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Do online social media cut through the constraints that limit the size of offline social networks?

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Abstract

The social brain hypothesis has suggested that natural social network sizes are constrained by cognitive processing capacity. Online social media have been widely expected to cut through this to allow rapid expansion of existing offline social networks (this the potential to break through the glass ceiling). Friendship and acquaintanceship networks on Facebook, Twitter and LinkedIn have been examined to see if they conform to the predictions of the social brain, social similarity hypothesis (ie, gender and regional assortativity), and to see if they show the expected clustering into emotionally close, intimate, sympathetic, friends and the layering of friends into a series of nested, offline, Dunbar's layers. Twenty-one variables, respondents also specified the number of their friends they believed they could call on for various types of emotional support and the number they had actually contacted in the previous month. Online social media do not seem to cut through the constraints that limit the size of offline social networks. The expected layering of friends into a series of nested, offline, Dunbar's layers, is not evident. Online social media do not seem to cut through the constraints that limit the size of offline social networks. The expected layering of friends into a series of nested, offline, Dunbar's layers, is not evident.

1. Introduction

Thanks to the Internet, the past decade has witnessed a dramatic revolution in the ways in which people can interact socially. This has been accompanied with immense but as-yet-poorly understood changes in the ways in which people now interact with one another. Online social networks have been widely hailed as having the capacity to cut through the constraints that have limited the size of offline social networks to a few hundred at most. The underlying assumption is that, by allowing people to make friends in cyberspace, online social networks will allow people to make friends and acquaintances far more easily than they can offline. This is widely seen as the potential to break through the glass ceiling that has kept the size of offline social networks to a few hundred at most. For the benefits of online social networks, it has been argued that they can enhance a person's well-being, increase their social capital, and ease the transition into new social roles (for example, following retirement or bereavement) [1–3]. Online social networks have also been widely hailed as the means by which we can rapidly and easily make new friends and acquaintances, and thus increase our social capital [4–6]. Online social networks have also been widely hailed as the means by which we can rapidly and easily make new friends and acquaintances, and thus increase our social capital [7–9]. Online social networks have also been widely hailed as the means by which we can rapidly and easily make new friends and acquaintances, and thus increase our social capital