

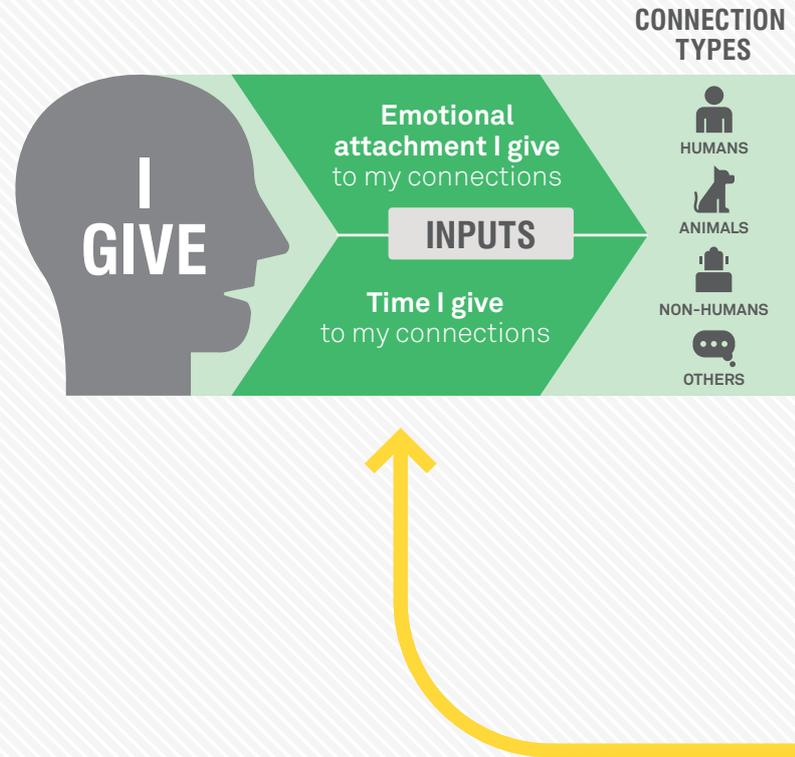
Healthy Social Connections

Swinburne Social Innovation
Research Institute

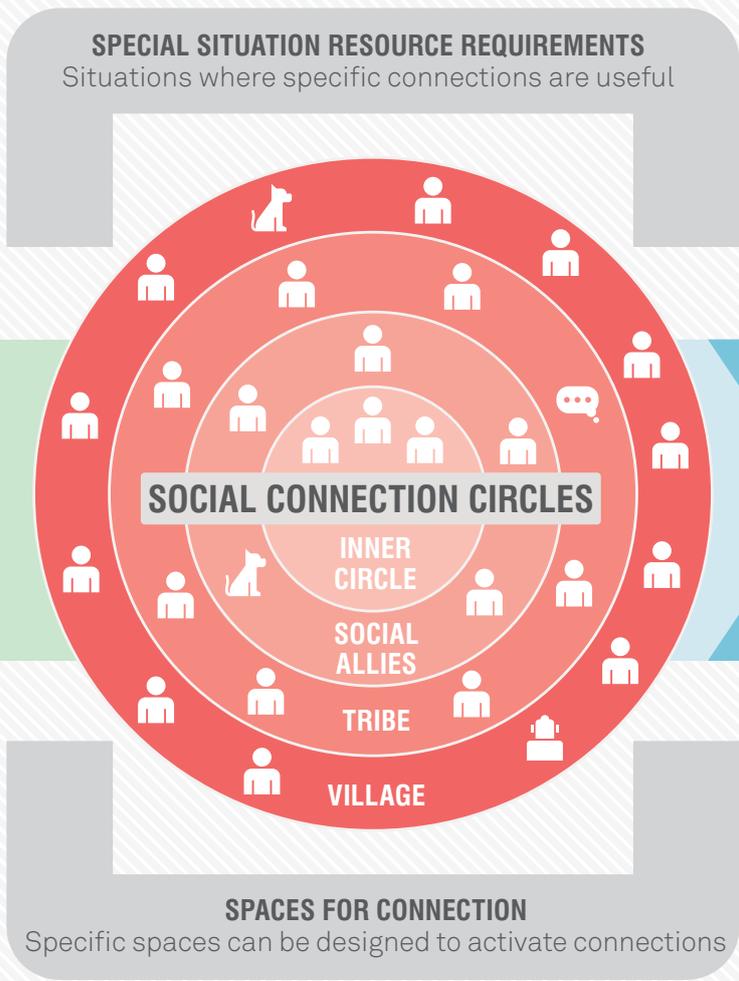


Model of Social Connection

Our social connections have the power to positively affect our health and wellbeing. They can foster community development and provide resilience during times of crisis. Social connection can be typically understood as face-to-face contact through friends, family, neighbours, and can also take shape through personal emotional attachments maintained via phone or online. Connections can be with carers or service providers, pets, modern technologies like robots and metaphysical entities like a god or understandings of country.



<p>INPUTS</p> <p>Each person has their stock of emotional attachment and time to give to build and maintain their social connections. Inner layers of social connections need more emotional attachment and time to maintain them. In research studies, frequency of contact is used as a proxy measure for emotional attachment.</p>	<p>CONNECTION TYPES</p> <p><i>Human</i> connections can give more resources and feelings compared to connections with <i>animals</i> and <i>non-humans</i> (artificial intelligence) or <i>others</i> (metaphysical entities such as God or country). Some connections bring extra resources useful in special situations. Location of these connection types within the layers, predicts how much emotional attachment and time they get.</p>	<p>SOCIAL CONNECTION CIRCLES</p> <p>We know from Robin Dunbar's work on the social brain hypothesis that human connections form layers, which we call circles, involving those with intense emotional attachment and high time (in inner layers) to less attachment and time in outer layers. Layers typically form a 5:15:50:150 numbers model, from intimate inner layers (your 'Inner Circle') to infrequent personal connections (your 'Village').</p>
--	---	---



EVALUATION

Check the balance, so that input given equals outputs received from connections. Are the outputs positive?

OUTPUTS

Evidence shows a consistent set of feelings that people emote, realised through/from their social connections and a set of resources they get from others, through their social connections.

SPECIAL SITUATIONS

There are special situations where social connections are required to 'step-up'. It's good to be prepared for these eg neighbours are useful in emergencies; connections to other networks are useful for learning or finding new jobs.

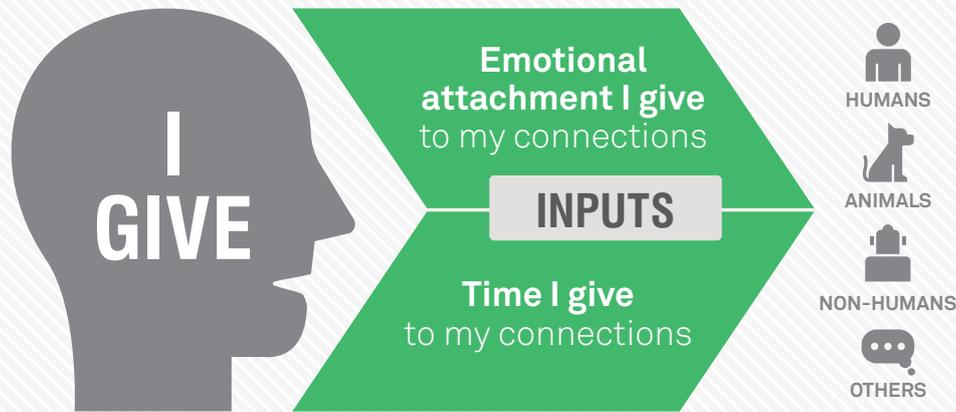
SPACES FOR CONNECTION

Evidence shows there are a number of spaces set up in/by society with explicit or implicit goals to connect people. These are useful places to make connection, eg volunteering, events, community gardens – activating connections, building communication, literacy and digital literacy.

EVALUATION

There are key things to bear in mind that help in understanding how to interact optimally with the concept of social connections; eg people should check they are getting the output resources and feelings from their connections – most of the time, they shouldn't be giving more than they are getting back; it might be more or less easy to build and maintain social connections depending on personal circumstances.

1. Inputs and connection types



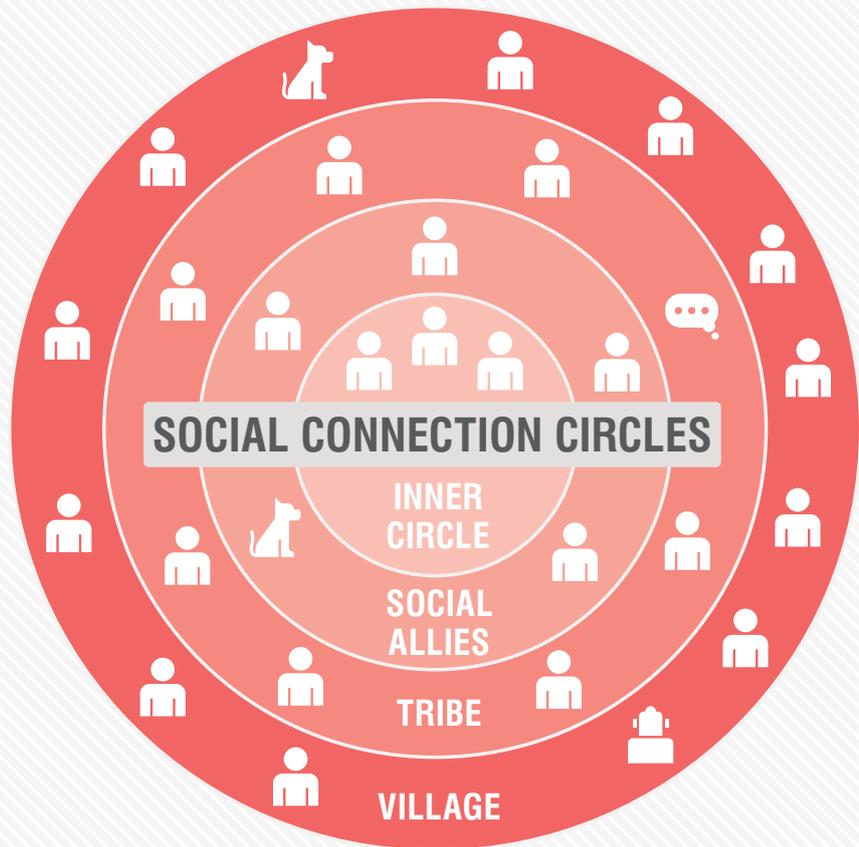
Our inputs are the investments we make in our connections, and a person has their stock of emotional attachment and time as inputs to invest.

Emotional attachment can be the personal intensity or how emotionally close we feel to our connections. Time is the frequency of contact we spend on our connections. Because time is finite, the amount of time we allocate to maintaining a connection is a good indicator of our bonds and a good proxy to measure closeness (Dunbar et al., 2015). The connections that we hold closest to us usually take more time and emotional attachment to maintain.

The types of connections that we make most prominently are with **humans** who provide us with the most resources and feelings that we require. These include family, who may need less time to maintain the connection due to kinship bonds; friends who may need a range of inputs of time and emotional attachment depending on type of resources and feelings we want from them; neighbours, work colleagues, acquaintances, service providers and online friends. These are all connections we can invest different levels of time or emotional attachment in, and who may provide, in return, different levels of resources, support, information and feelings.

However, we may also make connections with non-human entities which may also provide us with a range (though more limited) of resources and feelings. These include **animals** like our pets who serve as loyal companions (Amiot & Bastian, 2015), **human replacements** like robots or home virtual assistants (Epley et al, 2008), and even **metaphysical connections**, these could be religious as with a god, or even through connections to country (Green & Elliott, 2010; Lim & Putnam, 2010).

2. Social connection circles



There is consistent evidence that human social connections are structured into layers, or in circles as is reflected in everyday speech. For example, we speak of our 'inner circle' of friends.

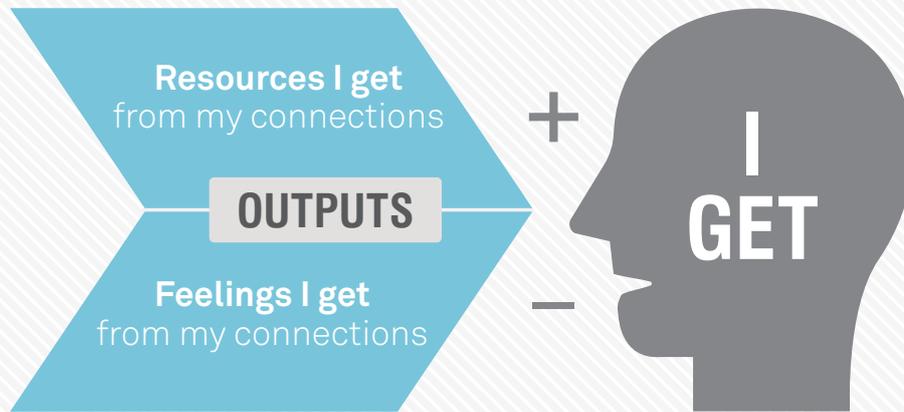
We know from anthropologist Robin Dunbar and colleagues' work (Dunbar, 1993; Dunbar & Spoons, 1995; Hill & Dunbar, 1995; Dunbar, 1998; MacCarron et al., 2016) on the social brain hypothesis that the connections we form are structured in layers that reflect the allocation of our personal resources of *emotional attachment* and *time*. Based on neuroimaging studies, Dunbar and colleagues found that there is a limit to the number of connections the brain can manage at one time, and this capacity is layered depending on the intimacy of the connections. Layers typically form a 5:15:50:150 numbers model, intimate inner layers take up more time and/or emotional attachment (your 'Inner Circle') through to infrequent personal connections, where you have less attachment or commit less time (your 'Village'). This pattern of layering has been found in studies of traditional groups like medieval villages, hunting tribes and army units, and also modern groups like social media networks such as Facebook and Twitter, online computer gaming and in mobile phone records.

Our intimate inner layers or circles, *inner circle* and *social allies*, are our primary network and these connections play a central role in informing and moderating our interactions with the wider community and they are those from whom we are most likely to seek advice, receive emotional comfort from, and who we turn to in times of severe stress be it financial or emotional. We are most likely to commit most of our time to these and they would receive much of our emotional attachment.

The outer layers or circles, the *tribe* and *village* are our secondary group of connections that may be less personal, or those that we spend less time with. They can include family we don't see that often, friends we see socially, or from hobby, recreational or religious groups, work colleagues, or acquaintances that we have things in common with.

Relationships in all circles can change over time, and the circles only represent the amount and 'strength' of social connections at a given time. Strengths of relationships change quicker in the outer rather than inner circles and can be leveraged depending on the different resources that we need, and they provide at specific times.

3. Outputs



Evidence shows that different types of social connections are associated with different outputs, which are the levels of feelings and resources that we get back from our connections.

Humans have the highest potential to provide these, but their different attributes can help you attend to a range of your needs that require different levels of your time and attachment (Granovetter, 1973; Roberts & Dunbar, 2011) Thoits, 2011). For example, you may have strong attachments to **family** though you may not need as much time to maintain these because of your kinship bonds (Roberts & Dunbar, 2011). **Friends** also have different attributes, there are those that provide high levels of support that you may place more time into maintaining, and those that you may socialise with but are not emotionally attached to. These people may provide you with other resources such as fun, entertainment or information. You can have a strong emotional attachment to **online friends**, particularly those you also know face-to-face. Friends online can require less time to maintain. They may provide you with emotional support (Dunbar et al., 2015), but will be less likely to provide practical help. **Neighbours** could be friends or just acquaintances but could be useful due to their proximity to provide you practical support like watering your plants when you're away or for help in dealing with local crises like bushfire or

flood. Other connections can bring extra resources useful in special situations for example connections with people who work in different industry sectors, have different knowledge and access to different networks can be useful for gaining new jobs and information. While connections with people in positions of power, status or specific technical expertise can be useful in situations where community activation or protest are needed; and connections to individuals in your local community and community services may provide you with greater resilience in times of crises or emergency.

Connections to **non-humans** can also provide you with a range of resources and feelings. **Animals** with their loyalty can provide comfort, companionship and joy (Amiot and Bastian, 2015). **Robots** are beginning to be used to provide companionship and assistance to the elderly and **metaphysical connections** can provide a sense of identity and comfort (Green & Elliott, 2010; Lim & Putnam, 2010).

Conclusion



The Social Connection model reflects key aspects of social connection that have been raised by a diverse body of research and acknowledges the changing nature of contemporary social life. It is the result of work completed by the Swinburne Social Innovation Research Institute and the Australian Red Cross as part of the Healthy Social Connection Project. We anticipate that the model can be used to support practice to understand the changing face of contemporary social connection, and to tackle social isolation and loneliness in a strength-based way.

REFERENCES

- Amiot, C. E. & Bastian, B. 2015. Toward a psychology of human-animal relations. *Psychological Bulletin*, 141, 6.
- Dunbar R (1993) Coevolution of neocortical size, group size and language in humans. *Behavioural and Brain Sciences*, 16, 681-735.
- Dunbar R (1998) The Social brain hypothesis. *Evolutionary Anthropology* 6(5) 178-190
- Dunbar R, Spoor M (1995) Social networks, support cliques and kinship. *Human Nature*, 6(3), 273-90.
- Dunbar R, Arnaboldi V, Conti M, Passarella A (2015) The structure of online social networks mirrors those in the offline world. *Social Networks*, 43, 39-47.
- Epley, N., Scott, A., Adam, W. & John, T. C. 2008. Creating Social Connection Through Inferential Reproduction: Loneliness and Perceived Agency in Gadgets, Gods, and Greyhounds. *Psychological Science*, 19, 114-120.
- Granovetter MS (1973) The strength of weak ties. *American Journal of Sociology*, 78, 1360-80.
- Green, M. & Elliott, M. 2010. Religion, health, and psychological well-being. *Journal of religion and health*, 49, 149-163.
- Hill RA & Dunbar R. (1995) Social network size in humans. *Human Nature*, 14(1), 53-72
- Lim, C. and Putnam, R.D., 2010. Religion, social networks, and life satisfaction. *American sociological review*, 75(6), pp.914-933.
- MacCarron P, Kaski K, Dunbar R (2016) Calling Dunbar's numbers. *Social Networks*, 47, 151-155.
- Roberts S & Dunbar R (2011) The costs of family and friends: an 18 month longitudinal study of relationship maintenance and decay. *Evolutionary Human Behaviour*, 32, 186-197.
- Thoits PA (2011) Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior*, 52(2), 145-161.

CONTACT FOR MORE INFORMATION

Swinburne Social Innovation Research Institute

Professor Jane Farmer, Director
+61 (03) 9214 8180
sii@swinburne.edu.au
John Street, Hawthorn
Victoria 3122 Australia

The Australian Red Cross

Ebony Gaylor
Community Mobilisation
Australian Red Cross
egaylor@redcross.org.au



This report is released subject to a Creative Commons BY-NC-ND license (License). This means, in summary, that you may reproduce, transmit and distribute the text, provided that you do not do so for commercial purposes, and provided that you attribute the text as extracted from *Healthy Social Connections*, Swinburne Social Innovation Institute, Melbourne, 2018. You must not alter, transform or build upon the text in this publication. Your rights under the License are in addition to any fair dealing rights which you have under the *Copyright Act 1968* (Cth). For further terms of the License, please see <http://creativecommons.org/licenses/by-nc-nd/3.0/>

© Swinburne Social Innovation Research Institute,
September 2018