Networks in Nigeria: A pilot study on network characteristics and their relation with life satisfaction in a Nigerian sample

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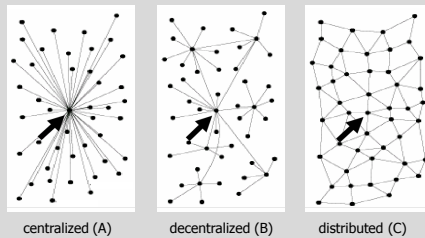
Abstract

Social relationships are a central determinant of life satisfaction. The collectivity of individual social relationships form a social network. This study examines such networks in a Nigerian sample (*N* = 108). Network size, proportions of positive and negative relationships within those networks, and structural characteristics (e.g., network centrality) were assessed. Furthermore, network characteristics were examined concerning their association with life satisfaction. Results indicate differential relations of network characteristics with life satisfaction. Results are discussed in terms of (1) cross-cultural assessment of network characteristics, (2) life satisfaction as related to social structural characteristics, and (3) differential associations between network types and different aspects of life satisfaction.

Introduction

The essential importance of social relationships to life satisfaction across cultures is well-documented in psychological and sociological research (e.g., Oishi, Diener, Lucas, & Suh, 1999; Haller & Hadler, 2006). However, while questions concerning social relationships have been included together with life satisfaction or happiness in many cross-national surveys (e.g., World Values Survey, International Social Survey), structural network characteristics have been rarely investigated in context of life satisfaction, even less so in non-Western samples. To our knowledge, the present exploratory study is the first one investigating the relation between structural characteristics of personal social networks and life satisfaction in a Nigerian sample.

Network structure
Pictorial stimuli were used representing different combinations of network centrality and network density. Stimulus A depicts a network high in centrality and low in density. („centralized network") . Stimulus B depicts a network medium in centrality and medium in density („decentralized network") . Stimulus C depicts a network low in centrality and high in density („distributed network"). For each picture, participants were asked to rate to what extent their personal social network is similar to the network depicted on an 11-point rating scale (ranging from 0 - "not at all like network A/B/C" to 10 – "totally like the network A/B/C")

centralized (A)   decentralized (B)   distributed (C)

Method

Participants and Procedure
108 Nigerian males aged 19 to 36 years (*M* = 23.8, *SD* = 3.4) participated by completing a paper-pencil questionnaire.

Assessment of life satisfaction
Life satisfaction was assessed using the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). Reliability was very low (Cronbach's α = .59). Items 1-3 asking for the current status of life satisfaction („In most ways my life is close to my ideal"/"The conditions of my life are excellent"/"I am satisfied with my life") show only weak to medium correlations with items 4 and 5 asking for retrospective life satisfaction ("So far I have gotten the important things I want in life." / "If I could live my life over, I would change almost nothing"). Therefore, results are not reported on basis of one single scale value. Reduced reliability of this well-established scale in the present sample is in accordance with previous research (Dorahy et al., 2000) reporting similarly low reliability of the scale in a Nigerian sample.

Assessment of network size
Participants were asked to give the overall number of persons in their personal social network, as well as numbers of positive and negative relationships in their network. These variables were not meaningfully related to life satisfaction.

Results

Network structure and life satisfaction
The degree to which the centralized network (type A) was chosen was positively related with the present-oriented part of the SWLS (i.e., items 1 to 3), and negatively related with one aspect of retrospective life satisfaction (item 4), while the degree to which the distributed network (type C) was chosen was negatively related with present life satisfaction aspects (although not in all cases significance was reached), and not substantially related with retrospective life satisfaction. The degree to which the decentralized network (type B) was chosen was positively related to both present and retrospective life satisfaction, although significance was obtained only with respect to the latter one. A significant (positive) relation between network type similarity and overall life satisfaction was obtained only with respect to network type B.

	A	B	C	LS-1	LS-2	LS-3	LS-4	LS-5	LS
A	1.00	-.34	-.10	.20(*)	.09	.21(*)	-.21(*)	.01	.08
B		1.00	.16	.18	.16	.01	.27*	.26*	.20(*)
C			1.00	-.09	-.19(*)	-.08	.07	.01	-.07
LS-1				1.00	.33	.41	.01	.15	.56
LS-2					1.00	.45	.30	.11	.72
LS-3						1.00	.20	.13	.72
LS-4							1.00	.26	.55
LS-5								1.00	.48
LS									1.00

Network types:
A: centralized network
B: decentralized network
C: distributed network

Life satisfaction:
LS-1: In most ways my life is close to my ideal,
LS-2: The conditions of my life are excellent,
LS-3: I am satisfied with my life.
LS-4: So far I have gotten the important things I want in life.
LS-5: If I could live my life over, I would change almost nothing.
LS: SWLS scale mean

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Discussion & Conclusion

Cross-cultural assessment of network structures
First, it has to be stated that cross-cultural validity of assessment of personal social networks characteristics using pictorial stimuli as in our study has not been tested so far. Although language-free stimuli are not subject to translation biases, differences in cognitive styles might lead to systematic differences in how stimuli of this type are perceived. Further studies should address this issue.

Differential associations of network structures with different aspects of life satisfaction
Network structures A and C showed to differentially relate to temporal aspects of life satisfaction: Being connected in centralized networks (type A) was positively related with present and negatively related with retrospective life satisfaction. Being connected in distributed networks (type C) was negatively related with present life satisfaction only. The present result might point to the possibility that centralized networks are either relicts from a not-so-satisfactory past or else that being in centralized networks is somehow affecting how people look at the past. Decentralized networks might have developed in recent times only and therefore show no connection with past life satisfaction. Further studies should investigate whether these patterns consistently emerge, and how they can be explained.

Life satisfaction and social structure
Overall, endorsement of network type B was positively associated with life satisfaction. One possible (post-hoc) explanation bases on the assumption that matching between an individual's orientation and the values of the cultural environment of this person should promote life satisfaction. For example, Caldwell-Harris and Aycicegi (2006) have shown that individual scores on the individualism-collectivism dimension contrary to the individualism-collectivism orientation on society level are associated with psychopathology. Analogously, life satisfaction should be highest when personal network structure reflects cultural values of the person's social environment. For West African countries, Hofstede (2001) reports relatively low individualism and relatively high power distance. This combination could be reflected by a network structure where both centrality and density are given, such as in networks of type B investigated in this study. Further studies should investigate the association between network structures and cultural values, especially with regard to influences on satisfaction.

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