

# BRIDGING, BONDING, AND MAINTAINED SOCIAL CAPITAL AS PREDICTORS OF PSYCHOLOGICAL WELL-BEING IN A WHATSAPP GROUP

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This paper reported part of the findings from a study conducted to understand how participants build and maintain social capital through group communication on WhatsApp. We collected data from 75 participants who were members of a high school WhatsApp group. The participants all graduated from the same high school in 2003, and they currently use WhatsApp to keep in touch. We used QuestionPro; an online survey platform, for data collection. Participants were compensated with mobile phone call credits in the local currency. We tested a single hypothesis to see if bridging, bonding, and maintained social capital in the group are predictive of individual group member's self-reported measures of psychological well-being based on Ryff & Keyes (1995). Regression result shows that of the three, only bridging social capital is a significant predictor of psychological well-being. This result adds to the findings by Ellison, Steinfield, & Lampe (2007).

## 1. Keywords

Bridging social capital, bonding social capital, maintained social capital, WhatsApp, social networks, psychological well-being, group communication.

## 2. Introduction

WhatsApp is a messaging application owned by Facebook. It has the capacity for voice, text and video calls. Like a few other messaging platforms, WhatsApp allows people to create groups and each group is currently limited to 256 people (WhatsApp, n.d.). WhatsApp groups are used for different purposes and some of these purposes may include sharing similar interests, keeping in touch with friends and family, engaging in politically motivated discussions, project discussions by teams, and so on. Social media is bringing about a shift in the traditional thinking about time and place as it relates to communities. For example, a Yoruba proverb, rooted in the context of *togetherness* (in terms of being physically present in the same geographical space at a given time), states that "it is impossible for twenty children to play together for twenty years". Scholars have also asked if a community is possible in the digital age (Williams & Durrance, 2008). This question is particularly important when we think about community as a physical space (Flora, 1998; Putnam, 2000). Depending on the lens through which we view the concept of community, platforms like WhatsApp are helping us redefine the concept of space and time as they relate to communities. In this paper, we examined how students who graduated from the same high school in 2003 are using WhatsApp as a platform for building and maintaining social capital. Following Ellison, Steinfield, & Lam-pe (2007) whose research examined social capital among college students on Facebook, we set out to examine three dimensions of social capital explained subsequently.

### **2.1. Bridging, Bonding, and Maintained Social Capitals**

Putnam (2000) introduced and developed both bridging and bonding forms of social capital in his seminal work on social capital titled *bowling alone*. He described bonding social capital as the connection between people who are similar. Hence, we can refer to bonding social capital as a type of social network between socially homogeneous groups. Homogeneity can take the shape of gender, race, ideology, and age. However, bridging social capital occurs between socially heterogeneous groups (Panth, 2010). Putnam stressed the importance of bridging social capital for a modern and diverse democratic society. Bridging social capital transcends gender, age, religion, sexual orientation, and economic power. Maintained social capital relates to the way an individual's social network is structured when moving from one stage of life to the next. This was coined by Ellison, Steinfield, & Lampe (2007) to explain how, for example, the social network of a student changes from high school to college, and how the student maintains some of the social networks from high school even while forming another social network at college. Ellison, Steinfield, and Lampe (2007) refer to maintained social capital as the ability to leverage and maintain social connections from high school.

### **2.2. Social Capital and Psychological Well-Being**

Studies have shown that connections with people in form of friendship correlate positively with well-being. According to Myers (2000), there is a correlation between social support and well-being. Abbey and Andrews (1985), and Perlman and Rook (1987) works cited in Myers (2000) both reported that people that enjoy close relationships cope better with various stresses, including bereavement, rape, job loss, and illness. Perkins (1991) also reported that high income and occupational successes are less important to an individual's well-being and happiness compared to social support.

Based on this discussion, we tested the following hypothesis as part of the study:

H0: There will be no significant prediction of psychological well-being by bridging, bonding, and maintained social capital among study participants.

## **3. Method**

The data was collected from a WhatsApp group of students who finished their high school in 2003. The students attended the same high school in a city in Nigeria. There were over 150 people in the group. Data collection was from March 17 to March 30, 2018, through QuestionPro; an online survey management platform. We reached the group members through the group's administrator. Participants were compensated with mobile phone credits in the local currency.

### **3.1. Measures**

Bridging and bonding social capital measures are each 10-item measure adapted from Williams (2006). The items were only slightly modified for this study participants. To retain the reliability of the measures, we did not change any content that will impact participants' understanding of the measure as initially constructed by Williams (2006). Maintained social capital is a 5-item measure adapted from Ellison, Steinfield, & Lampe (2007). The measure of psychological well-being is a 42-item measure by Ryff & Keyes (1995). This 42-item measure has been widely used for measuring psychological wellbeing and it is designed to capture categories such as autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance. We used a 6-point Likert scale ranging from strongly disagree to strongly agree for each of these measures.

#### 4. Results

Participants are located across 16 cities in six countries. For employment status (N=74), 56% are employed, 5.3% unemployed, 32% self-employed, stay-at-home and students are each 2.7%. For marital status (N=74), 18.7% are single, 74.7% married, both divorced and widowed are each 1.3%, and complicated is 2.7%. 92% of the participants are within the age group 26 – 33. It is important to note that all participants are females. Table 1 provided the measures of psychological well-being based on six dimensions. Also, Table 2 provided descriptive details for the three dimensions of social capital.

Table 1. Descriptive Statistics for Psychological Well-Being (N = 75). Note that each of the six dimensions in Ryff's Psychological Well-Being Scales (PWB) adds up to a total of 42 and the Total score adds up to 252).

	Mean	Std. Deviation
Autonomy	32.7	5.4
Environmental Mastery	30.4	4.5
Personal Growth	35.9	4.5
Positive Relations	33.2	5.6
Purpose in Life	35.6	5.1
Self-Acceptance	33.9	5.5
Total	202.0	23.8

Table 2: Descriptive Statistics for Bonding, Bridging, and Maintained Social Capital (N = 75)

	Mean	S. D
<b>Bonding Social Capital</b>		
There are several people on this WhatsApp group I trust to help solve my problems.	3.67	1.55
There is someone on this WhatsApp group I can turn to for advice about making very important decisions.	4.56	1.65
There is no one on this WhatsApp group that I feel comfortable talking to about intimate personal problems.	4.63	1.75
When I feel lonely, there are several people on this WhatsApp group I can talk to.	3.84	1.77
If I needed an emergency loan of 50,000 Naira, I know someone on this WhatsApp group I can turn to.	3.41	1.99
The people I interact with on this WhatsApp group would put their reputation on the line for me.	3.69	1.53
The people I interact with on this WhatsApp group would be good job references for me.	4.25	1.42
The people I interact with on this WhatsApp group would share their last Naira with me.	3.36	1.45
I do not know people on this WhatsApp group well enough to get them to do anything important.	4.48	1.47
The people I interact with on this WhatsApp group would help me fight an injustice.	4.77	1.30
<b>Bridging Social Capital</b>		
Interacting with people on this WhatsApp group makes me interested in things that happen outside of my town.	5.25	1.00
Interacting with people on this WhatsApp group makes me want to try new things.	5.32	1.10
Interacting with people on this WhatsApp group makes me interested in what people unlike me are thinking.	4.85	1.17
Talking with people on this WhatsApp group makes me curious about other places in the world.	4.88	1.28
Interacting with people on this WhatsApp group makes me feel like part of a larger community.	5.47	.88
Interacting with people on this WhatsApp group makes me feel connected to the bigger picture.	5.09	.98
Interacting with people on this WhatsApp group reminds me that everyone in the world is connected.	5.28	.95
I am willing to spend time to support general community activities on this WhatsApp group	5.19	1.12
Interacting with people on this WhatsApp group gives me new people to talk to.	4.80	1.29
On this WhatsApp group, I come in contact with new people all the time	4.29	1.56
<b>Maintained Social Capital</b>		
I'd be able to find out about events in another town from a high school acquaintance living there through this WhatsApp group	5.05	1.24
If I needed to, I could ask a high school acquaintance on this WhatsApp group to do a small favor for me	4.89	1.20
I'd be able to stay with a high school acquaintance on this WhatsApp group if traveling to a different city	4.93	1.17
I would be able to find information about a job or internship from a high school acquaintance through this WhatsApp group	5.25	.97
It would be easy to find people to invite to my high school reunion through this WhatsApp Group	5.34	1.08

A multiple linear regression was calculated to predict psychological well-being based on bridging, bonding, and maintained social capital. A significant regression equation was found ( $F(3,62) = 3.300, p < .026$ ), with an  $R^2$  of .138. Participants' predicted psychological well-being is equal to  $145.821 + 1.058$  (Bridging Social Capital) +  $.003$  (Bonding Social Capital), +  $.142$  (Maintained Social Capital), where bridging, bonding, and maintained social capitals are measured using Likert scale ranging from 1 -6 (where 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = slightly agree, 5 = agree, and 6 = strongly agree). Among the three independent variables, only bridging social capital is a significant predictor of psychological well-being.

## **5. Discussion and Conclusion**

Our result shows that bridging social capital is a predictor of psychological well-being among participants. This finding corroborated the existing studies on the importance of social support in the well-being of individuals. As discussed previously, Myers (2000) showed that a correlation exists between an individual's social capital and well-being. But the question here is, why is bridging social capital the significant predictor of well-being among the group studied? Why not bonding or maintained social capital? We previously defined bridging social capital as a type of social capital between socially heterogeneous groups. While we studied a female only group, there are other factors that make it a heterogeneous group. The members are all dispersed in different parts of the world, held diverse jobs, are of different religious organizations, and have different political views among others. The significance of the bridging social capital as reported by this group shows that members of the group see the platform in part as a medium to connect to opportunities beyond their immediate environment or their individual social networks formed outside of this group.

Further work will explore among others, variables such as the intensity of WhatsApp use on participants' bridging, bonding, and maintained social capital.

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