33.6%	31.1%	29.8%	4.9%	0.5%	35.6%	32.9%	31.5%
WOMEN 25-39	1991	32.5%	32.5%	23.4%	10.2%	1.4%	36.8%	36.7%	26.5%
	1990	31.4%	34.3%	24.3%	8.9%	1.1%	34.9%	38.1%	27.0%
WOMEN 40-54	1991	29.4%	32.0%	20.2%	16.5%	2.0%	36.0%	39.2%	24.8%
	1990	30.4%	35.1%	21.2%	12.0%	1.3%	35.1%	40.5%	24.4%
WOMEN 55+	1991	28.5%	31.2%	15.6%	22.0%	2.7%	37.9%	41.4%	20.7%
	1990	28.6%	33.7%	17.3%	18.6%	1.8%	35.9%	42.3%	21.8%
CHILDREN 5-12	1991	38.8%	24.1%	29.8%	6.8%	0.5%	41.9%	26.0%	32.1%
	1990	37.9%	27.3%	30.0%	4.4%	0.4%	39.8%	28.7%	31.6%
TEENS 13-17	1991	35.6%	26.3%	31.8%	5.5%	0.8%	38.0%	28.0%	34.0%
	1990	33.6%	29.5%	31.6%	4.9%	0.4%	35.5%	31.2%	33.3%

AS AT:		SUN-SAT 6:00PM-12:00MIDNIGHT "All Station Shares"				ADELAIDE	SUN-SAT 6:00PM-12:00MIDNIGHT "Commercial Station Shares"		
08-Nov-91		Seven	Nine	Ten	TWO	SBS	Seven	Nine	Ten
ALL HOMES	1991	31.6%	29.6%	23.4%	12.8%	2.6%	37.4%	34.9%	27.6%
	1990	31.3%	31.2%	23.3%	12.4%	1.9%	36.5%	36.4%	27.1%
GROCERY BUYERS	1991	31.5%	31.0%	21.0%	14.1%	2.4%	37.7%	37.2%	25.1%
HOUSEHOLD SHOPPER	1990	31.7%	31.7%	22.1%	12.8%	1.7%	37.1%	37.0%	25.9%
GROCERY BUYER 18-39	1991	33.6%	28.8%	26.3%	9.8%	1.4%	37.9%	32.5%	29.7%
HOUSEWIVES 15-39	1990	33.2%	32.2%	26.0%	7.4%	1.2%	36.3%	35.3%	28.5%
SOCICO-ECONOMIC AB	1991	28.8%	30.1%	20.5%	18.4%	2.2%	36.3%	38.0%	25.8%
PROFESSIONALS	1990	28.9%	32.6%	20.4%	15.6%	2.6%	35.2%	39.9%	24.9%
ALL PEOPLE	1991	32.1%	30.2%	22.8%	12.6%	2.3%	37.7%	35.5%	26.8%
	1990	31.5%	31.6%	23.5%	11.6%	1.7%	36.4%	36.5%	27.1%
PEOPLE 18+	1991	31.5%	31.1%	21.4%	13.6%	2.4%	37.5%	37.0%	25.5%
	1990	30.9%	32.2%	22.1%	12.8%	1.9%	36.2%	37.8%	25.9%
PEOPLE 16-39	1991	33.0%	29.4%	27.2%	8.5%	1.8%	36.8%	32.8%	30.4%
	1990	32.4%	32.9%	26.1%	7.4%	1.3%	35.5%	36.0%	28.6%
PEOPLE 25-39	1991	32.6%	29.9%	25.6%	10.1%	1.8%	37.0%	34.0%	29.1%
	1990	32.1%	33.5%	24.5%	8.5%	1.4%	35.6%	37.2%	27.2%
PEOPLE 25-54	1991	32.4%	30.5%	23.6%	11.2%	2.2%	37.4%	35.3%	27.3%
	1990	31.6%	33.2%	23.3%	10.3%	1.6%	35.9%	37.7%	26.4%
MEN 16-24	1991	34.5%	28.2%	29.2%	6.1%	2.0%	37.6%	30.7%	31.8%
	1990	31.9%	33.6%	27.8%	5.8%	1.0%	34.2%	36.1%	29.8%
MEN 25-39	1991	31.2%	31.1%	25.2%	10.4%	2.1%	35.7%	35.5%	28.8%
	1990	30.6%	34.7%	23.7%	9.2%	1.8%	34.4%	39.0%	26.6%
MEN 40-54	1991	33.3%	31.7%	20.2%	13.1%	1.7%	39.1%	37.2%	23.7%
	1990	29.8%	33.4%	21.6%	13.0%	2.2%	35.2%	39.4%	25.4%
MEN 55+	1991	28.1%	31.6%	15.3%	20.8%	4.3%	37.5%	42.1%	20.4%
	1990	28.4%	31.1%	18.4%	19.0%	3.1%	36.4%	39.9%	23.7%
WOMEN 16-24	1991	33.4%	28.6%	32.1%	4.2%	1.6%	35.5%	30.4%	34.1%
	1990	34.2%	29.5%	31.2%	4.3%	0.8%	36.1%	31.1%	32.8%
WOMEN 25-39	1991	33.8%	28.9%	26.0%	9.9%	1.4%	38.1%	32.6%	29.3%
	1990	33.5%	32.3%	25.3%	7.8%	1.1%	36.7%	35.5%	27.8%
WOMEN 40-54	1991	31.2%	31.0%	21.9%	12.2%	3.7%	37.1%	36.9%	26.1%
	1990	32.0%	32.3%	21.7%	12.4%	1.7%	37.2%	37.6%	25.2%
WOMEN 55+	1991	30.0%	32.5%	16.8%	18.2%	2.5%	37.8%	41.0%	21.2%
	1990	30.3%	30.9%	18.8%	18.0%	2.0%	37.9%	38.6%	23.5%
CHILDREN 5-12	1991	37.0%	25.4%	28.8%	8.2%	0.7%	40.6%	27.8%	31.6%
	1990	36.9%	26.4%	32.6%	3.5%	0.6%	38.5%	27.5%	34.0%
TEENS 13-17	1991	35.6%	24.4%	33.1%	4.3%	2.6%	38.2%	26.2%	35.5%
	1990	34.2%	28.3%	32.8%	4.1%	0.7%	35.9%	29.7%	34.4%

AS AT: 08-Nov-91		SUN-SAT 6:00PM-12:00MIDNIGHT "All Station Shares" Seven	Nine	Ten	TWO	SBS	PERTH SUN-SAT 6:00PM-12:00MIDNIGHT "Commercial Station Shares" Seven	Nine	Ten
ALL HOMES	1991	33.0%	28.9%	19.8%	15.7%	2.6%	40.4%	35.3%	24.3%
	1990	31.7%	30.9%	20.7%	14.2%	2.5%	38.1%	37.1%	24.8%
GROCERY BUYERS	1991	33.0%	29.7%	18.0%	17.0%	2.2%	40.8%	36.8%	22.3%
HOUSEHOLD SHOPPER	1990	32.3%	32.0%	18.9%	14.7%	2.2%	38.8%	38.5%	22.7%
GROCERY BUYER 18-39	1991	35.2%	28.2%	24.4%	10.6%	1.6%	40.1%	32.1%	27.8%
HOUSEWIVES 15-39	1990	33.8%	31.1%	23.4%	10.0%	1.7%	38.3%	35.3%	26.5%
SOCICO-ECONOMIC AB	1991	26.6%	28.6%	17.8%	23.2%	3.7%	36.4%	39.2%	24.4%
PROFESSIONALS	1990	29.1%	31.9%	17.8%	18.0%	3.3%	37.0%	40.4%	22.5%
ALL PEOPLE	1991	34.2%	29.0%	19.7%	14.9%	2.1%	41.2%	35.0%	23.8%
	1990	32.7%	31.3%	20.8%	13.1%	2.2%	38.6%	36.9%	24.5%
PEOPLE 18+	1991	32.9%	29.8%	18.5%	16.4%	2.4%	40.5%	36.8%	22.8%
	1990	31.6%	32.2%	19.1%	14.6%	2.5%	38.1%	38.8%	23.0%
PEOPLE 16-39	1991	34.7%	28.9%	24.0%	10.6%	1.9%	39.6%	33.0%	27.4%
	1990	32.9%	31.5%	24.0%	9.7%	1.9%	37.2%	35.7%	27.1%
PEOPLE 25-39	1991	33.8%	28.8%	22.8%	12.4%	2.2%	39.6%	33.7%	26.7%
	1990	33.1%	31.7%	21.9%	11.1%	2.2%	38.1%	36.6%	25.3%
PEOPLE 25-54	1991	33.2%	28.6%	20.7%	14.9%	2.7%	40.2%	34.7%	25.1%
	1990	32.2%	32.0%	20.2%	13.2%	2.4%	38.2%	37.9%	23.9%
MEN 16-24	1991	36.2%	31.4%	22.7%	8.0%	1.6%	40.1%	34.8%	25.2%
	1990	32.4%	31.4%	27.7%	6.8%	1.6%	35.4%	34.3%	30.3%
MEN 25-39	1991	33.7%	29.5%	21.5%	12.9%	2.4%	39.8%	34.8%	25.4%
	1990	31.9%	31.9%	21.6%	12.0%	2.7%	37.3%	37.4%	25.3%
MEN 40-54	1991	31.2%	27.6%	17.9%	19.6%	3.7%	40.7%	36.0%	23.3%
	1990	30.7%	32.3%	17.6%	16.5%	3.0%	38.1%	40.1%	21.8%
MEN 55+	1991	30.4%	31.5%	11.7%	23.0%	3.5%	41.3%	42.8%	15.9%
	1990	28.3%	32.8%	13.4%	21.5%	4.0%	37.9%	44.1%	18.0%
WOMEN 16-24	1991	37.0%	26.7%	30.6%	4.9%	0.8%	39.2%	28.3%	32.5%
	1990	32.3%	30.6%	30.0%	6.1%	1.0%	34.8%	33.0%	32.3%
WOMEN 25-39	1991	33.9%	28.1%	24.0%	11.9%	2.0%	39.4%	32.7%	27.9%
	1990	34.2%	31.5%	22.2%	10.3%	1.8%	38.9%	35.9%	25.2%
WOMEN 40-54	1991	33.4%	29.1%	17.8%	16.8%	3.0%	41.6%	36.3%	22.2%
	1990	31.7%	32.4%	18.4%	15.2%	2.3%	38.4%	39.2%	22.3%
WOMEN 55+	1991	31.6%	32.0%	11.8%	22.5%	2.1%	41.9%	42.5%	15.6%
	1990	31.9%	33.0%	14.2%	18.6%	2.3%	40.3%	41.7%	18.0%
CHILDREN 5-12	1991	41.7%	23.1%	24.9%	9.4%	0.8%	46.5%	25.8%	27.8%
	1990	41.4%	24.3%	29.6%	4.2%	0.5%	43.5%	25.5%	31.1%
TEENS 13-17	1991	39.8%	25.7%	27.4%	6.2%	0.8%	42.8%	27.7%	29.5%
	1990	34.9%	28.0%	31.5%	5.0%	0.6%	37.0%	29.7%	33.4%

Appendix 6

Roy Morgan Research

The Roy Morgan Research Centre Pty. Ltd.
A.C.N. 004 433 265
Quality System Certified to AS/NZS ISO 9001 : 94 Cert. No.6669

Ref: [x:\workgrps\media\mp\doc\tv_comp.doc; 13 (+1)]

February 20, 1998

Roy Morgan TV Diary Ratings Vs Nielsen TV Meter Ratings (Melbourne Data)

The attached comparisons of Roy Morgan TV Rating figures and Nielsen TV Rating figures show high correlation (> 0.9) between the two sets of figures. (Jan-Mar 97 & Apr-Jun 97)

84% of Roy Morgan ratings are within 95% confidence intervals of Nielsen ratings.

Foreword

The purpose of the exercise was to evaluate and demonstrate the validity of Roy Morgan Diary rating data. The data was from respondents within the Melbourne TV market (Rating) area interviewed during the period January to June 1997 (inclusive).

Method

Time periods were divided into two quarters (Jan-Mar and Apr-Jun). TV programs selection criteria were:

1. Those programs that can be consistently combined (e.g. Same program which is shown on roughly the same time each week); and
2. Those programs shown on at least 4 weeks within the period.

The above was done so the sample for each program was at least 400 people. The results were compared with Nielsen TV Rating figures from the corresponding period. Nielsen's figures are based on people aged 13 and above, while Roy Morgan's are based on people 14+.

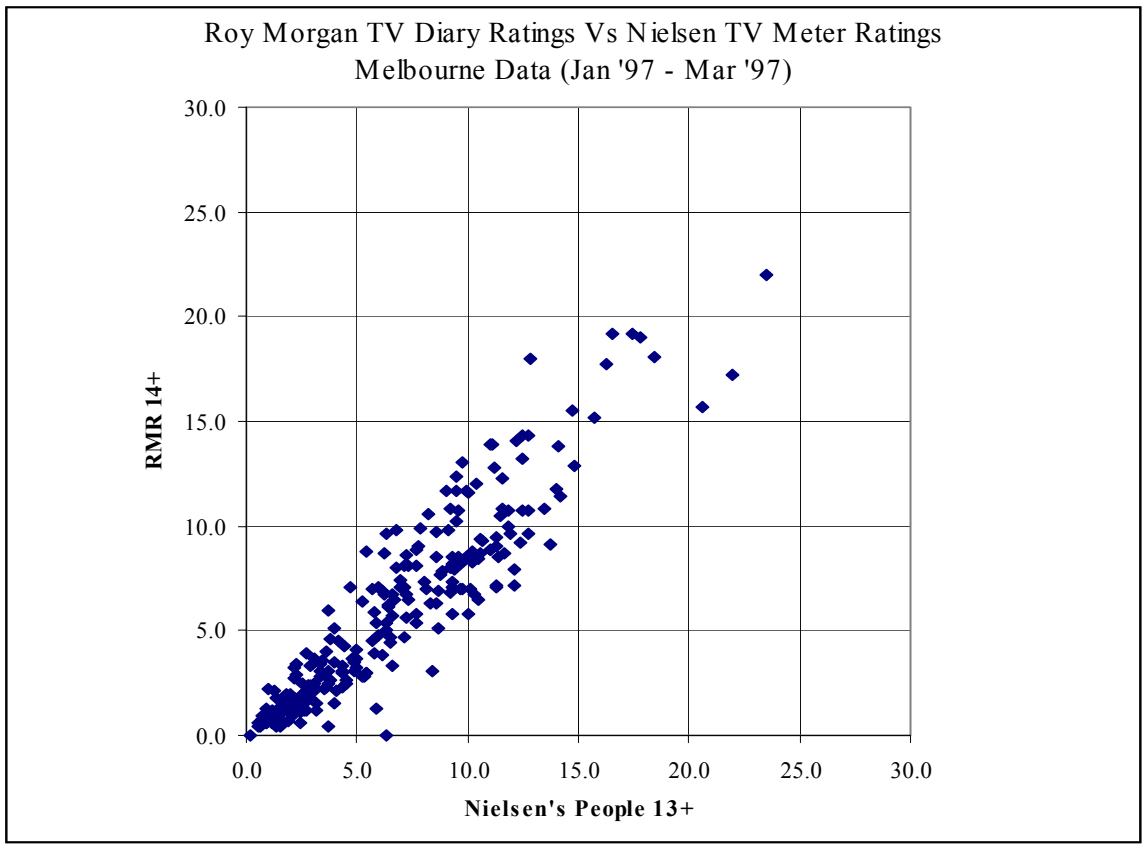
Conclusions

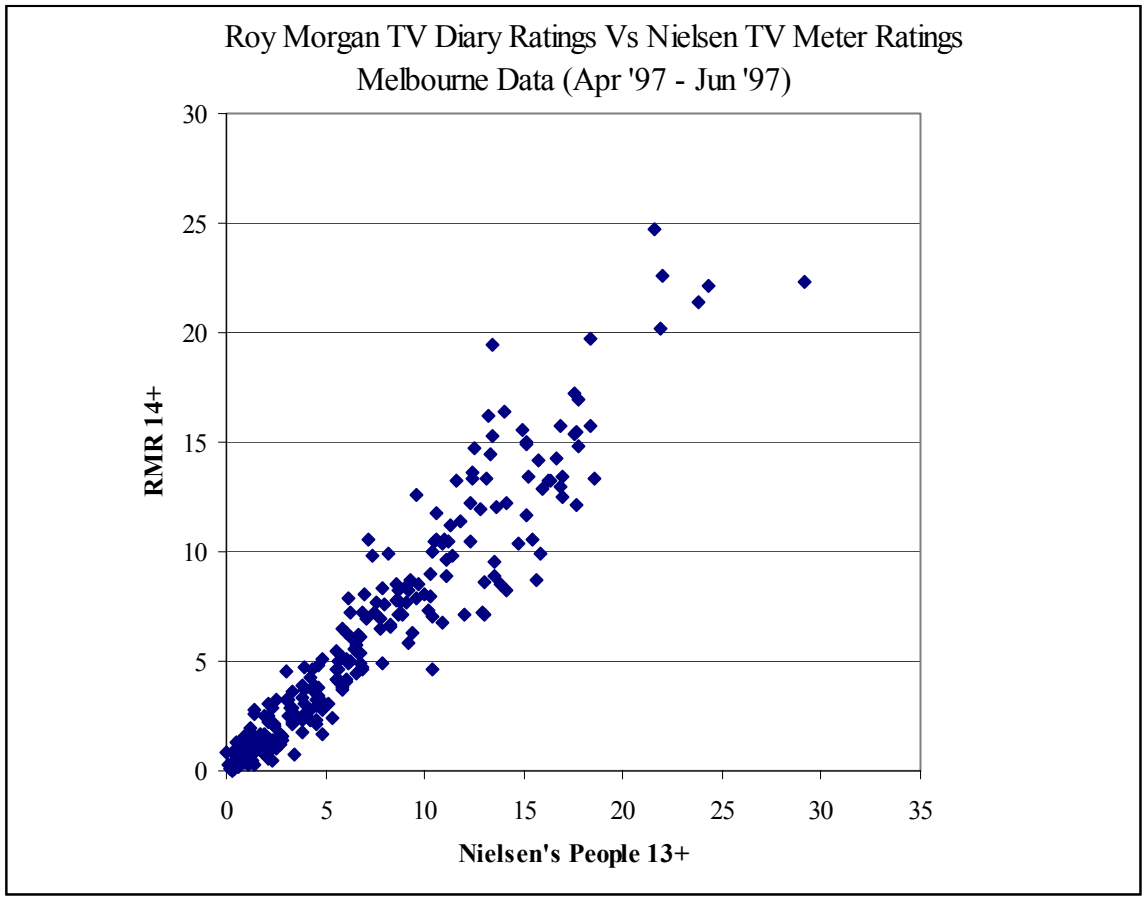
The attached tables/ charts show that the average differences in ratings between Roy Morgan and Nielsen are around 0.7 of a rating point (0.5 for Jan-Mar quarter and 0.8 for Apr-Jun quarter). Histograms of the rating differences show the majority of programs are within 2 rating points.

The result show a high correlation between Roy Morgan TV ratings and Nielsen ratings (0.93 and 0.96 for the two quarters). The following table shows proportion of Roy Morgan TV ratings (84%) within 95% confidence intervals of Nielsen ratings.

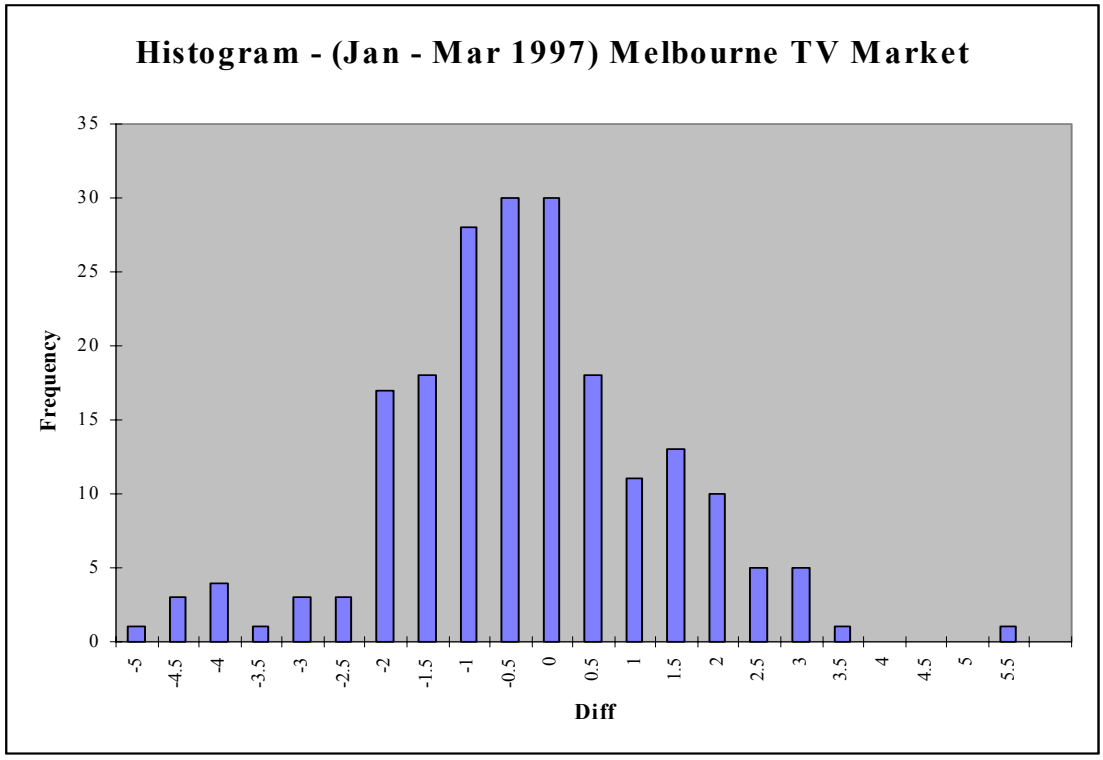
These are extremely conservative estimates and assume the Nielsen ratings are not subject to error or to weekly fluctuation.

	Jan '97 - Mar '97	Apr '97 - Jun '97
Total No. of programs	199	248
No. of programs within 95% Confidence Interval	167 (84%)	209 (84%)


Roy Morgan TV Diary Ratings Vs Nielsen TV Meter Ratings
Melbourne Data (Jan '97 - Mar '97)
RMR 14+
Nielsen's People 13+
0.0
5.0
10.0
15.0
20.0
25.0
30.0


Roy Morgan TV Diary Ratings Vs Nielsen TV Meter Ratings
Melbourne Data (Apr '97 - Jun '97)
RMR 14+
Nielsen's People 13+
0
5
10
15
20
25
30
35

Histogram (Jan – Mar 1997) Melbourne TV Market



Diff	*Frequency*
-5	1
-4.5	3
-4	4
-3.5	1
-3	3
-2.5	3
-2	17
-1.5	18
-1	28
-0.5	30
0	30
0.5	18
1	11
1.5	13
2	10
2.5	5
3	5
3.5	1
4	0
4.5	0
5	0
5.5	1
More	0

Rating Comparison (Jan – Mar 97)
Melbourne TV Market

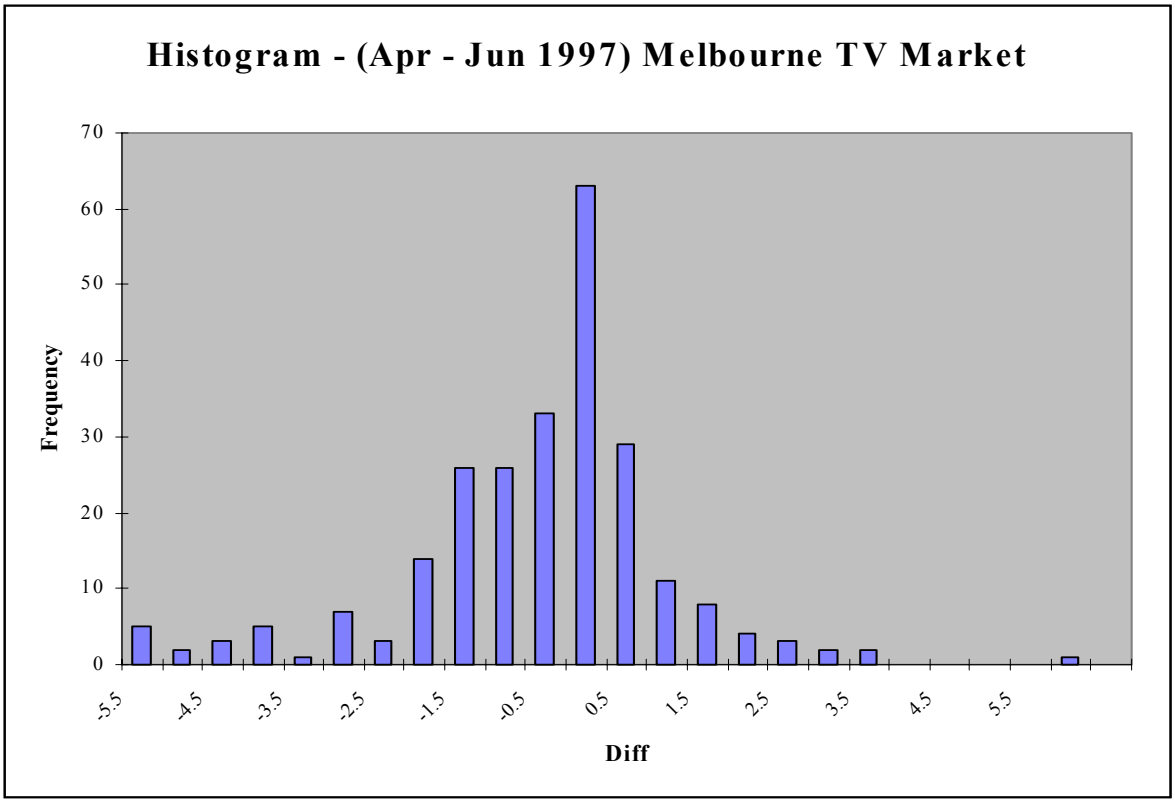
TV Program	**Nielsen's People 13+ (29-Dec-96 - 29-Mar-97)**	**RMR 14+**	***Diff (RMR - Nielsen)***
3RD ROCK FROM SUN-SUN (HSV7 20:00 - 20:30)	9.6	10.7	*1.1*
99-1 Ave	2.8	2.4	*-0.4*
ADV OF SINBAD (ATV10 19:30 - 20:30)	3.5	2.2	*-1.3*
AFL:FRI Ave	14.8	12.9	*-1.9*
AFL:MON ANS CUP (HSV7 20:30 - 23:30)	11.5	10.5	*-1.0*
AFL:SAT Ave	9.7	7.0	*-2.7*
AFL:SUN Ave	11.6	10.8	*-0.8*
ALFRED HITCHCOCK PRESEN Ave	5.9	1.3	*-4.6*
ALL NEW HALE & PACE Ave	10.0	5.8	*-4.2*
AUDIENCE WITH B.CONNOLY (HSV7 20:30 - 21:30)	11.1	13.9	*2.8*
AUST MOST WANTED (HSV7 19:30 - 19:45)	11.3	7.2	*-4.1*
BABYLON 5 Ave	3.1	2.5	*-0.6*
BAYWATCH-WED (ATV10 19:30 - 20:30)	5.9	5.4	*-0.5*
BETTER HOMES & GARDENS (HSV7 19:30 - 20:00)	14.7	15.5	*0.8*
BEVERLY HILLS 90210-TUE (ATV10 19:30 - 20:30)	7.7	8.1	*0.4*
BEYOND 2000-SAT Ave	1.9	0.7	*-1.2*
BIG SKY Ave	7.2	5.6	*-1.6*
BIRDS OF A FEATHER (HSV7 09:30 - 10:00)	1.0	2.2	*1.2*
BLANKETY BLANKS Ave	6.7	6.5	*-0.2*
BLUE HEELERS (HSV7 20:30 - 21:30)	17.8	19.0	*1.2*
BOLD & BEAUTIFUL (ATV10 16:30 - 17:00)	4.0	3.5	*-0.5*
BRADY BUNCH (ATV10 18:00 - 18:30)	4.2	4.5	*0.3*
BRAMWELL Ave	8.6	8.5	*-0.1*
BRIGHT IDEAS Ave	3.1	2.1	*-1.0*
BROTHERLY LOVE Ave	6.6	5.7	*-0.9*
BURKES BACKYARD (GTV9 19:30 - 20:30)	14.1	13.8	*-0.3*
BURKES BACKYARD-RPT (GTV9 17:00 - 18:00)	4.9	3.1	*-1.8*
BURNING ZONE (ATV10 21:30 - 22:30)	7.7	5.8	*-1.9*
BUSINESS SUNDAY (GTV9 08:00 - 09:00)	1.4	1.8	*0.4*
CANDID CAMERA-WKNT (ATV10 18:30 - 19:00)	3.3	3.1	*-0.2*
CAROLINE IN CITY (GTV9 20:00 - 20:30)	14.0	11.8	*-2.2*
CHICAGO HOPE Ave	12.7	14.3	*1.6*
CNN WORLD NEWS (GTV9 06:00 - 06:30)	0.5	0.4	*-0.1*
COURTHOUSE Ave	2.9	3.3	*0.4*
CRICKET SHOW Ave	3.7	6.0	*2.3*
CURRENT AFFAIR (GTV9 18:30 - 19:00)	15.7	15.2	*-0.5*
CYBILL (GTV9 19:30 - 20:00)	10.2	8.3	*-1.9*
CYBILL (GTV9 20:30 - 21:00)	9.3	7.1	*-2.2*
DANGERFIELD Ave	7.1	8.1	*1.0*
DARK SKIES (ATV10 20:30 - 22:30)	8.0	7.3	*-0.7*
DAYBREAK NEWS (GTV9 06:30 - 07:00)	1.1	1.0	*-0.1*
DAYS OF OUR LIVES Ave	3.6	4.0	*0.4*
DEADLY AUSTRALIANS (GTV9 19:30 - 20:30)	12.5	10.7	*-1.8*
DREW CAREY SHOW Ave	9.2	8.0	*-1.2*
DUCKMAN Ave	3.1	2.3	*-0.8*
E.R. Ave	12.8	18.0	*5.2*
ELEVEN AM (HSV7 11:00 - 12:00)	1.2	0.6	*-0.6*
ELLEN-SAT (HSV7 20:00 - 20:30)	7.1	7.1	*0.0*

ELLEN:THU (HSV7 19:30 - 20:00)	9.3	8.0	*-1.3*
EMERGENCY 000 (HSV7 20:00 - 20:30)	10.6	8.7	*-1.9*
ENTERTAINMENT TONIGHT Ave	3.2	1.2	*-2.0*
ERIC BANA SHOW LIVE Ave	6.1	6.9	*0.8*
FACE TO FACE (HSV7 08:30 - 09:00)	0.7	0.8	*0.1*
FAMILY FEUD (HSV7 17:00 - 17:30)	3.8	4.6	*0.8*
FRASIER Ave	9.3	7.3	*-2.0*
FRI NIGHT MOVIE (ATV10 20:30 - 22:45)	7.0	7.1	*0.1*
FRI NIGHT MOVIE (HSV7 20:30 - 22:40)	9.4	8.3	*-1.1*
FRI NIGHT MOVIE Ave	8.6	6.3	*-2.3*
FRIENDS (GTV9 19:30 - 20:00)	18.4	18.1	*-0.3*
FULL FRONTAL Ave	10.7	9.3	*-1.4*
FULL HOUSE (GTV9 17:00 - 17:30)	2.7	2.1	*-0.6*
FUNNIEST HOME VIDEO (GTV9 19:30 - 20:00)	11.9	9.6	*-2.3*
GENERAL HOSPITAL (ATV10 12:00 - 13:00)	0.7	0.6	*-0.1*
Golf Ave	4.4	4.3	*-0.1*
GOLF SHOW Ave	2.7	2.1	*-0.6*
GOOD MEDICINE (GTV9 20:00 - 20:30)	14.2	11.4	*-2.8*
GOOD MORNING AUSTRALIA (ATV10 09:00 - 11:30)	1.2	1.2	*0.0*
GOOSEBUMPS (ATV10 18:30 - 19:30)	3.7	2.5	*-1.2*
HEALTHY WLTHY WISE (ATV10 19:30 - 20:30)	9.2	10.8	*1.6*
HOLIDAY (ATV10 20:30 - 21:30)	3.7	3.1	*-0.6*
HOME & AWAY (HSV7 19:00 - 19:30)	10.6	9.4	*-1.2*
Home Improvement Ave	8.6	9.7	*1.1*
HOPE & GLORIA (GTV9 10:00 - 10:30)	0.9	1.3	*0.4*
I.M.T (GTV9 21:30 - 23:00)	11.3	9.0	*-2.3*
INTERFOOTY Ave	2.4	1.1	*-1.3*
Ironman Ave	2.1	1.7	*-0.4*
JAG (HSV7 19:30 - 20:30)	10.1	7.0	*-3.1*
LARRY SANDERS SHOW Ave	2.8	2.1	*-0.7*
LOIS & CLARK:NEW ADVENT (GTV9 19:30 - 20:30)	7.7	8.9	*1.2*
LONELY PLANET Ave	2.8	2.4	*-0.4*
M.A.N.T.I.S (ATV10 23:30 - 24:30)	1.2	0.6	*-0.6*
M.A.S.H. Ave	6.2	8.7	*2.5*
MAD ABOUT YOU Ave	7.8	9.0	*1.2*
MARRIED WTH CHLDRN-AFTN (GTV9 15:30 - 16:00)	3.6	2.3	*-1.3*
MARRIED WTH CHLDRN-LATE (GTV9 21:45 - 22:15)	5.8	3.9	*-1.9*
MEDIVAC (ATV10 21:30 - 22:30)	5.7	4.5	*-1.2*
MEET THE PRESS (ATV10 08:30 - 09:00)	0.7	0.8	*0.1*
MELROSE PLACE Ave	9.9	11.7	*1.8*
MIDDAY (GTV9 12:00 - 13:30)	4.3	3.1	*-1.2*
MON MIDDAY MOVIE (GTV9 11:30 - 13:10)	2.4	0.6	*-1.8*
MON MIDDAY MOVIE (HSV7 12:00 - 14:00)	2.3	2.9	*0.6*
MON NIGHT MOVIE (ATV10 20:30 - 22:40)	9.3	8.2	*-1.1*
MON NIGHT MOVIE (HSV7 20:30 - 22:35)	12.7	10.7	*-2.0*
MONDAY TO FRIDAY (ATV10 15:00 - 16:00)	1.2	0.7	*-0.5*
MUPPETS TONIGHT (HSV7 19:30 - 20:00)	6.6	3.3	*-3.3*
MURDER ONE Ave	12.4	9.2	*-3.2*
MURDER SHE WROTE Ave	4.9	3.5	*-1.4*
NAT.NINE MORNING NEWS (GTV9 10:30 - 11:00)	0.9	0.6	*-0.3*
NAT.NINE NEWS-SAT Ave	12.5	14.3	*1.8*
NAT.NINE NEWS-SUN Ave	17.4	19.2	*1.8*
NATIONAL NINE NEWS (GTV9 18:00 - 18:30)	16.5	19.2	*2.7*
NBA ACTION (ATV10 11:00 - 11:30)	1.5	1.1	*-0.4*

NED & STACEY (ATV10 19:30 - 20:00)	9.5	11.7	*2.2*
NEIGHBOURS (ATV10 18:30 - 19:00)	6.2	6.7	*0.5*
NFL Afternoon Ave	0.9	0.6	*-0.3*
NFL Evening Ave	1.6	1.1	*-0.5*
NIGHTLINE Ave	5.4	3.0	*-2.4*
NRG WORLD SURFING (ATV10 11:00 - 11:30)	2.4	1.3	*-1.1*
NYPD BLUE Ave	8.2	10.6	*2.4*
OPRAH WINFREY SHOW (ATV10 14:00 - 15:00)	1.8	1.5	*-0.3*
OUR HOUSE Ave	11.8	10.7	*-1.1*
OUTER LIMITS Ave	4.3	2.3	*-2.0*
PEAK PRACTICE Ave	7.9	9.9	*2.0*
PRICE IS RIGHT (GTV9 17:30 - 18:00)	6.0	4.8	*-1.2*
RACING SHOW Ave	1.9	1.1	*-0.8*
RAGE-AM (ABV2 06:00 - 08:30)	0.7	0.9	*0.2*
RECOVERY-AM (ABV2 09:00 - 12:00)	1.1	0.9	*-0.2*
RENEGADE 1 Ave	2.9	1.8	*-1.1*
REX HUNTS FISHING ADVEN Ave	3.8	2.6	*-1.2*
RICKI LAKE Ave	1.5	0.8	*-0.7*
RICKI LAKE SHOW (ATV10 13:00 - 14:00)	2.5	2.5	*0.0*
RIPSNORTERS (HSV7 20:00 - 20:30)	7.1	4.7	*-2.4*
ROAD TO AVONLEA (ATV10 16:00 - 17:00)	2.1	0.9	*-1.2*
ROSEANNE-AFTN (ATV10 13:30 - 14:00)	1.2	0.6	*-0.6*
SABRINA:TEENAGE WITCH Ave	8.8	7.7	*-1.1*
SALE OF CENTURY (GTV9 19:00 - 19:30)	12.5	13.2	*0.7*
SAT MIDDAY MOVIE (HSV7 12:00 - 14:00)	2.3	3.4	*1.1*
SAT MIDDAY MOVIE Ave	2.0	2.0	*0.0*
SAT MIDDAY MOVIE Ave	2.3	1.7	*-0.6*
SAT NIGHT MOVIE (ATV10 20:30 - 22:30)	4.5	2.5	*-2.0*
SAT NIGHT MOVIE (HSV7 20:30 - 23:10)	8.7	6.9	*-1.8*
SAT NIGHT MOVIE Ave	8.4	3.1	*-5.3*
SEAQUEST 2032 (ATV10 19:30 - 20:30)	4.0	5.1	*1.1*
SEINFELD-SUN (ATV10 20:00 - 20:30)	11.0	13.9	*2.9*
SEINFELD-THU Ave	10.0	11.6	*1.6*
Seven Late Night News	5.3	2.8	*-2.5*
SEVEN NEWS-SAT Ave	11.3	7.1	*-4.2*
SEVEN NEWS-SUN (HSV7 18:00 - 18:30)	11.6	12.3	*0.7*
SEVEN NIGHTLY NEWS (HSV7 18:00 - 18:30)	11.2	12.8	*1.6*
SEX/LIFE Ave	7.2	6.7	*-0.5*
SIMPSONS-SUN (ATV10 19:00 - 20:00)	10.4	12.0	*1.6*
SIMPSONS-SUN (ATV10 19:30 - 20:30)	9.0	11.7	*2.7*
SIMPSONS-WKNT (ATV10 19:00 - 19:30)	5.0	3.7	*-1.3*
SIXTY MINUTES (GTV9 19:30 - 20:30)	16.3	17.7	*1.4*
SLIDERS (ATV10 19:30 - 20:30)	5.7	7.0	*1.3*
SMALL BUSINESS SHOW (GTV9 07:30 - 08:00)	0.6	0.6	*0.0*
SOMETHING SO RIGHT (ATV10 20:00 - 20:30)	7.7	5.4	*-2.3*
SPORTS SUNDAY Ave	6.1	3.8	*-2.3*
SPORTS TONIGHT Ave	2.6	1.2	*-1.4*
SPORTS TONIGHT-RPT (ATV10 06:00 - 06:30)	0.2	0.0	*-0.2*
SPORTSWORLD (HSV7 09:00 - 12:00)	2.2	2.7	*0.5*
STAR TREK:NEXT GENERATI Ave	3.4	3.6	*0.2*
SUN LATE NGHT MOVIE Ave	2.9	2.2	*-0.7*
SUN MIDDAY MOVIE Ave	3.0	3.4	*0.4*
SUN NIGHT MOVIE (ATV10 20:30 - 22:55)	9.5	10.2	*0.7*
SUN NIGHT MOVIE (HSV7 20:30 - 22:40)	11.8	10.0	*-1.8*

SUN NIGHT MOVIE Ave	9.8	13.0	*3.2*
SUNDAY (GTV9 09:00 - 11:00)	3.1	3.7	*0.6*
SUNDAY SUNRISE (HSV7 08:00 - 08:30)	0.5	0.6	*0.1*
SUNRISE (HSV7 06:00 - 07:00)	0.6	0.4	*-0.2*
TEN NEWS AT 11:30 (ATV10 11:30 - 12:00)	1.4	1.0	*-0.4*
TEN NEWS AT 5:00 (ATV10 17:00 - 18:00)	9.1	9.8	*0.7*
TEN NEWS L.ED Ave	5.0	3.2	*-1.8*
TEN NEWS L.ED-SAT Ave	4.1	2.1	*-2.0*
TEN NEWS L.ED-SUN Ave	5.4	3.0	*-2.4*
TEN NEWS-SAT (ATV10 17:00 - 17:30)	6.3	5.4	*-0.9*
TEN NEWS-SUN Ave	4.7	7.1	*2.4*
TENNIS:COLONIAL CLASSIC Ave	2.2	1.5	*-0.7*
TENNIS:DAVIS CUP Ave	6.5	4.4	*-2.1*
THE MUMMIES (HSV7 20:00 - 20:30)	7.2	8.6	*1.4*
THE NANNY-RPT (ATV10 19:00 - 19:30)	6.8	8.0	*1.2*
THE NANNY-SUN (ATV10 18:30 - 19:00)	9.5	12.4	*2.9*
THE PRETENDER Ave	9.7	8.2	*-1.5*
THE SENTINEL (HSV7 21:30 - 22:30)	12.1	7.2	*-4.9*
THU MIDDAY MOVIE (GTV9 11:30 - 13:30)	2.2	1.8	*-0.4*
THU MIDDAY MOVIE Ave	2.7	1.2	*-1.5*
THU NIGHT MOVIE (GTV9 21:30 - 23:30)	5.8	5.9	*0.1*
TODAY (GTV9 07:00 - 09:00)	3.3	3.4	*0.1*
TODAY ON SATURDAY (GTV9 08:00 - 09:00)	1.1	1.0	*-0.1*
TODAY TONIGHT (HSV7 18:30 - 19:00)	9.4	7.9	*-1.5*
TOUCHED BY AN ANGEL Ave	6.4	6.1	*-0.3*
TUE MIDDAY MOVIE (GTV9 11:30 - 13:30)	3.2	1.5	*-1.7*
TUE MIDDAY MOVIE Ave	2.9	2.4	*-0.5*
TUE NIGHT MOVIE (GTV9 20:30 - 22:40)	9.3	5.8	*-3.5*
TWISTED TALES Ave	9.2	6.8	*-2.4*
VIDEO HITS-SAT (ATV10 09:00 - 11:00)	1.8	2.0	*0.2*
VIDEO HITS-SUN (ATV10 09:00 - 11:00)	2.2	3.2	*1.0*
WATER RATS (GTV9 20:30 - 21:30)	13.7	9.1	*-4.6*
WED MIDDAY MOVIE Ave	2.4	1.9	*-0.5*
WED MIDDAY MOVIE Ave	2.7	1.6	*-1.1*
WED NIGHT MOVIE (GTV9 20:30 - 22:30)	9.6	8.5	*-1.1*
WED NIGHT MOVIE Ave	9.3	8.5	*-0.8*
WHATS COOKING (GTV9 11:00 - 11:30)	1.5	1.4	*-0.1*
WHEEL OF FORTUNE (HSV7 17:30 - 18:00)	6.4	6.2	*-0.2*
WHERE ARE THEY NOW (HSV7 19:30 - 20:30)	7.3	6.5	*-0.8*
WHO DARES WINS (HSV7 19:30 - 20:00)	11.3	9.5	*-1.8*
WIDE WLD SPORT Ave	2.8	1.8	*-1.0*
WITNESS (HSV7 21:30 - 22:35)	10.2	8.8	*-1.4*
WNDRFUL WRLD OF DISNEY (ATV10 17:30 - 18:30)	3.3	2.8	*-0.5*
X CARS (HSV7 20:00 - 20:30)	12.1	7.9	*-4.2*
X FILES (ATV10 20:30 - 21:30)	12.2	14.1	*1.9*
YOUNG & RESTLESS Ave	2.7	3.9	*1.2*
Averages	**6.4**	**5.9**	**-0.5**
Min	**0.2**	**0.0**	**-5.3**
Max	**18.4**	**19.2**	**5.2**
Correlation	**0.93**		

Histogram (Apr – Jun 1997) Melbourne TV Market



Diff	*Frequency*
-5.5	5
-5.0	2
-4.5	3
-4.0	5
-3.5	1
-3.0	7
-2.5	3
-2.0	14
-1.5	26
-1.0	26
-0.5	33
0.0	63
0.5	29
1.0	11
1.5	8
2.0	4
2.5	3
3.0	2
3.5	2
4.0	0
4.5	0
5.0	0
5.5	0
6.0	1
More	0

Rating Comparison (Apr – Jun 97)
Melbourne TV Market

TV Program	Nielsen 13+ (30-Mar-97 - 28-Jun-97)	RMR 14+	*Diff (RMR - Nielsen)*
3RD ROCK FROM SUN-SUN (HSV7 20:00 - 20:30)	10.6	10.6	*0.0*
7.30 REPORT-EV (ABV2 19:30 - 20:00)	7.5	7.2	*-0.3*
ABC NEWS-EV (ABV2 19:00 - 19:30)	10.6	11.8	*1.2*
ABC NEWS-SA (ABV2 19:00 - 19:30)	8.7	8.2	*-0.5*
ABC NEWS-SU (ABV2 19:00 - 19:30)	9.6	12.6	*3.0*
ABOUT US (SBV28 20:30 - 21:30)	1.4	1.1	*-0.3*
ABSOLUTELY FABULOUS HR (HSV7 20:30 - 21:30)	10.9	10.4	*-0.5*
ACCESS ALL AREAS-EV (ABV2 21:15 - 22:15)	3.4	2.6	*-0.8*
AFL:LEAGUE TEAMS (HSV7 23:40 - 24:35)	1.1	1.1	*0.0*
AFL:PREM H&A FRI EV (HSV7 19:30 - 22:30)	15.7	14.2	*-1.5*
AFL:PREM H&A MON EV (HSV7 17:00 - 18:00)	7.2	10.6	*3.4*
AFL:PREM H&A SAT EV (HSV7 19:30 - 22:30)	14.7	10.4	*-4.3*
AFL:PREM H&A SUN DA (HSV7 15:25 - 18:00)	11.8	11.4	*-0.4*
AFL:PREM H&A SUN DA (HSV7 15:30 - 18:00)	15.1	14.9	*-0.2*
ALIEN EMPIRE-EV (ABV2 20:00 - 20:30)	6.3	7.2	*0.9*
ANIMAL HOSPITAL (GTV9 19:30 - 20:30)	16.8	13.0	*-3.8*
AROUND GROUNDS (HSV7 17:00 - 17:30)	5.8	3.8	*-2.0*
AS IT HAPPENED (SBV28 20:30 - 21:30)	1.3	1.5	*0.2*
AUST MOST WANTED (HSV7 19:30 - 20:30)	13.0	8.6	*-4.4*
AUST STRANGEST HOME IMP (HSV7 20:00 - 20:30)	13.5	9.5	*-4.0*
AUSTRALIAN STORY-EV (ABV2 18:30 - 19:00)	5.5	4.6	*-0.9*
AUSTV NEWS-LE (ABV2 23:30 - 24:00)	0.8	0.8	*0.0*
BABYLON 5 Ave	3.4	2.6	*-0.8*
BALLYKISSANGEL-EV (ABV2 19:30 - 20:15)	12.5	14.7	*2.2*
BEAVIS & BUTTHEAD (ATV10 23:30 - 24:00)	1.5	0.9	*-0.6*
BETTER HOMES & GARDENS (HSV7 19:30 - 20:00)	17.5	15.4	*-2.1*
BEVERLY HILLS 90210-TUE (ATV10 19:30 - 20:30)	7.0	8.1	*1.1*
BIG PICTURE-LE (ABV2 21:30 - 22:30)	3.3	2.9	*-0.4*
BIG SKY (ATV10 21:30 - 22:30)	6.7	5.4	*-1.3*
BILL-SA (ABV2 20:30 - 21:15)	13.6	12.0	*-1.6*
BILL-TU (ABV2 20:00 - 20:30)	11.1	9.6	*-1.5*
BLUE HEELERS Ave	24.3	22.1	*-2.2*
BOLD & BEAUTIFUL (ATV10 16:30 - 17:00)	4.5	3.2	*-1.3*
BRAMWELL (GTV9 21:30 - 22:35)	6.2	7.9	*1.7*
BRIGHT IDEAS (ATV10 17:30 - 18:30)	3.8	3.9	*0.1*
BRIGHT IDEAS 12:30 - 14:00 Ave	2.1	0.6	*-1.5*
BROTHERLY LOVE (HSV7 19:00 - 19:30)	8.7	7.1	*-1.6*
BURKES BACKYARD (GTV9 19:30 - 20:30)	16.6	14.3	*-2.3*
BURKES BACKYARD-RPT (GTV9 17:00 - 18:00)	5.6	4.1	*-1.5*
BURNING ZONE (ATV10 21:30 - 22:30)	8.3	6.6	*-1.7*
BUSH TUCKER MAN-EV (ABV2 18:00 - 18:30)	4.2	4.3	*0.1*
BUSINESS SUNDAY (GTV9 08:00 - 09:00)	1.4	2.8	*1.4*
CAROLINE IN CITY (GTV9 20:00 - 20:30)	15.2	13.4	*-1.8*
CATCH PHRASE (GTV9 17:00 - 17:30)	5.5	5.5	*0.0*
CHICAGO HOPE (HSV7 20:30 - 21:30)	15.4	10.6	*-4.8*
CNN WORLD NEWS (GTV9 06:00 - 06:30)	0.6	0.5	*-0.1*
COMMON AS MUCK-LE (ABV2 21:30 - 22:30)	3.3	2.2	*-1.1*
COMPASS-AM (ABV2 11:30 - 12:00)	1.1	0.4	*-0.7*

COMPASS-LE (ABV2 22:15 - 23:15)	1.9	1.7	*-0.2*
CONCENTRATION (HSV7 17:00 - 17:30)	3.9	3.7	*-0.2*
CROSS COUNTRY-SAT (HSV7 06:00 - 06:30)	0.3	0.3	*0.0*
CURRENT AFFAIR (GTV9 18:30 - 19:00)	16.8	15.7	*-1.1*
CUTTING EDGE (SBV28 20:30 - 21:30)	1.2	1.6	*0.4*
CYBILL (GTV9 20:30 - 21:00)	10.3	8.0	*-2.3*
DANCING IN THE STREE-LE (ABV2 22:30 - 23:30)	3.8	2.3	*-1.5*
DARK SKIES (ATV10 20:30 - 21:30)	6.9	4.7	*-2.2*
DATELINE SATURDAY (SBV28 19:30 - 20:30)	0.7	1.1	*0.4*
DATELINE SATURDAY-RPT (SBV28 12:30 - 13:30)	0.3	0.0	*-0.3*
DAYBREAK NEWS Ave	2.1	1.5	*-0.6*
DAYS OF OUR LIVES (GTV9 13:30 - 14:30)	4.4	3.9	*-0.5*
DREW CAREY SHOW (GTV9 20:00 - 20:30)	11.6	13.2	*1.6*
DROP DEAD DONKEY (SBV28 21:00 - 21:30)	1.1	0.9	*-0.2*
E.R. (GTV9 20:30 - 21:30)	21.9	20.2	*-1.7*
ELEVEN AM (HSV7 11:00 - 12:00)	1.1	0.9	*-0.2*
ENTERTAINMENT TONIGHT (GTV9 11:30 - 12:00)	1.9	1.1	*-0.8*
FACE TO FACE (HSV7 08:30 - 09:00)	0.9	1.3	*0.4*
FALLEN ANGELS-EV (ABV2 20:30 - 21:30)	3.8	3.3	*-0.5*
FINE CUT (SBV28 22:45 - 24:05)	0.3	0.1	*-0.2*
FLIPPER (ATV10 18:30 - 19:30)	4.5	2.1	*-2.4*
FOOD LOVERS GUIDE TO AU (SBV28 19:00 - 19:30)	2.4	1.3	*-1.1*
FOOTY SHOW AFL-SUN (GTV9 11:00 - 12:00)	4.6	3.8	*-0.8*
FOOTY SHOW AFL-WED (GTV9 21:30 - 23:15)	21.6	24.7	*3.1*
FOOTY SHOW:AFL (GTV9 21:30 - 23:00)	23.8	21.4	*-2.4*
FOREIGN CORRESPONDEN-LE (ABV2 21:30 - 22:30)	6.7	6.2	*-0.5*
FOREIGN CORRESPONDEN-PM (ABV2 13:00 - 14:00)	0.5	0.3	*-0.2*
FOUR CORNERS-EV (ABV2 20:30 - 21:15)	8.0	7.6	*-0.4*
FOUR CORNERS-PM (ABV2 13:00 - 13:45)	0.5	0.2	*-0.3*
FRASIER (GTV9 21:00 - 21:30)	8.8	7.7	*-1.1*
FRIENDS (GTV9 19:30 - 20:00)	22.0	22.6	*0.6*
FRONT UP (SBV28 19:30 - 20:00)	1.2	1.4	*0.2*
FRONT UP-RPT (SBV28 16:30 - 17:05)	0.2	0.1	*-0.1*
FRONTLINE-EV (ABV2 20:00 - 20:30)	13.4	19.4	*6.0*
FULL FRONTAL-MON (HSV7 20:30 - 21:30)	13.1	13.3	*0.2*
FULL FRONTAL-THU (HSV7 19:30 - 20:30)	10.4	7.0	*-3.4*
FUNNIEST HOME VIDEO (GTV9 19:30 - 20:00)	14.9	15.6	*0.7*
GARDENING AUSTRALIA-EV (ABV2 18:30 - 19:00)	4.8	5.1	*0.3*
GETAWAY (GTV9 19:30 - 20:30)	15.9	12.9	*-3.0*
GLENROE (SBV28 18:00 - 18:30)	0.5	0.5	*0.0*
GOOD GUYS BAD GUYS (GTV9 21:30 - 22:30)	12.3	10.5	*-1.8*
GOOD MEDICINE (GTV9 20:00 - 20:30)	15.8	9.9	*-5.9*
GOOD MORNING AUSTRALIA (ATV10 09:00 - 11:30)	1.4	1.0	*-0.4*
GOOSEBUMPS (ATV10 18:30 - 19:30)	4.3	4.6	*0.3*
GOURMET IRELAND (SBV28 19:00 - 19:30)	2.4	2.0	*-0.4*
GREAT CASTLES OF EUROPE (SBV28 15:30 - 16:00)	0.7	0.3	*-0.4*
GREAT ESCAPES Ave	14.1	8.2	*-5.9*
GREAT OUTDOORS (HSV7 20:00 - 20:30)	18.6	13.3	*-5.3*
HEALTHY WLTHY WISE (ATV10 19:30 - 20:30)	10.4	10.0	*-0.4*
HEARTBREAK HIGH-EV (ABV2 18:00 - 18:30)	1.9	2.5	*0.6*
HERCULES:LEGENDARY JOUR (ATV10 19:30 - 20:30)	4.6	3.4	*-1.2*
HETTY WAINTHROPP INV-EV (ABV2 19:30 - 20:45)	11.3	11.2	*-0.1*
HOME & AWAY Ave	11.2	10.5	*-0.7*
HOME IMPROVEMENT Ave	11.0	10.6	*-0.4*

HOME TRUTHS-EV (ABV2 20:30 - 21:00)	5.5	4.2	*-1.3*
HOMICIDE:LIFE ON STREET Ave	5.3	2.4	*-2.9*
ICAM (SBV28 19:30 - 20:00)	0.3	0.3	*0.0*
INSIDE STORY-EV (ABV2 20:30 - 21:30)	6.2	4.9	*-1.3*
INTERFOOTY Ave	2.4	1.4	*-1.0*
JAG (HSV7 19:30 - 20:30)	9.2	8.2	*-1.0*
JAKES PROGRESS-EV (ABV2 20:30 - 21:30)	6.1	5.1	*-1.0*
KEEP IT IN THE FAMIL-EV (ABV2 18:30 - 19:00)	3.0	3.2	*0.2*
KEEPING UP APPEARANC-EV (ABV2 18:30 - 19:00)	7.4	9.8	*2.4*
LATELINE-LE (ABV2 22:30 - 23:15)	2.4	1.2	*-1.2*
LATELINE-PM (ABV2 12:30 - 13:00)	0.5	0.5	*0.0*
M.A.N.T.I.S (ATV10 23:30 - 24:30)	1.3	1.7	*0.4*
M.A.S.H. (ATV10 18:00 - 18:30)	6.1	6.3	*0.2*
MAD ABOUT YOU Ave	7.1	6.9	*-0.2*
MARRIED WTH CHLDRN-AFTN (GTV9 15:30 - 16:00)	3.8	2.5	*-1.3*
MASTERPIECE (SBV28 20:30 - 21:30)	0.8	0.7	*-0.1*
MEDIA WATCH-EV (ABV2 21:15 - 21:30)	7.6	7.7	*0.1*
MEDIVAC Ave	5.6	5.0	*-0.6*
MEET THE PRESS (ATV10 08:30 - 09:00)	0.7	0.5	*-0.2*
MELROSE PLACE (ATV10 20:30 - 21:30)	10.0	8.1	*-1.9*
MIDDAY (GTV9 12:00 - 13:30)	4.3	3.7	*-0.6*
MILLENNIUM (HSV7 21:30 - 22:30)	11.4	9.8	*-1.6*
MIRROR MIRROR (ATV10 08:30 - 09:00)	0.5	0.5	*0.0*
MOESHA (ATV10 18:00 - 18:30)	4.5	3.0	*-1.5*
MONDAY TO FRIDAY Ave	0.9	0.4	*-0.5*
MONEY (GTV9 20:00 - 20:30)	16.9	12.5	*-4.4*
MOVIE SHOW (SBV28 20:00 - 20:30)	1.7	1.7	*0.0*
MOVIE SHOW-RPT (SBV28 13:30 - 14:00)	0.3	0.1	*-0.2*
MR.BEAN (HSV7 19:30 - 20:00)	17.5	17.2	*-0.3*
MURDER ONE (HSV7 21:30 - 22:30)	12.0	7.1	*-4.9*
MURPHY BROWN-LATE Ave	2.3	1.4	*-0.9*
NAT.NINE MORNING NEWS (GTV9 10:30 - 11:00)	0.8	0.6	*-0.2*
NAT.NINE NEWS-SAT (GTV9 18:00 - 18:30)	17.7	15.5	*-2.2*
NAT.NINE NEWS-SUN (GTV9 18:00 - 18:30)	18.4	19.7	*1.3*
NATIONAL NINE NEWS (GTV9 18:00 - 18:30)	18.4	15.7	*-2.7*
NED & STACEY (ATV10 19:30 - 20:00)	9.1	8.4	*-0.7*
NEIGHBOURS (ATV10 18:30 - 19:00)	7.8	6.5	*-1.3*
NEW HORIZONS (SBV28 19:30 - 20:00)	0.5	0.6	*0.1*
NEWSHOUR WITH J.LEHRER (SBV28 17:05 - 18:00)	0.1	0.3	*0.2*
NEWSWEEK (ATV10 08:00 - 08:30)	0.7	0.4	*-0.3*
NEXT OF KIN-EV (ABV2 18:30 - 19:00)	8.6	8.5	*-0.1*
NIGHTLINE Ave	5.1	3.1	*-2.0*
NYPD BLUE (ATV10 21:30 - 22:30)	7.9	4.9	*-3.0*
OPRAH WINFREY SHOW Ave	1.4	1.2	*-0.2*
OUR HOUSE (GTV9 19:30 - 20:00)	16.9	13.4	*-3.5*
OUR WORLD (GTV9 18:30 - 19:30)	15.1	11.7	*-3.4*
OUT OF THE BLUE (HSV7 22:35 - 23:35)	2.8	1.6	*-1.2*
OUTER LIMITS (HSV7 23:00 - 23:50)	2.8	1.4	*-1.4*
PARTY OF FIVE (ATV10 19:30 - 20:30)	8.3	6.7	*-1.6*
PEAK PRACTICE Ave	10.5	10.5	*0.0*
PEOPLE (SBV28 20:30 - 21:30)	1.4	1.3	*-0.1*
PIE IN THE SKY-EV (ABV2 19:30 - 20:15)	13.4	15.3	*1.9*
POLICE CAMERA ACTION-SU (HSV7 19:30 - 20:00)	10.2	7.3	*-2.9*
PRICE IS RIGHT (GTV9 17:30 - 18:00)	7.8	6.9	*-0.9*

QUANTUM-EV (ABV2 20:00 - 20:30)	7.9	8.3	*0.4*
QUANTUM-PM (ABV2 12:30 - 13:00)	0.6	0.2	*-0.4*
RACE AROUND WORLD-LE (ABV2 21:30 - 22:00)	6.9	4.6	*-2.3*
RACING SHOW (GTV9 13:30 - 14:00)	1.4	1.1	*-0.3*
RAGE-AM (ABV2 06:00 - 08:30)	0.6	0.8	*0.2*
REAL TV Ave	11.1	8.9	*-2.2*
RECOVERY-AM (ABV2 09:00 - 12:00)	0.9	1.6	*0.7*
RENEGADE 1 Ave	2.4	2.1	*-0.3*
REX HUNTS FISHING ADVEN (HSV7 16:30 - 17:00)	3.9	3.1	*-0.8*
REX HUNTS FISHING ADVEN (HSV7 17:30 - 18:00)	9.1	7.7	*-1.4*
RICKI LAKE Ave	1.8	1.6	*-0.2*
RIVER SOMEWHERE-EV (ABV2 20:00 - 20:30)	12.4	13.6	*1.2*
ROAD TO AVONLEA (ATV10 14:00 - 15:00)	1.8	0.8	*-1.0*
ROSEANNE-AFTN (ATV10 13:00 - 13:30)	1.4	1.2	*-0.2*
ROY & HG-LE (ABV2 21:30 - 22:30)	5.8	5.2	*-0.6*
RUMPOLE OF THE BAILE-EV (ABV2 19:30 - 20:30)	8.2	9.9	*1.7*
RUTH RENDELL (ATV10 21:30 - 23:35)	6.3	6.1	*-0.2*
SABRINA:TEENAGE WITCH (HSV7 18:30 - 19:00)	9.7	8.5	*-1.2*
SALE OF CENTURY Ave	17.8	16.9	*-0.9*
SECRET LIFE OF MACHINES (SBV28 17:30 - 18:00)	1.4	1.3	*-0.1*
SECRET WORLD OF ALEX-PM (ABV2 17:30 - 18:00)	1.6	1.3	*-0.3*
SEINFELD-SUN (ATV10 20:00 - 20:30)	12.4	13.3	*0.9*
SEINFELD-THU (ATV10 20:00 - 20:30)	10.3	9.0	*-1.3*
SEVEN NEWS (HSV7 10:30 - 11:00)	0.8	0.5	*-0.3*
SEVEN NEWS-SAT Ave	12.9	7.2	*-5.7*
SEVEN NEWS-SUN (HSV7 18:00 - 18:30)	16.3	13.2	*-3.1*
SEVEN NIGHTLY NEWS (HSV7 18:00 - 18:30)	12.3	12.2	*-0.1*
SEVEN NIGHTLY NEWS WITH Ave	4.1	2.7	*-1.4*
SHINE ON HARVEY MOON-EV (ABV2 18:30 - 19:00)	5.6	4.6	*-1.0*
SIMPSONS-SUN (ATV10 19:00 - 20:00)	13.3	14.4	*1.1*
SIMPSONS-WKNT (ATV10 19:00 - 19:30)	6.3	5.0	*-1.3*
SIXTY MINUTES (GTV9 19:30 - 20:30)	17.8	14.8	*-3.0*
SLIDERS (ATV10 19:30 - 20:30)	6.9	7.2	*0.3*
SMALL BUSINESS SHOW (GTV9 07:30 - 08:00)	0.7	1.2	*0.5*
SMALLEST ROOM IN THE-LE (ABV2 21:30 - 22:00)	5.9	3.7	*-2.2*
SOCCER ENGLISH 97-LE (ABV2 23:15 - 25:00)	2.1	2.2	*0.1*
SPORTS SUNDAY (GTV9 12:00 - 13:30)	3.3	2.1	*-1.2*
SPORTS TONIGHT Ave	2.5	1.0	*-1.5*
SPORTS TONIGHT-SUN (ATV10 23:45 - 24:15)	2.0	1.4	*-0.6*
SPORTSWORLD (HSV7 09:00 - 11:00)	2.3	2.9	*0.6*
SPORTSWORLD AFL PANEL Ave	3.3	3.6	*0.3*
STAR TREK (HSV7 23:00 - 24:00)	2.7	1.7	*-1.0*
STAR TREK:NEXT GENERATI (GTV9 23:00 - 24:00)	3.9	4.7	*0.8*
STAR TREK:VOYAGER Ave	4.3	3.7	*-0.6*
STATE RULES 1997-LE (ABV2 23:45 - 24:45)	0.4	0.1	*-0.3*
STATELINE-EV (ABV2 18:00 - 18:30)	1.1	1.2	*0.1*
STATELINE-PM (ABV2 12:00 - 12:30)	0.6	0.2	*-0.4*
SUN SUPER LEAGUE 97-PM (ABV2 17:00 - 19:00)	0.9	0.9	*0.0*
SUNDAY (GTV9 09:00 - 11:00)	3.0	4.5	*1.5*
SUNDAY SUNRISE (HSV7 08:00 - 08:30)	0.7	0.7	*0.0*
SUNRISE Ave	1.1	0.9	*-0.2*
SUNSET BEACH (ATV10 12:00 - 14:00)	0.7	0.3	*-0.4*
TALES FROM SUITCASE (SBV28 19:00 - 19:30)	0.8	1.2	*0.4*
TALKING FOOTY Ave	5.7	4.1	*-1.6*

TEN NEWS AT 11:30 (ATV10 11:30 - 12:00)	1.4	0.8	*-0.6*
TEN NEWS AT 5:00 (ATV10 17:00 - 18:00)	9.3	8.7	*-0.6*
TEN NEWS L.ED Ave	4.9	3.1	*-1.8*
TEN NEWS L.ED-SAT Ave	3.8	1.8	*-2.0*
TEN NEWS L.ED-SUN Ave	4.2	2.3	*-1.9*
TEN NEWS-SAT (ATV10 17:00 - 17:30)	6.8	5.4	*-1.4*
TEN NEWS-SUN (ATV10 17:00 - 17:30)	6.6	5.7	*-0.9*
THE NANNY-SUN (ATV10 18:30 - 19:00)	13.2	16.2	*3.0*
THE NEWSROOM (SBV28 21:00 - 21:30)	0.7	0.8	*0.1*
THE PRETENDER Ave	8.9	7.1	*-1.8*
THIN BLUE LINE-EV (ABV2 20:00 - 20:30)	9.6	7.9	*-1.7*
TIMEFRAME-EV (ABV2 20:30 - 21:00)	6.1	4.1	*-2.0*
TODAY (GTV9 07:00 - 09:00)	3.1	3.2	*0.1*
TODAY ON SATURDAY Ave	1.2	1.0	*-0.2*
TODAY TONIGHT Ave	13.8	8.5	*-5.3*
TOUCHED BY AN ANGEL (GTV9 17:00 - 18:00)	6.5	5.6	*-0.9*
UNSOLVED MYSTERIES-SAT (ATV10 20:30 - 21:30)	6.1	4.2	*-1.9*
VIDEO HITS-SAT (ATV10 09:00 - 11:00)	2.1	2.5	*0.4*
VIDEO HITS-SUN (ATV10 09:00 - 11:00)	2.5	3.2	*0.7*
WAITING FOR GOD-EV (ABV2 18:30 - 19:00)	4.6	4.8	*0.2*
WATER RATS (GTV9 20:30 - 21:30)	17.7	12.1	*-5.6*
WEIRD SCIENCE (ATV10 15:30 - 16:00)	1.3	0.5	*-0.8*
WHATS COOKING (GTV9 11:00 - 11:30)	1.5	1.5	*0.0*
WHEEL OF FORTUNE Ave	6.8	6.1	*-0.7*
WHO DARES WINS (HSV7 19:30 - 20:00)	13.5	8.9	*-4.6*
WHO DARES WINS-SUN (HSV7 18:30 - 19:00)	13.0	7.1	*-5.9*
WIDE WLD SPORT-SAT (GTV9 13:00 - 16:00)	2.1	1.3	*-0.8*
WILD RELATIONS-EV (ABV2 20:00 - 20:30)	6.8	4.9	*-1.9*
WILDSCREEN-EV (ABV2 20:00 - 20:30)	6.6	4.4	*-2.2*
WITNESS Ave	10.9	6.8	*-4.1*
WORLD AT NOON-PM (ABV2 12:00 - 12:30)	0.6	0.6	*0.0*
WORLD NEWS (SBV28 18:30 - 19:00)	1.4	2.6	*1.2*
WORLD NEWS-SAT (SBV28 18:30 - 19:00)	2.4	2.0	*-0.4*
WORLD NEWS-SUN (SBV28 18:30 - 19:00)	2.1	3.1	*1.0*
WORLD SPORTS (SBV28 19:00 - 19:30)	0.5	0.7	*0.2*
X FILES (ATV10 20:30 - 21:30)	14.0	16.4	*2.4*
YES MINISTER-EV (ABV2 18:30 - 19:00)	5.8	6.5	*0.7*
YOUNG & RESTLESS Ave	4.5	3.8	*-0.7*
Averages	**6.6**	**5.8**	**-0.8**
Min	**0.1**	**0.0**	**-5.9**
Max	**24.3**	**24.7**	**6.0**
Correlation	**0.96**		

Appendix 7

ARF/ESOMAR Conference

Worldwide Electronic and Broadcast Audience Research Conference

Bal Harbour, Florida (U.S.)
7-9 May 2000

WHY WE CANNOT AFFORD TO MEASURE VIEWERS

The Case for VPVH (Viewers-Per-Viewing-Households) Modeling

Erwin Ephron
Stuart Gray

To date, work on viewer modeling has been driven by the need for larger local-market meter panels to measure cable, but it is a broader issue. Media-mix requires integrating a TV meter into single-source. This can only be achieved through a set-meter panel and viewer modeling.

The authors have reported earlier on three experiments in viewer modeling using SMART and Nielsen data. The results were encouraging.

This paper presents a more sophisticated plan for modeling program viewer audiences from household tuning data, using the characteristics of the panel household, including number, age and sex of household members, (and in the future, the number and location of TV sets), to model viewers-per-viewing-households (VPVH).

The work was done using Kevin Killion's T-View optimizer as the analysis tool to access the Nielsen respondent database.

THE RESEARCH ISSUES

There are big problems in TV audience research. Today's many channels result in smaller ratings, shorter interval tuning and viewer confusion. This means the diary does not work. You need a meter to measure TV *and* you need larger samples.

The response problem is equally acute. *Households* and *persons* are difficult to recruit, because installing a peoplemeter is invasive, pushing buttons is a nuisance – and people are tired of being hit-on by telecoms, banks and researchers.

Peoplemeter panels are probably a dead end for television measurement.[1] They limit sample size because they cost too much to operate and get poor cooperation because they are intrusive and demanding. Counting refusals and mechanical problems in cooperating households, the Nielsen NTI response-rate *(% cooperation x % in-tab)* is now below 40%.

THE ECONOMIC ISSUES

As we have written earlier, any good research design puts the dollars where the variability is. In taking a medical history, the doctor notes the patient's height and weight, but does not bother counting toes. In finance the principle is called "working to the left of the decimal" – spending the dollars where they will have the most effect. Because of the fragmenting structure of TV viewing, intelligent management of research dollars calls for large, market-by-market set meter samples with viewers-per-viewing-households modeled from smaller sample survey data.

By far the greatest variability in audience measurement is in the program selected. In a 60-channel universe, whether or not the household is tuned to a specific channel at a specific time is by far the most important piece of information to have for estimating the viewing audience. This is what a set meter provides.

The variation in viewers-per-set is more predictable. It is limited by who resides in the household, the set being used and the program and time-period. If it is a single person household, that person is most likely viewing when the set is tuned. When there are several household members, location of set, time-period and program content can also help to identify probable viewers. If the set in the kid's room is tuned to the Cartoon Channel, the kid is most likely watching. If it is Oprah on the kitchen set, it is most likely the woman. If it is NFL football in the family room, it is most likely the man. (This is not based on sexist attitudes, but on empirical evidence.)

All of this information can be collected from a set-meter panel.

Figure 1
ESTIMATING MEN 18-49, MONDAY NIGHT FOOTBALL

1. Tuned Households
2. With 18-49 male resident?
   Yes (Go to 3) No (Discard)
3. One person household?
   Yes (Add to viewers) No (Go to 4)
4. Estimate probability of Male 18-49 viewing in remaining demo households.
   Use demo-specific VPVH estimates for the program tuned from independent sources like the national peoplemeter sample or the Adcom viewer validation log.
   (Add to viewers.)
5. Sum total viewers.

All this information comes directly from the set meter panel, (in this case, tuning data from a random half of the Nielsen national peoplemeter panel), so through editing rules, not modeling, we have identified 330,000 male viewers aged 18 - 49 years. We have also eliminated 5,080,000 tuned households that could *not* have a male aged 18 - 49 viewing, by our ground rules.

The viewers we have to model are males aged 18 - 49 (M18-49) in the remaining 6,590,000 larger tuned households with a (M18-49) household member.

The modeled *viewers-per-viewing-household* for this group, obtained from national peoplemeter data from the other half sample, is 0.71. (Lacking peoplemeter data, other sources, like Adcom's "Viewer Validation Log" could be used.)

This generates 4,680,000 male viewers aged 18 - 49. Therefore the total M18-49 viewers for Monday Night Football is 330,000 single member households and 4,680,000 modeled viewers. This totals 5,010,000 M18-49, which results in a viewers-per-viewing-household estimate of 0.42 and an 8.1 national demo rating.

To validate the model, these estimates (based on a random half of the NTI sample) are compared to the actual peoplemeter viewer estimates produced by the other half of the sample. In this case the peoplemeter half-sample generated a viewers-per-viewing-household M18-49 of 0.38, (compared to the modeled half-sample's viewers-per-viewing-household of 0.42). That is a viewer projection of 4,560,000 and a rating of 7.4.

One additional comparison helps make the case. When we again divide the peoplemeter sample in half, the Monday Night Football VPVH estimates for

the two half-samples are 0.37 and 0.43. The difference is sampling error. A four-way data comparison: half-sample modeled, VPVH 0.42; remaining half-sample, VPVH 0.38; another half-sample peoplemeter, VPVH 0.37; and its remaining half-sample, VPVH 0.43, shows the modeled viewer estimate is indistinguishable from a peoplemeter viewer estimate taken from a similar size sample.

Although one example hardly represents validation, it demonstrates the validation process with an encouraging result.[4)]

The viewers-per-viewing-household estimate for the two-and-more member households containing the demo member (step 4) is the largest source of potential error. In the future we can again refer to panel information to improve the model, based on the assumption that *if more demo households are tuned, more demo members are viewing within those households*. In other words, the higher the composition of the household demo group, the higher the VPVH (viewers-per-viewing-household) within that group.

To do this we would start with the national demo VPVH value among two-plus-member demo households for the time period from peoplemeter data, and adjust that value up, or down, for the model, using the set meter panel comp of demo households tuned to the program, divided by the set meter panel comp of demo households tuned to the time period. A higher index indicates a higher VPVH.

How will modeled viewer estimates compare to peoplemeter viewer estimates? We believe they will be very close, since some of the viewers are calculated directly from the household tuning data and the balance modeled only for the relevant demo households.[5)] It will also be arguably better than local peoplemeter data, since the set meter panel can be considerably larger and the response rates better.

SUMMATION

New ideas in advertising planning are moving us from planning-by-medium to media mix. New systems for advertising accountability need single-source media and product purchase data.

The peoplemeter panel is a dead-end for media or accountability measurements. It is plagued by small samples and low response rates -- and cooperation is too fragile for it to be used for single source.

The industry's best answer to audience fragmentation is data integration and for that we need measurement systems that are more inclusive. A peoplemeter panel can measure only television. A set meter panel can measure much more.

FOOTNOTES

1. Admittedly, there are many supporters of peoplemeters, and even if Nielsen should pursue its plan to roll out this technology beyond Boston, there would remain numerous markets relying on diaries for viewer demographics, in which case we still maintain that modeling would represent a better solution for those markets.
2. Nielsen is tight-lipped about the relative cost of peoplemeter and set-meter panels. In Canada, where TV measurement options are being reviewed, the estimate is three to four times the sample for a given budget.
3. The final model might also credit a demo viewer to tuning on sets used only by the demo-to-be-modeled. This is particularly useful for modeling teenager and child viewing based on their "private" bedroom sets.
4. The large sampling error on a 600 household peoplemeter panel, as is currently being installed in Boston, would make even larger differences in VPVH, modeled to measured, irrelevant.
5. The number of demo households tuned to a program will vary with each telecast, which allows the set meter tuning measurement to capture variation in VPVH, just as would a peoplemeter panel.

THE AUTHORS

Erwin Ephron is a Partner, Ephron, Papazian & Ephron, United States.

Stuart Gray is Senior Vice President, Media Resources BBDO, United States.