

MACK

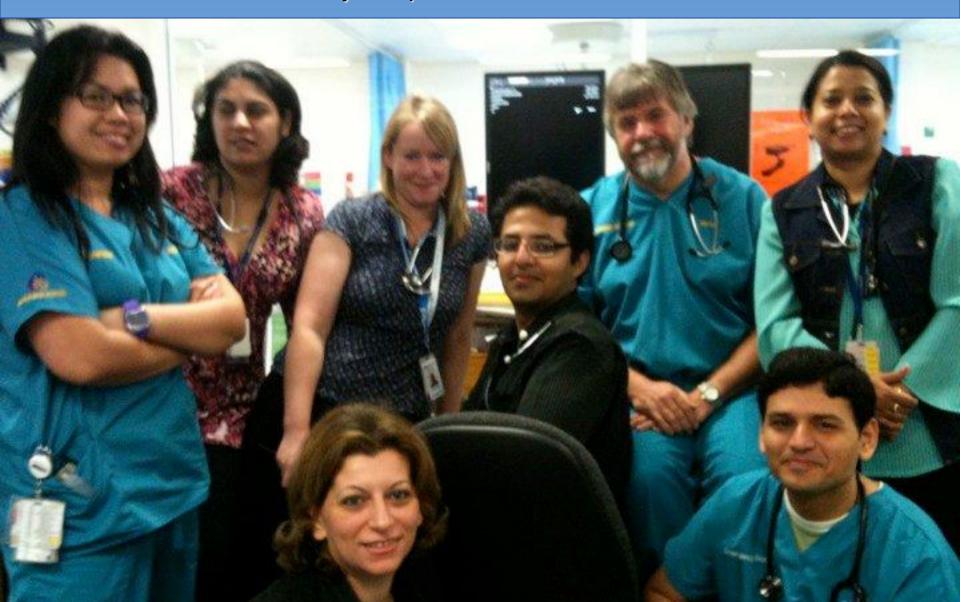
5

Power in community safety promotion networks: If you want something done ask someone who is already busy

0 M M U N I T I E

...

Dr Dale Hanson Prof. Philippa Pattison Prof Garry Robins Staff Emergency Physician, & Director of Clinical Training Mackay Hospital & Health Service



COCAL KNOWLEDGE

as cars

crash

into

Death of tourist raises concerns Two hurt

By JEDDIGAMMER

ing given CPR, rother that he ing flows to the multihed. Be said he was concepted that

AN Airlin Basch man has questioned the corcumstances surloorial in the Whitsondary on Tride Addie Com Bial station director.

applications of forest had apparently own travelting from Abel Point Murrian for Watersteer Murile Rerise (VME) beat and every just min-utes Due. Whitehaven Blasch when the past was flown to the

has Gordon mid he believed the maintaint. Mr Gordan served as a annunce on artiman should have remetoid on

GAEL VME and the Withouter The place non-ministry flight to be takend. A dustor on the beech Water Point during the rescue The 44-loss old heartst, who pet who was longing an another rea-rel, a many and long company well into differdine analyzing awise about titles in the factory, was

member accorpanied the min to therein has a floori plane to Whiteaux the maindaned stay and port on Shate Harbour-hand, but he was processed deal

Whitsunday Water Pelice serviusable to continent further owner far afterneed. Treering these are

Guerthese and all

Markey and Towney like course وروانه Whitehaven Beach, where he was information ed by the lines when its car redled and hit a perset per of 100 participa metal of the Ebrer dhee Stations of 8.3/gens on Mal

> PL. Rescue workers fromport Alice Jensen, manual in a Haster subover on Saturday, to the Mackay Bose Hospital. If was a 100003/10 a week and for the diabit of a marganicy sendost personnel. Picture: JOHN GASE

Man dies, five injured in crash

Daily Mercury

12

Phone (07, 4807 SHA Case/Feds 128 107 EnglineerStalynetury.com.as Website www.dafgmetury.com.as

Pintes and Published by the Blackey Pinting and Publishing Company (Pb) United of 35-41 holinghing

Sheet, Marries, Generalized, of that address

legistent by Autoria Pad Publishin Number (242277) ACH DOBRS [100

Granter \$57 12 plus poologie, payment 14 advector

Talachune 607: 4007/0414 Renainile 1071 4807/0411

Casifiets Moyles

Fast find index

Getting in touch

Power was restored to the Bea considered upon of 11 being and progreatively to the Barazia area part after statinged, by Pland, and

Stitches needed A INTEARCED man on a hire

By JESSICKHALL 117), hours near Mobie on Frida A 10-YEAR-OLD Course man in Scentte attempts to revise him at Whitehaven Brach, in the White

the Preservice Intellity on civic porth of Primeriples on Sat-

storted on the Bruce Highway about 2-dison on fisturday. Preservine police tail two tars outlided fatad-on to the accident. sending deligit Opting met/ve.

clo with the decensed man, was keep from the same orbitize to Pron-laken to Preserptive Dece Hospital erpites Hospital with injuries. by the Operational Ambulators

Wash?

Vol. 131

Schools ...

Service (QAS). He was complain- threatening. with a hugging accident in which a long of back pain and had exts to man were planted by a gloot has for him long.

 Θ

CLASSIFIEDS

136 181

Daily Mercury

to Des. - and Both own About the same time a 44-year. Keekhampton Ease Encyltal by estu-ald fritich boartst diel oughts the Rayal Phring Dorner Bervice size. estensively damaged in the cells (RPDE) at 1.38cm. The boy was thought to be a reli-Contait Directors saved the Inclusionsi

the wale debut was to attre of the man, police said. A 31 year old frendle motoriet in As reside spreas halffed for two hours to free hus from the wreth. the porthbound vehicle was also "Everything that could have taken to Primerpine Roughtal with heren dione by reactor overse area a comprosil lower leg tractum. She mas transferred to Towner(de down an quality and efficiently as powerfuld." Contait Darvies said. Dass Hospital by the MPD5 of Sam-"They were light that's next QAS also book a lincer-ski not more writing toparters Ever prease old give and more prease old

Const Daries usid officers from Prescriptor and Whiteholay prilips stations attended, as sell or however, have were not like portion and Airlie Beach Queensland Fire and Reating

Investigating officer Committee Generalized Fire a Justic Derive, of Fireryster pro-

Smile, baby, you're a star

WIRGET taly at lucary. Asdeepress some month-eid Addregt freud is a labe of humany. Add righ recently returned from Sedney with ten mother indie Turner, where she has been working her smile for the Judges of the Children's Passeta Mother and Balty Bearth For A Corne Stor. Ash-leigh was among Die Salties chosen From 94,004 netwo to contrast the animatic Uniterruptedby Mo-Turner is bound by soleney and enought rownel the winter until the next house of Mother and Baby give as sale from July 10.



hask when bits'I have done 11 minutes The did sing has on the large of their I littled the interior

er tractur.

the gr

For white induced when percent on the Constitution and particular

Husbanc

By JESSICA HALL

and LORIS MALL

THE actions of a Presser Valley by

saved his with after she was tragged overtracized warnar on their Owens i

property on Relation. After denses was planed by the th

machine after is flipped on the for

quick-thicking husbard

sizat from Gergett, about 11 Marts

hill and rushed to ber aid.

or and think and racel of to "I was concerned from the bostened Ber lying there. sty Jonnes and he was multic to ture the leard the years slip as the was driving up a tractor off horsons the ignition was facing

MONDAY, JULY 14, 2003

Daily Mercury

"E insched at they tracked by and taked in

It task a forther 11 extentes for smortpencrews to arrive

Biophial and was later diagnosed with a tonded

When you see a tractor spelde down HAS ARRIVED SENSATIONAL VALUE ISSOC WORTH OF ADDED VALUE FEATURES · Ecotech VE - with transmission - 5 + stylish IE' alog wheels roof rack on wagon - colour coded mirrors, door handles. Admos - cherne exhaust extension - Equipe balging E stack in-dash CD player - prove control - al power windows PIONEER

cargo blind on wegos - unique seat and door this fabric RURRY - VER: LIMITED STOCKS FOR MACKA GORDON ST MARKEY

Paul Stephone 4952 4552 / Mice Bosnell 4954 3764 Doug Kelly (1419 715 643 - Paul Brady (1408 079 425

tracked petrick Last aight the was to a sights could be. her as undersealt the Fisch Hatten police Sergeant Ino Galpin The pain threadsaid is above stepson and Mr. Jensen's pairs threadsaid in above stepson and Mr. Jensen's pairs desaury Industies Doots being warmit My Jerssen said his wife uses trapped for 'Anybody would have done it. It's just a

aves wife

reaction," Mr densen said. Sat Calpin said a Finch Harman Applea Samia stubilized the woman who was flown to blackay place Respiral by the RACQ CQ

EXSQ helicopter about typic SES personnel, Walkerston Policy and Mry Jensen was taken to Macher Bass. Markey Fire and Rescus Dervice also at

MOTORS

PHONE 4963 4259

dead, and two other people are to hespitul after a redistant on kill-

head have the mean to the mail forthis required strutes from an Airlie Beach dortor. The spokespermus said the mast was superiorseling shock from the

Just fill out the coupon in







The Daily Mercury on Saturdays

and MidWeek on Wednesdays,

or feel free to call 136 181

to advertise your items worth

for FREE

MERCURY CLASSIFIEDS

ONLY IN THE

Fax: 4957 0389

2 - The Delty Mercury, Monilay, July 14, 2000

300 or less

rday morning. Michael McGanar was atritified. to Tennorille by Tennorille's Revue 121 belleopter but he later clied as a result of his separate. Pressrptus petas betare the A starsared boy, who was writtent may have been furlate measuring in the southbound webs The languity was one included in

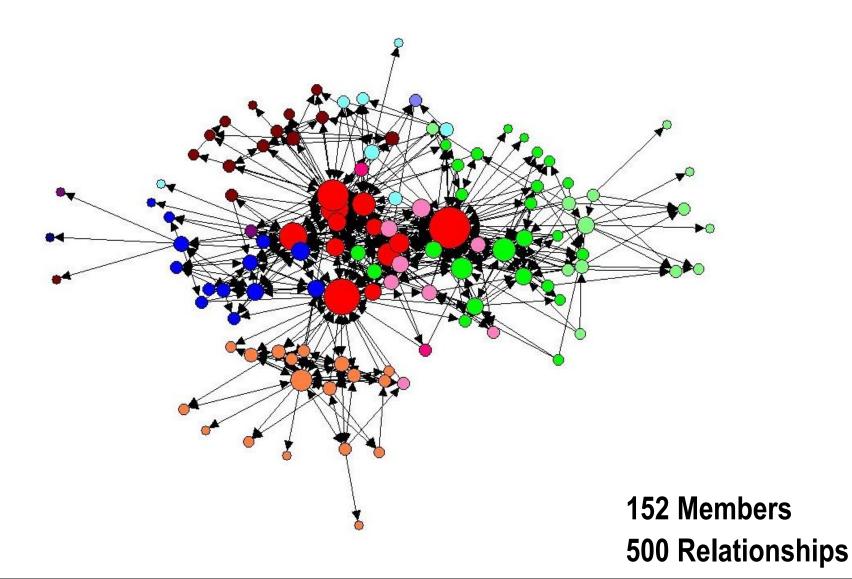


There has to be a better way!



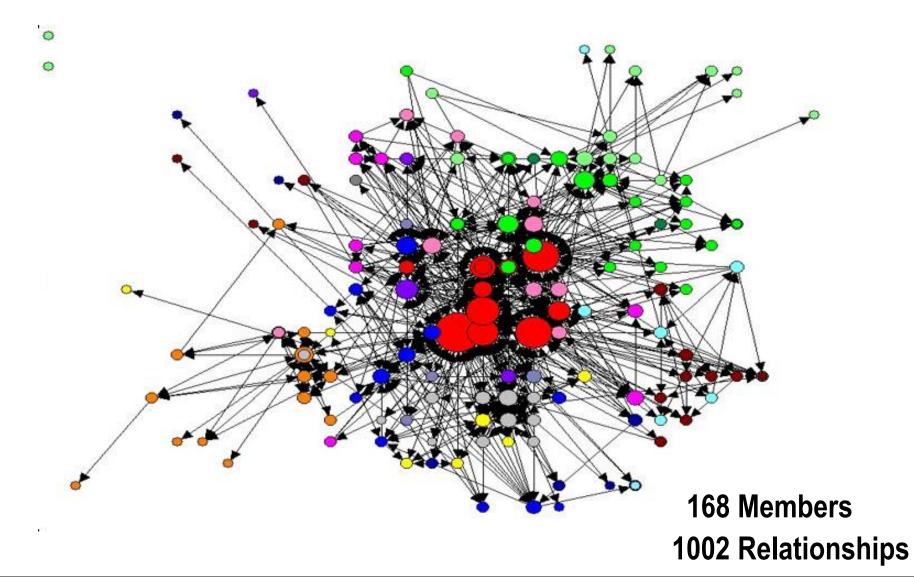


Mackay Whitsunday Safe Communities Established February 2000



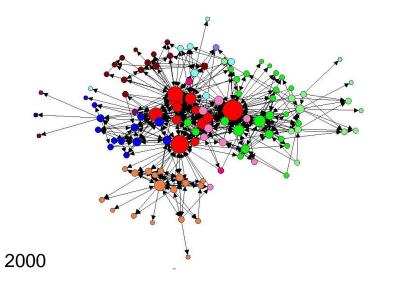


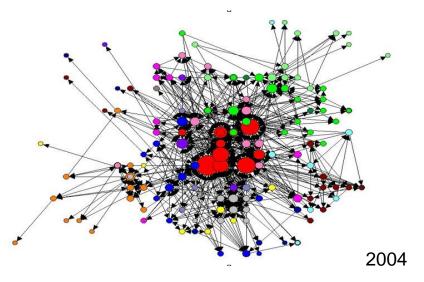
Mackay Whitsunday Safe Communities Designated August 31st 2000





Mackay Whitsunday Safe Communities
More Cohesive

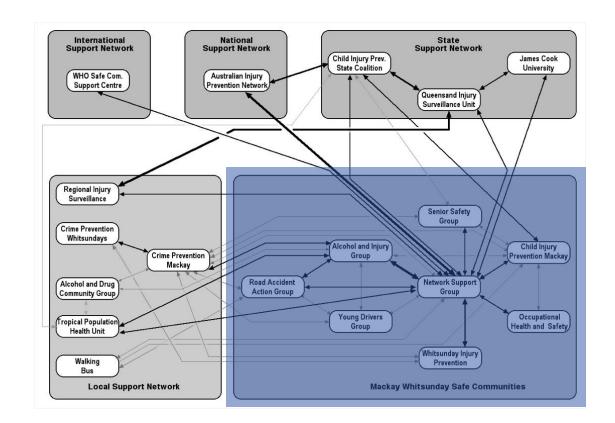




| | 2000 | 2004 |
|----------------------------|-------|--------------------|
| Members | 152 | 168 |
| Total relationships | 500 | 1002 |
| Av. relationships / member | 3.3 | 5.9 (p < 0.0005) |
| Density | 0.022 | 0.036 (p , 0.0002) |
| Centralization | 18% | 43% |
| Clustering Co-efficient | 0.30 | 0.50 |



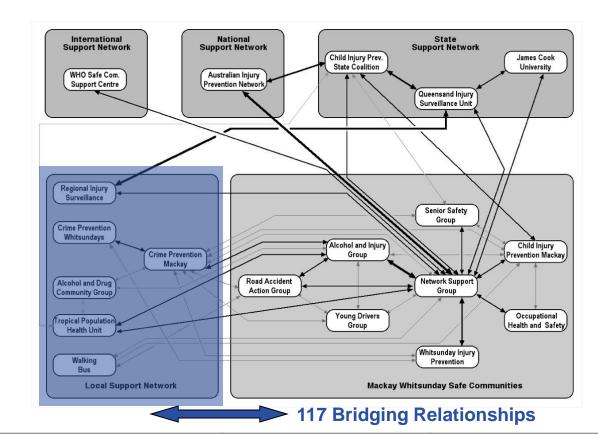
Mackay Whitsunday Safe Communities
Better Connected



| | 2000 | 2004 |
|---|------|------|
| Bonding Relationships (Internal) | 307 | 615 |
| Bridging Relationships (to local support network) | 72 | 117 |
| Linking Relationships (to state / national support network) | 56 | 156 |



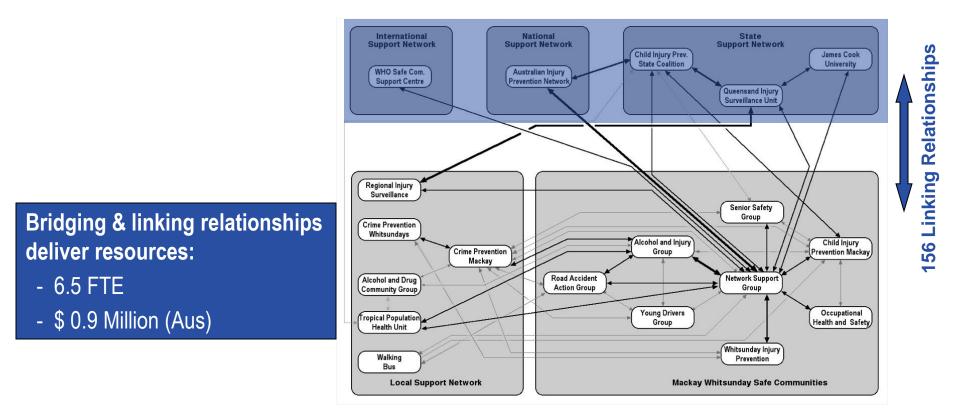
Mackay Whitsunday Safe Communities
Better Connected



| | 2000 | 2004 |
|---|------|------|
| Bonding Relationships (Internal) | 307 | 615 |
| Bridging Relationships (to local support network) | 72 | 117 |
| Linking Relationships (to state / national support network) | 56 | 156 |

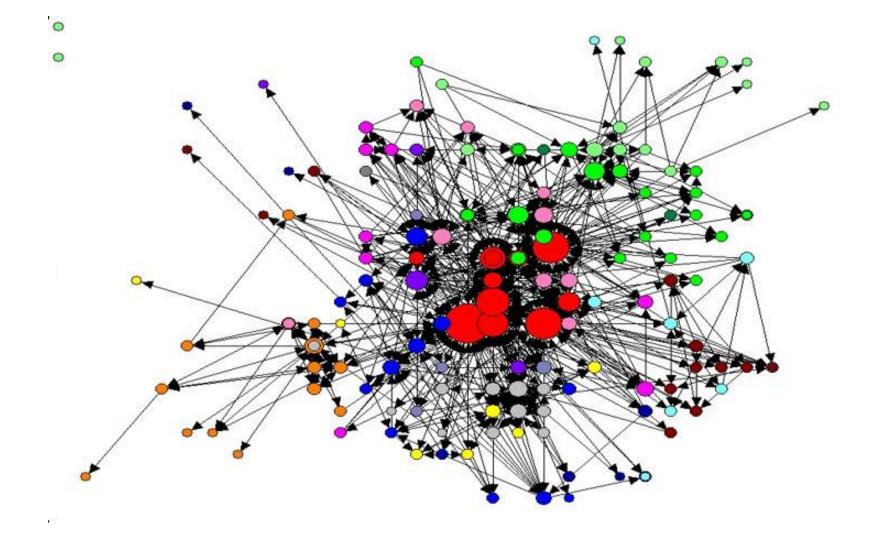


Mackay Whitsunday Safe Communities
Better Connected



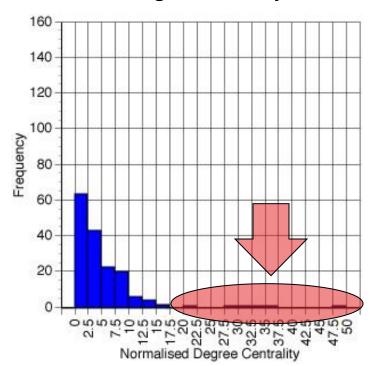
| | 2000 | 2004 |
|---|------|------|
| Bonding Relationships (Internal) | 307 | 615 |
| Bridging Relationships (to local support network) | 72 | 117 |
| Linking Relationships (to state / national support network) | 56 | 156 |





NB. The size of the circle is proportional to the number of relationships maintained by that network member



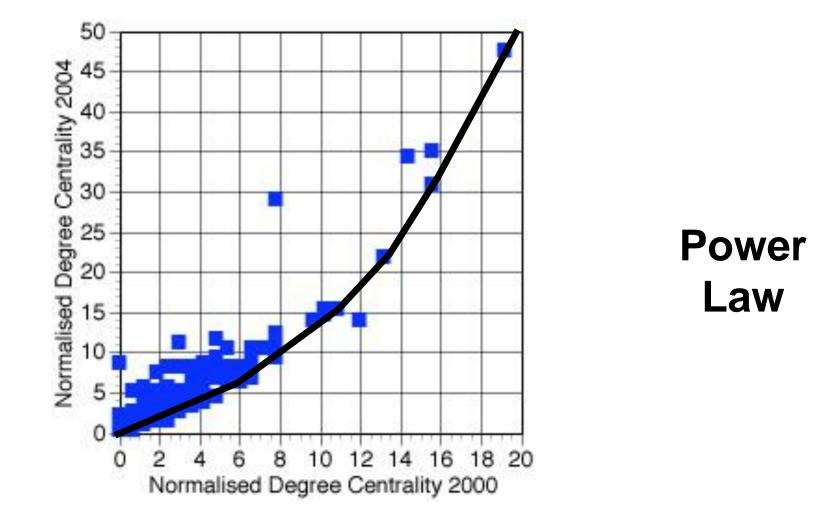


Degree Centrality

Six network facilitators maintained

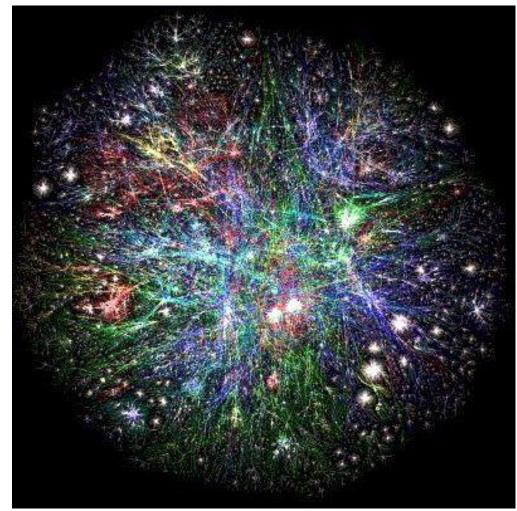
- 44% of all relationships
- 60% of brokering relationships







The meaning of Life the universe & everything

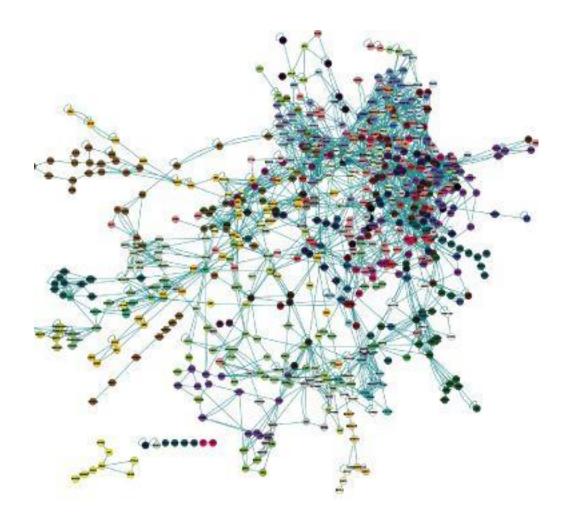


Power Law

The world wide web



The meaning of Life the universe & everything

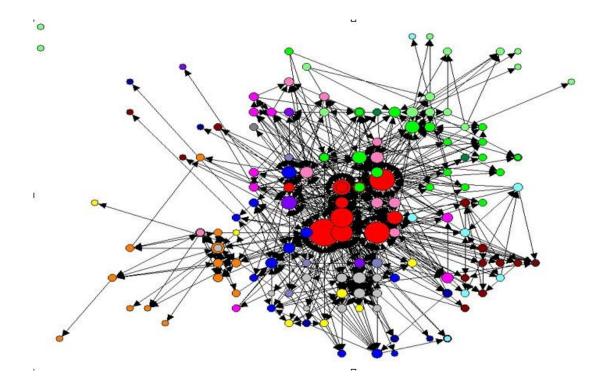


Power Law

The cellular network of human beings



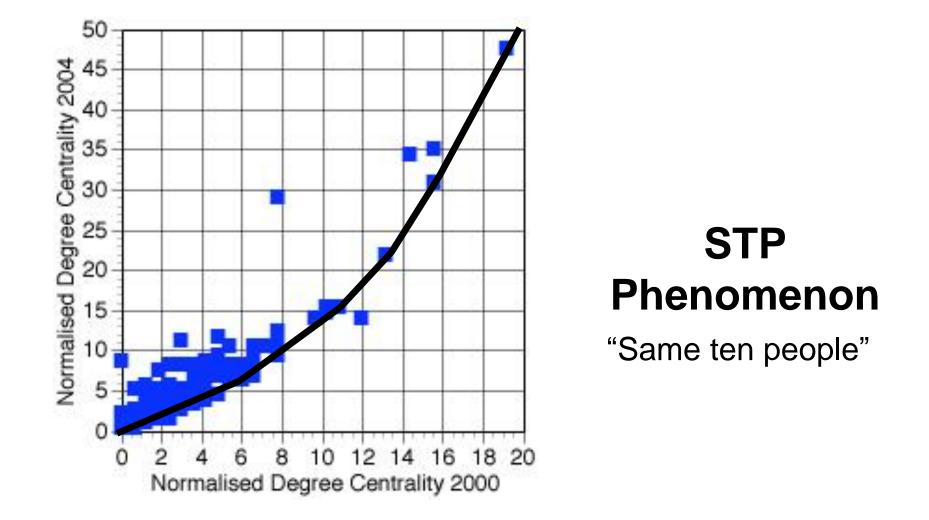
The meaning of Life the universe & everything



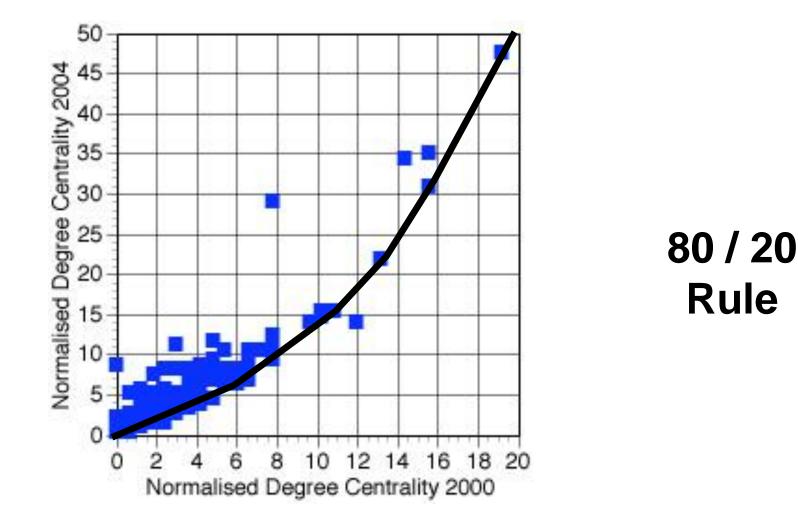


Human social network











were opportunity and responsibility so asymmetric?





Three possible explanations:

- 1. The facilitators were unwilling to share responsibility
- 2. The facilitators were unable to share responsibility the network expected them to lead
- 3. The facilitators had more opportunity to establish new relationships



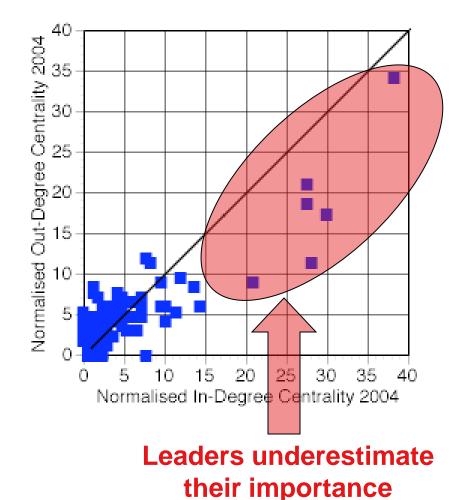


?

Mackay Whitsunday Safe Communities Why is it so?

Three possible explanations:

- X The facilitators were unwilling to share responsibility
 - The facilitators were unable to share responsibility - the network expected them to lead
 - The facilitators had more opportunity to establish new relationships





Melbourne University: Social Networks Laboratory It's complex!

Everything is interrelated!

• the defining characteristic of social interaction is that we effect one another

However, most statistical models are built on the assumption that all observations are independent

P* models

- Exponential random graph (p*) models for social networks
- An attempt to statistically model this potpourri of inter-related social determinants



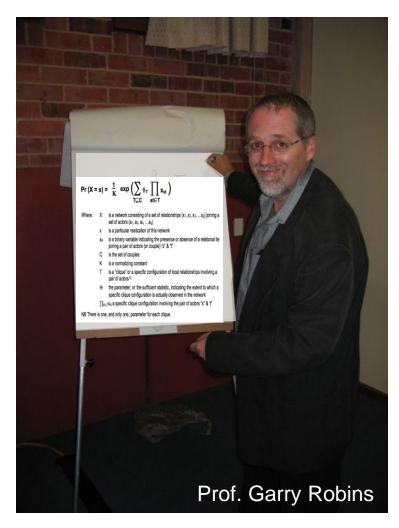
Robins G., Pattison P., et al. An Introduction to Exponential Random Graph (P*) Models for Social Networks, Social Networks, May 2007



"The past must exist for the present to create the future" Ephraim Bani (1944-2004)



Melbourne University: Social Networks Laboratory It's complex!



- Markov chain Monte Carlo
 maximum likelihood estimation
- Hammersley- Clifford Theorem

$$Pr(X=x) = \frac{1}{K} \exp\left(\sum_{T \subseteq C} \Theta_{T} \prod_{st \in T} x_{st}\right)$$

- A computer algorithm to do the estimation (P-net)
- Try and explain the overall social structure in terms of interpersonal forces

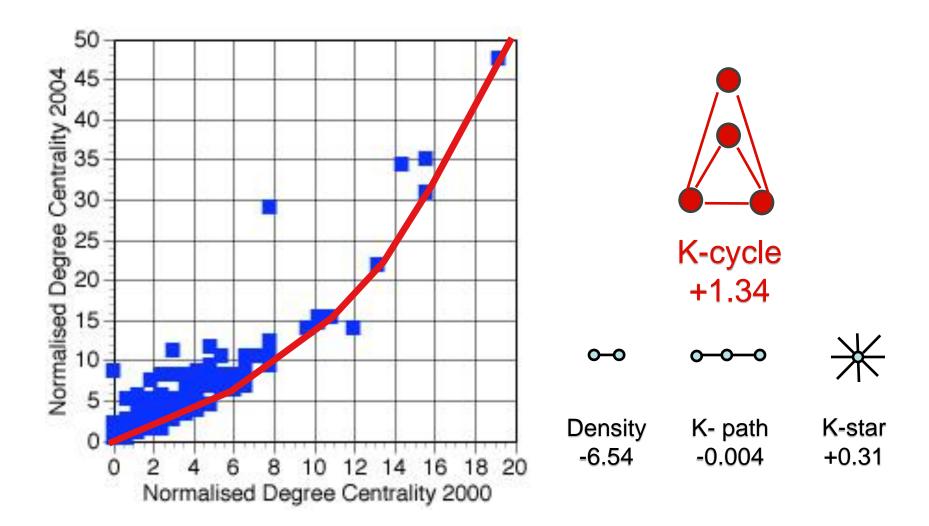




Robins G., Pattison P., et al. An Introduction to Exponential Random Graph (P*) Models for Social Networks, Social Networks, May 2007



Melbourne University: Social Networks Laboratory
A statistical model



Robins G., Pattison P., et al. An Introduction to Exponential Random Graph (P*) Models for Social Networks, Social Networks, May 2007



Three possible explanations:

The facilitators were unwilling to share responsibility

The facilitators were unable to share responsibility - the network expected them to lead

The facilitators had more opportunity to establish new relationships





Three possible explanations:

- The facilitators were unwilling to share responsibility
 - The facilitators were unable to share responsibility - the network expected them to lead (+0.31)

✓ ✓ Opportunity to establish new relationships (+1.34)

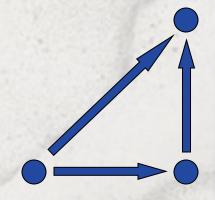




How do you meet new people?



Introduction was the dominant social force in Mackay Whitsunday Safe Communities



But to get introduced you have to have a mutual acquaintance

- ⇒ The more people you know, the more opportunity you have to get introduced
- ⇒ The more people you know, the more people you will get to know!



Mackay Whitsunday Safe Communities Networks are very powerful!

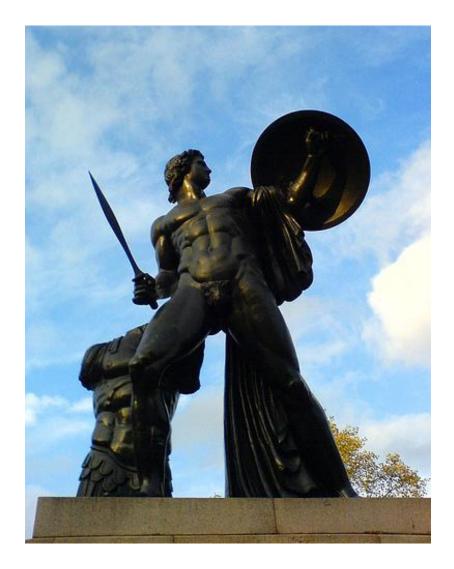
- Doubling of bonding social capital (which attracted resources)
- Tripling of linking social capital (which accessed resources)
 - 6.5 FTE
 - \$0.9 Million (Aus)
- 12% reduction in Emergency Department injury presentations
- Network facilitators provided the glue that held the network together and accessed most of the resources





Mackay Whitsunday Safe Communities But beware their Achilles Heal

- Doubling of bonding social capital (which attracted resources)
- Tripling of linking social capital (which accessed resources)
 - 6.5 FTE
 - \$0.9 Million (Aus)
- 12% reduction in Emergency Department injury presentations
- Network facilitators provided the glue that held the network together and accessed most of the resources





MACK

S L **Power in community safety promotion networks:** If you want something done ask someone who is already busy

Any

Questions

COMMUNITIES

WHITSUNDAY

EALTH ORGANISATION



More Information?

Documenting the Development of Social Capital in a Community Safety Promotion Network: It's not just what you know but who you know.

> Dale Hanson Jan Hanson Paul Vardon Kathyrn McFarlane David Durheim Rick Speare

Health Promotion Journal of Australia August 2008, p 144

Available for download at the WHO Collaborating Centre for Community Safety Promotion (Karolinska) web site

Evaluation and Planning Method

Documenting the development of social capital in a community Safety Promotion Network: It's not what you know but who you know

Dale Hanson, Jan Hanson, Paul Vardon, Kathryn McFarlane, Rick Speare and David Dürrheim

Introduction

Injury is the fourth leading cause of death in Australia, and the leading cause of death in those under 45 years of age.¹ Every year approximately 7,800 Australians die¹ and 330,000 are hospitalised² due to injury. Regional and rural communities experience greater morbidity and mortality due to injury.²

Injury has a complex aetiology caused by an intricate tapestry of behavioural, physical, environmental and social determinants.⁴⁴ No single profession, organisation, community group or government sector possesses the experise or resources necessary to design or implement a comprehensive multi-level and multi-sector solution.⁵ Stone et al. observe, "The main concern is how to bring about enough co-operation among disparate community elements to get things done. This is a 'power to' that, under many conditions of ultracomplexity, characterises the situation better than 'power over/1035'0'¹.

Mackay Whitsunday Safe Communities

Mackay is a major regional centre in north Queensland, 1,200 km north of Brisbane and 300 km north of the Tropic of Capricorn. In 2001 it had a population of 128,000.

In 1999, Mackay Base Hospital (MBH) reported age standardised Emergency Department (ED) injury presentation rates were double those observed in South Brisbane, the major urban centre in the same State.⁷

The Mackay community had attempted to respond, but a needs analysis concluded, "injury control activities in Mackay have been extensive but largely unco-ordinated ... With many of the programs based on similar principles and strategies, a co-operative, systematic and inter-sectorial approach would be more productive."

Abstract

Issue addressed: The Mackay Whitsunday Safe Communities (MWSC) was established in February 2000 in response to high rates of injury observed in the region. A key objective was to consolidate and better coordinate a network of community groups already working in community safety promotion.

Methods: This study used Social Network Analysis (SNA) to document and analyse the social resources, or social capital, mobilised by the network. Using a snowballing methodology, the chain of relationships that constitute MWSC and its Support Network (SN) was elucidated and quantified.

Results: Since it was launched in February 2000, MWSC and its SN almost doubled its bonding social capital, while bridging social capital increased 160% and linking social capital increased 280%. Relationships were not evenly distributed. Forty-four per cent of relationships were maintained by six actors who also maintained 60% of the network's brokerage potential.

Conclusion: SNA proved a powerful tool for describing and analysing relationships within the MWSC and its SN. It provided diagrammatic representation of the social structure and quantified important aspects of its structure and function. It highlighted the asymmetric distribution of relationships, resources and power that had a profound impact on how the network functioned.

Keywords: social capital, social network analysis, safe communities, safety promotion, injury prevention

Health Promotion Journal of Australia 2008; 19:144-51

So what?

There is more than one type of social capital. Bonding social capital (an attribute of cohesive groups) enhanced cooperation, while bridging and linking social capital (an attribute of strategically connected individuals) accessed the resources necessary to maintain MWSC activities.



More Information?

Measuring the sustainability of a community safety promotion network: working from the inside out

Dale Hanson Jan Hanson Paul Vardon Kathyrn McFarlane David Durheim Rick Speare

International Journal for Injury Control and Safety Promotion September 2012, 19(3), p 297 International Journal of Injury Control and Safety Promotion 2012, 1-9, iFirst article Taylor & Francis

Measuring the sustainability of a community safety promotion network: working from the inside out

D. Hanson**, K. McFarlaneb, P. Vardone, J. Lloydd, D. Dürrheime and R. Speared

⁴Anton Breinl Centre for Public Health and Tropical Medicine, James Cook University, Mackay Medical Campus, e/o Mackay Health Service District, PO Box 3580, Mackay Mail Centre, Duensland 4741, Australia; "Tropical Regional Services, Dirision of the Chief Health Officer, Queenkand Health, PO Box 1103, Cairm, Queensland 4787, Australia; "Health Losses Team, Healthy Liong Branch, Preventative Health Directonuct, Duision of the Chief Health Officer, Queensland 4106, Australia; "Tropical Regional Services, Dirision of Chief Health Officer, Queensland 4066, Australia; "Tropical Regional Services, Dirision of Chief Health Officer, Queensland 4066, Australia; "Tropical Regional Services, Dirision of Chief Health Officer, Queensland 4066, Mealthender, LMB 4016, Townsmith, Queensland 4067, Australia; "Tropical Regional Services, Dirision of Chief Health Officer, Queensland 4060, Mealtend, NSW 2287, Australia; "Anton Breind Centre for Public Health and Tropical Medicine, James Cook University, Trownsville, Ouensland 4411, Australia;" Anton Breind Centre for Public Health and Tropical Medicine, James Cook University, Townsville, Ouensland 4411, Australia;

(Received 25 January 2012; final version received 4 July 2012)

Mackay Whitsunday Safe Communities (MWSC) was developed using a capacity building model that consciously a tempoted to design sustainability in to the network. Our aim was to quantify the flow of resources used by MWSCio implement and sustain its injury control activities. Resource exchange among network members was quantified and analysed using social network analysis. In 2004, MWSC accessed an estimated 6.5 full-time staffequivalents and 50.9 million. However, these resources were largely accessed externally. The linking relationships that connected MWSC to its external support network, more than half of which were maintained by six broker network. facilitators, were the critical social anet used to access resources and sustain network productivity. The sustainability of this network and arguably similar safety promotion networks is vulnerable to the changing priorities of external sponsoring agents and highly dependent on its leaden who facilitated access to the resources in required to remain productive.

Keywords: safety promotion; injury control; safe communities; sustainability; ecological health promotion; social capital; social network analysis

Mackay Whitsunday Safe Communities

Mackay Whitsunday Safe Communities (MWSC) was launched in February 2000 in response to perceived excess injury morbidity in the region (Carter & Muller, 2002; Vardon, Hanson, Muller, & Miles, 2000). The programme targeted two local government areas in Queensland, Australia: Mackay City Council with an estimated population of 98,957 and Whitsunday Shire Council with an estimated population of 39,781 on 30 June 2004.

The MWSC attempted to catalyse structural, social and political change that empowered the community and ultimately, individuals within the community, to change their environment and behaviours to reduce the risk of injury (Hanson et al., 2005). It was made up of six working groups, supported and coordinated by a Network Support Group (NSG) (Figure 1).

Information on the range of programmes delivered as part of the MWSC is detailed elsewhere (Hanson, 2007) and included a suite of interventions targeting a number of issues including child safely, senior safety,

*Corresponding author. Email: dale.hanson@jcu.edu.au

ISSN 1745-7300 print/ISSN 1745-7319 colline 6 2012 Taylor & Francis http://dx.doi.org/10.1030/17457300.2012.709871 http://www.tasdfonline.com occupational health and safety, road trauma, alcohol harm and violence prevention in the Mackay entertainment precinct. The programme adopted a multistrategic approach, which encompassed improving awareness of the local injury burden, targeted campaigns to educate at risk groups concerning local injury determinants as well as policy and environmental changes.

Sustainable injury control and safety promotion

Sustainable injury control and safety promotion programmes deliver lasting health status improvements (Olsen, 1998; Shediac-Rizkallah & Bone, 1998). A sustained reduction in injury of a target population has two complementary components: longterm outcomes attributable to the injury control programme itself, and the maintenance of the social process required to implement and sustain this programme (Niken, Timpka, Nordenfelt, & Lindqvist, 2005). Given that nearly half of all community



More Information?

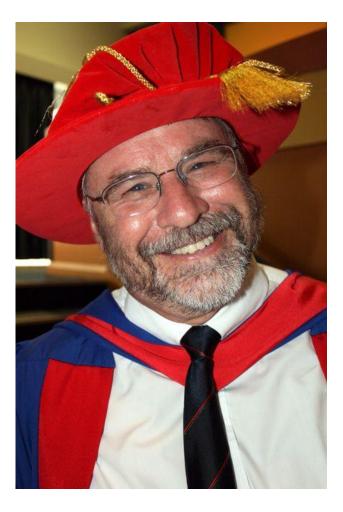
Social Network Analysis Mackay Whitsunday Safe Communities

Doctoral Thesis: Dr Dale Hanson

Community Safety Promotion Networks: From Metaphor to Methodology

http://eprints.jcu.edu.au/1751/







S

MACK

3

LL.

Power in community safety promotion networks: If you want something done ask someone who is already busy

A SAFE COMMUNITY

COMMUNITIES

H

WHITSUNDAY

EALTH ORGANISATIO