FRIEND-ING FACEBOOK: REVISITING FACEBOOK AND COLLEGE STUDENTS' SOCIAL CAPITAL

Arina Hidayatul Chasanah, University of Indonesia

Abstract
With the facts of recent movements that brought by the use of social networking sites, recently some researchers show that Facebook has positive impacts that is referred to social capital. However, the concept of social capital itself is still debatable. Through elaboration to various range and definitions, this study examined the proposed causal model of Facebook use towards five elaborated variables of social capital; collective action and cooperation, life satisfaction, trust, group and networks, and political participation. Random sampling was taken using statistical software from the lists of 2010-2011 University of Indonesia's undergraduate students. Sample responses were obtained through online survey and measured using *path analysis.* The results show that intensity of Facebook use has direct effect to collective action and cooperation; and indirect effects to the rest of social capital variables. While intensity of Facebook *group* use has direct effect to group and networks; and also indirect effects to political participation.
Keywords: Facebook, Facebook Group, Social Capital

Introduction
Frequently, the Middle East and North Africa uprising that came out through global news media coverage in early of 2011 has been linked with the use of social media, such as Facebook and Twitter. The Israel Project (2011) also wrote that the use of those social media has been shifted from social to political context. With the high population of young people, Middle East countries have been mobilized through the use of those social media sites. Features like photos and videos could lead the global opinion that resulted international pressures to support the demonstrators. Egypt Revolution that was successfully overthrew the regime of its previous president is oftenly named as "Facebook Revolution" while the similar revolution in Tunisia is famous as "Twitter Revolution" (Ingersoll, 2011). Before the 2011 Revoultion happened, Faris (2008) had been observed the role of Facebook in conforming Egypt youth's Social Capital. Facebook can reduce transaction cost that has been the barriers of individual social capital conformation. Faris (2008) cited Putnam (2000) that internet, particularly social networking sites, have the role in connecting people with same ideas and bond them under the bustle of their workdays.

Sheng (2011) mentioned that population boom without sufficient employement is the main factor that aroused those uprisings. Sheng (2011) also expressed that social capital is software in social life development. It needs to be developed together with the development physical capital (hardware) within a country, so that it will not be arousing discrepancy as the result of physical capital accumulation by elites of urban cities. Sheng (2011) cited social capital tipology by Putnam (1993); *bonding social capital*, as social capital among people who has similiarities (race, ethnic, religion, interest, hobbies, etc); and *bridging social capital,* as social capital among different people. Differences and similarities within a society will be resulting social capital complexity.

It is an interesting point that Indonesia has been proposed as an example (role model) for those countries to manage and maintain complex social capital within their society. Indonesia has been going through economical crises and the imposition of the regime of its second president in 1998. Furthermore, Indonesia is also representing variety of people in race, ethnic, and religion. Sheng (2011) argued that with the most population is Moslem (88%), the social narration spirit among ethnics and religions in Indonesia is impressive.

Indonesia is one of the country which has big population joined Facebook. In a previous year, Facebook users in Indonesia triplet and put it as the second biggest number of users after United States (Russel, 2010). Despite of moral panic arose from the use of internet and social networking sites (SNSs), some scholars conclude that SNSs are medium to establish online community to encourage people to take social action (Rheingold, 2000). It's simply because SNSs mediating people to communicate and interact based on the similarity of interest and activity (Boroughs, 2010).

Huysman and Wulf (2004) cited the work of Quaan-Haase and Wellman (2004) that summarize three approach in defining the relation between internet use and social capital based on the previous researches. The first one is internet transforming social capital. Internet becoming cheap and ease medium to communicate between individuals with similar interest. This contributes to social contact transformation and civic participation, from local solidarity to social networks that is dispersed in location but being bonded by those interest similarity. The second is internet degrading social capital. Internet ability to come with information and entertainment drawn the users from their families and friends. Internet also allowing the user to cope with geographical barriers so that they can communicate globally. This, makes them more unattracted to local matters around them. The third is internet enriching social capital. Internet is a part of human life and facilitate the existing social connection. It is proven to shape civic participation and socialization among people. Furthermore, people also channeling their hobbies and interests through internet.

Social capital is established through interaction among people in a network. As mentioned before, Facebook allows the users to socially interact with other users. Through the interaction, people establishing social networks, group norms, and trust among them. Networks, norms, and trusts, are the basic elements social capital that encourage people to work together towards shared-expected goals. Social network is closely related to social capital. People with broader and various social network is perceived to have bigger social capital accumulation to those who has narrower and more homogenous social networks (Valenzuela, Park, & Kee, 2009). The use of Facebook is not only allowing people to create new social networks, but also maintaining the existing *offline* social networks (Ellison, Steinfeild, & Lampe, 2007).

In the tranditional social networks, a person accumulates resources from information flow and their interaction with other people in the network. Those embedded resources are the social capital that is believed to be able to encourage people doing social action, including political action. The resources are; information, opportunity (Lin, 1999), civic skills, working skills, religion skills, and organization skills (Bode, 2009). Facebook facilitates the accumulation of those resources through information exchange and users interaction within provided features.

In particular, social networking sites have been growing to be prominent areas for relationship establishment. In features, Facebook has two types of messaging; private messaging (similar to email messaging) and public messaging through "timeline" or previously known as "wall", the homepage of someone's account where users can leave messages and comment on them. Facebook also equipped with "News-Feed" to display story/status updates of friends from the current time and "Mini-Feed" or activity log to display the activities of a single user. Users are able to control the visibility of their acitivities by controlling privacy.

Users also are able to communicate intensively with other users through a system that named as "Group". Through this feature, users can establish particular community or bring their offline ones to Facebook. Facebook also allows the users to meet up with others who have similar interest, hobbies, or ideas to be the 'Fan' of particular 'Page'. The 'Page' feature is often being utilized to market products, services, or even a cause to open networks with millions of Facebook users.

Literature Review

Defining Social Capital

The concept of social capital is introduced by two social scientist; Bourdieu in 1983 and Coleman in 1988. Other scientists eventually use the term of social capital far earlier than Bourdieu and Coleman. Hanidan, Jacobs and Loury used the term in 1920, 1961, and 1977. However, it remained obscured until Bourdieu and Coleman popularize it (Paxton, 1999). Paxton (1999) cited Bourdieu's definition of social capital: "Social capital is the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less instituonalized relationships of mutual acquaintance and recognition-or in other words, to membership in a group." Social capital is also defined by Putnam as a set of social life (networks, norms, and trust) that allow the participant to work together more effectively to achieve the shared-goal (Bode, 2009). Social capital itself is defined variously through discipline of Sociology and Economics. The difference in defining social capital brings another variety in operationalization of the concept.

Valenzuela, Park, dan Kee (2009) explaining social capital as social networks construction that will be resulting norms of trust and reciprocity which are essential in one's engagement sucession towards collective action. Researchers attempted to establish social capital's theoretical framework, which accommodates and integrates various dimension of social capital coherently. Scheufele and Shah (2000) clustered social capital in to three categories; intrapersonal (life satisfaction-related social capital), interpersonal (trust-related social capital), and behavioral. Intrapersonal social capital is life satisfaction-related social capital. Social capital is also heavily related in how people build trust to other people, which is put into interpersonal social capital. While, behavioral social capital is referred to both active civic participation and political participation. Paxton (1999) and Letki (2003) also show that social capital is a predictor which facilitates political participation.

From several research with different background and contexts, Claridge (2004) concluded social capital into the following dimensions; *trust* (Cox and Caldwell 2000; Falk and Guenther 1999; Glaeser et al. 2000; Guenther and Falk 1999; Kolankiewicz 1996); *Membership* (Baum and Ziersch 2003; O'Connell 2003; Price 2002; Warde et al. 2003; Wollebaek and Selle 2003); *Membership* and *trust* (Lappe et al. 1997; Lochner et al. 2003; Veenstra 2002); *Membership, trust* and *norms of reciprocity* (Isham et al. 2002; Skrabski et al. 2003; Staveren 2003); and *Network Resources* (Zhao 2002). Grootaert, Narayan, Jones, dan Woolcock (2004) conforming social capital dimensions based on five different social capital research; *The Tanzania Social Capital Survey, The Local Institutions Study, The Social Capital Initiative, The Social Capital Survey* (in Ghana and Uganda), and *The Guatemala Poverty Assessment.* The dimensions are summarized in *The Integrated Questionnaire of SocialCapital (SC-IQ's) Six Dimensions* as the World Bank Working Paper 18 about social capital measurement.

After reviewing various dimensions of social capital in previous researches, this study made an elaboration of those dimensions and concluded that social capital is a set of resources that is embedded in one' group involvement and networks that is including trust, collective action and cooperation, and also life satisfaction are likely to endorse one's political participation.

Social Capital and Facebook

Ellison, Steinfield, dan Lampe (2007); Steinfeild, Ellison, dan Lampe (2008) examined effect of intensity of Facebook use to social capital in the Putnam's typhology (2000); bridging and bonding social capital. The study found that students tend to experience positive effect of intense Facebook use to social capital, both bridging (weak ties such as being member of a club) and bonding (strong ties such as friends and family member). The research's subject is undergraduate student that is also found using Facebook to maintain their social networks with their current and high school friend. This finding endorsed the researcher to construct the third typology of social capital, maintained social capital. The study also came to a conclusion that people with lower self-esteem and life satisfaction are tend to get more benefit from the their Facebook use.

Valenzuela, Park, and Kee (2009) have also done a research to undergraduate student in two United States universities. In the study, they found positive relations between intensity of Facebook use towards life satisfaction, trust, and participation. Those three aspects of social capital are in resemblance with the three typology of social capital; life satisfaction refers to intrapersonal social capital, trust refers to interpersonal social capital, and participation referes to behavioral social capital.

In terms of behavioral, participation is one crucial aspect of social capital in a society, either socially or politically. Shah, Cho, Eveland, dan Kwak (2005) found that various types of online communication have positive impact to civic participation. Bode (2009) also strengthen this finding, particularly in significance of Facebook use in elevating civic participation by the use of blog. Facebook is similar to blog in terms of connecting people with similar cultural unit, and constructing sense of community. Facebook, again, share the same role to blog as Facebook enable public issues transmission to a group of people and at the same time giving the parameter of how far the issue is related to someone's life.

Pasek, More, and Romer (2008) also found that intensity of Facebook use positively related to civic participation. The participation is manifested in doing activities together, cooperation and volunteerism. In Valenzuela, Park, and Kee (2009); Ellison, Steinfield, and Lampe (2007) and their longitudinal study in 2008 (Steinfield, Ellison, & Lampe, 2008), they found that intensity of Facebook use is positively related to students' level of life satisfaction. Intensity of Facebook use and level of trust has also proven to have positive relationship (Valenzuela, Park, & Kee, 2009; Pasek, More & Romer, 2008).

H1: Intensity of Facebook use has direct effect to the level of collective action and cooperation (H_{1a}), life satisfaction (H_{1b}), and trust (H_{1c}).

Acquisiti and Gross (2006) introduced the concept of imagined community to explain community and networking that is established through Facebook. The concept is manifested in the creation of Facebook Group by Egyptian's opposition to gather people with similar ides, establish a network, and mobilize the mass. Valenzuela, Park and Kee (2009); Feezell, Conroy, and Guerrero (2009); Bode (2009) found that intensity of Facebook use has a positive relation with students' political participation.

H_2: Intensity of Facebook Group use has direct effect to level of group and networking (H_{2a}), and political participation (H_{2b}).

Civic participation, particularly for volunteering activity, is mostly endorsed by the motivation to get happy feeling and self-esteem (Omoto&Snyder in Scheufele and Shah, 2000). In general, it reflects that civic participation like collective action and cooperation resulting life satisfaction. Furthermore, Putnam (1995a) and Letki (2003) proposed that the more people civically engaged, the more bigger their social trust.

H_3: Level of collective action and cooperation mediating the effect of intensity of facebook use to level of life satisfaction (H_{3a}) and level of trust (H_{3b}).

Scheufele and Shah (2000) cited Anderson's work (1985) that life unsatisfaction in oneself may encourage him/her to ask others' motives and honesty. On the other hand, people with better life satisfaction tend to have positive evaluation towards their surroundings.

H_4: Level of life satisfaction mediating the effect of intensity of Facebook use to level of trust (H_{4a}) and level of political participation (H_{4a}).

Eventhough the World Bank counts political action as one of social capital dimensions, some scholars argue that political participation is predicted by social capital instead of the part of social capital itself. Organization skills are also having positive and consistent effect to political participation, even after being controlled by political interest and attention (Verba in Bode, 2009). Feezell, Conroy, and Guerrero (2009) explained that Intensity of Facebook Group use encourages both online and offline political participation. Putnam (1995a) in Letki mentioned that social trust and civic engagement are two main factors in social capital. Coleman (1998) and Verba (1995) in Letki (2003) found that people with higher membership in groups or organizations built more skills that made they tend to politically more engaged.

H_5: Level of group and networking mediating the effect of intensity of Facebook use to political participation.

Methodology

Path Analysis is used to examine direct and indirect relationship among variables and to test causal relationshp in the hypothesis. Path analysis is actually one of the two techniques in causal modelling, despite of Strucutral Equation Modelling (SEM). Causal modelling test if intercorelation pattern among variables is fit to the theory.

The proposed model is tested by *path analysis* and examined through multiple regression. From the proposed model, there are three endogenous variables; intensity of Facbook use, intensity of Facebook Group use, and social capital level. Inter-correlation among variables can be identified through the significancy score; for 95% confidence level, correlation is significant if the score is less than 0.05. Furthermore, the strength of the correlation is identified through the R score; 0.4-0.7 for mild relations, 0.7-0.9 for strong relationship, and above 0.9 for very strong realtionship. The model legends are z_1 = Intensity of Facebook use; z_2 = Intensity of Facebook Group use; z_3 = Level of Collective action and cooperation; z_4 = Level of Life Satisfaction; z_5 = Level of trust; z_6 = Level of group and networking; z_7 = Level of Political Participation.

Picture 1. Proposed Path Model
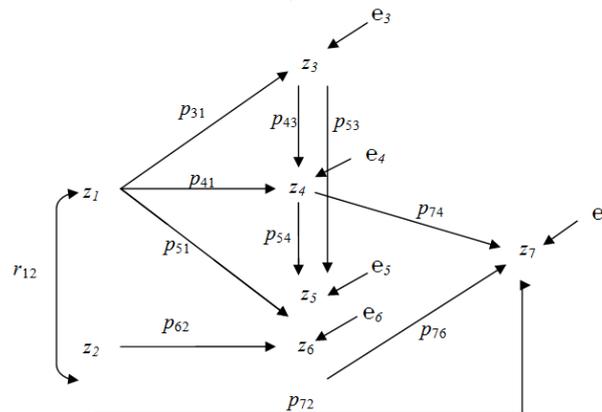
Measures

Sampling from is obtained from the campus bursary and it contains of 18.218 names of University of Indonesia Undergraduate students (regular program/ non vocational program, non international program). Regular program is sampling frame is taken as it is the main program for undergraduate/bachelor degree in University of Indonesia and it covers majority of undergraduate population. Simple random sampling is used to get 182 names as the sample and it represents 1% of the population. Respondents were contacted through Facebook to fill in the online survey with small credits given for completed survey. 77 completed and eligible questionnaire was obtained with overall response rate is 42.3%.

Respondents are consisted of 45 female (58%) and 32 male (42%). The students' year is dispersed from 19 senior students (24.7%), 26 junior students (33.8%), and 16 students each for freshmen and sophomore (20.8%). From the taken pre-test, variables is measured in interval scale and divided in to three categories; low, medium (moderate), and high. 1 to 5 Likert Scale in the survey is converted to low (1.00-2.33), medium (2.34-3.67), and high (3.68-5.00) score.

Measures of Intensity of Facebook and Facebook Group use

Ellison, Steinfield, and Lampe (2007) measured intensity of Facebook use through *The Facebook Intensity Scale.* They measured average time that is used to access Facebook in a day and numbers of Facebook "friends" obtained by a user. They also measured intensity of Facebook use by asking respondents' self assessment to the following statements: *"Facebook is part of my daily life", "I am happy to tell people that I am on Facebook", "Facebook has been part of my daily routines", "I feel out of touch if in a day I do not access my Facebook", "I feel like I am being a member of Facebook community", "I will be upset if Facebook is shut down".* This study use all those aspects measured by *Facebook Intensity Scale.*

Bode (2009) measured intensity of Facebook use with four separated variables; how often respondent visiting/checking their Facebook account, how often he/she updating their account, how many friends does the respondent have, and how many group he/she joined in. Engagement in Facebook Group is significant identification in order to measure networking and group ownership as an element of social capital. While Bode (2009), Feezell, Conroy, and Guerrero (2009) see that number of Group which respondent joined in is representing respondent's engagement in Facebook, Valenzuela, Park, and Kee (2009) had different opinion about it.

Valenzuela, Park, and Kee (2009) argue that people can easily click on a Page/Group and being the member without having any significant activity within the Group. Thus, rather than identifying from the number of the group, it is better to measure respondents' actual activity within any number of group they joined in, with measurement; how often the respondents reading and posting messages on Group's wall, posting discussion topics, how much time do they spend to read and post on the Group profile, and ask them to describe their participation in the groups they join in.

Questions that are used to measure intensity of Facebook Group are: how much time that the respondents spend to read and post in particular group; how often respondent; read postings in the group, post new discussion topics, in the last one week; and which from the following statements representing the respondent the most (seldom in accessing the group, reading post(s) or discussion board, mostly read but sometimes write, read and write on the group's profile, read, write, and start new topic(s) on the group's profile). Questions asking frequencies (time) are open ended questions with the answers are, then, encoded to particular scale, regarding to the answers range.

Measures of Collective Action and Cooperation

Collective action and cooperation is a variable to explore what and how respondents work with others in their community, in particular projects, and or their response towards crisis. This category also examine how is individual participation distorted from community expectation (Grootaert, Nayaran, Jones, & Woolcock, 2004). Questions derived from this measurement are asking whether in the following year respondents have been done something useful for their community, friends and colleagues will remind them if they are invited in an event, respondents will discuss problem within organization(s) they join in, and respondents will discuss with their friends if something bad is happened to one of them.

Measures of Life Satisfaction

From several existing tools to measure life satisfaction, this study using life satisfaction scale written by Diener, Emmons, Learsen, and Griffin (1985). The scale consisted of five statements; "*In most ways my life is close to my ideal*", "*The conditions of my life are excellent*", "*Iam satisfied with life*", "*So far I have gotten the important things I want in life*", "*If Icould live my life over, I would change almost nothing.*" The statements are measured using Likert scale with five answer choices ranging from completely disagree to definitely agree. Life satisfaction scale also supplemented with level of control question that ask the respondent to choose the closest statement about self-authority in making decision in their daily activities. The options are: not having any control, having control to small numbers of decision, having control to several decisions, having control to almost all decisions, and having absolute control to all decisions. Total score as the sum of each question's score is reflected the level life satisfaction.

Measures of Trust

To measure level of trust, this study adopting faith in people scale by Rosenberg (Rosenberg in Stark, 2009; Valenzuela, Park, & Kee, 2009). The scale asking if the respondents think that; in general people can be trusted, people can make use the trust given to them, people try to be honest; and help others; and people should be warn themselves when interact with others. The question are also measured in Likert Scale with five answer choices ranging from never to always (valenzuela, et al, 2009; Stark, 2009)

Measures of Group and Networking

In measuring group level of the respondents, this study using the following questions: how the respondents describe their participation in group and organization within and outside of campus (leader, very active, active, not so active, or never be involved) (Grootaert, Nayaran, Jones, & Woolcock, 2004); if their answer is not never be involved, they will be asked whether their involvement in organization or group is intensely and variously elevating over the time (completely disagree to definitely agree, five options range). To measure the networking level, the questions used are open ended questions, asking the number of friends the respondents have to; tell private stories or asking for help, borrow some money in urgent and sudden needs (as much as a week expenses), left valuable belongings when leaving room/house, tell information (about job, scholarships, etc) or give recommendation that critically valuable to respondents, help the respondents in study, and how many friends in the past year that asking for help about personal problem to the respondents. The answers scale is developed in regards to the range of the answers.
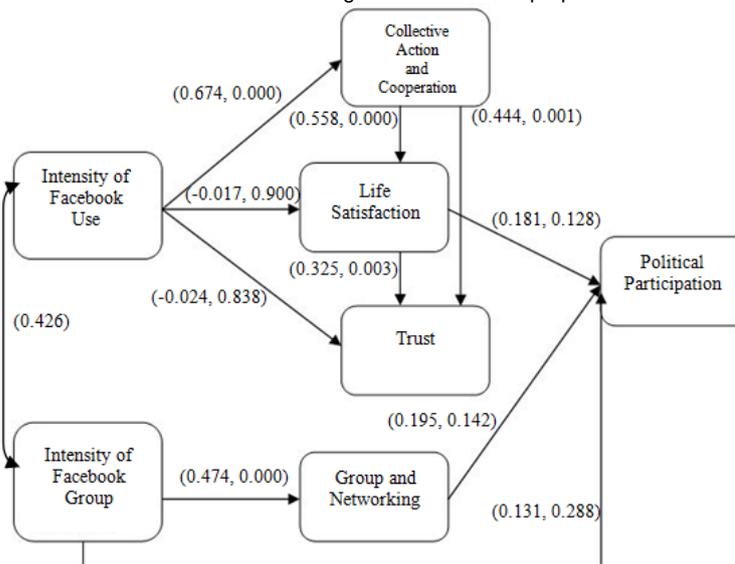
Measures of Political Participation

In studying the relationship of Facebook use to students' political behavior, Bode (2009) identified political action as online and offline. Some online political behavior are; using email to contact politician; online donation for politician, social group or 'cause'; forwarding political email news or stories to friends; signing online petition; visiting political campaign or politician's websites; sending comments or questions to particular political news or blog. Offline political behavior including voluntary work in a community, attending political meeting, rally or speech; wearing campaigning attributes such as sticker or any other particular signs; working for any candidate or political party; contacting politician through telephone or snail mail; donating money to candidate, social group, or particular "cause", signing on paper petition, voting in national and regional election.

Results

The result shows that 12 respondents (15.6%) using Facebook with low intensity, 49 respondents (63.6%) having moderate intensity, and the rest 16 respondents (20.8%) heavily using Facebook. For Group intensity, as much as 35.06% of the respondents accessing in low intensity, 48.06% of them moderately accessing it and 16.88% having high intensity. In terms of collective action and cooperation, as much as 2.6% of the respondents answered to have low collective action and cooperation. Most of the respondents have moderate level of collective action and cooperation (59.7%) while high level score is obtained by 37.7% of the respondents. Mean score for life satisfaction is 3.38 (moderate) with one respondent on low life satisfaction level (1.3%) while 27.3% having high level of life satisfaction. More than a half of the respondents (71.4%) have moderate life satisfaction.

For trust level, most of the respondents (72.7%) are on moderate level. Low trust is shown by 5.2%of the respondents while more people having high level of trust (22.1%). In measuring group and networking ownership, the results show that more people in low level than high level (23.4% compared to 9.1%). However, most of the respondents are in moderate level (67.5%) with overall mean score is 2.78. Political participation score of the respondents is tend to be low (with the mean is 1.64). Most of the respondent (92.38%) having low political participation, while 6.4% is in moderate and 1.3% in high level. Hoewever, after going through variable consistency and reliability test, all online political participation indicators has been removed. Thus, the remaining indicators in the variable are offline political participation. To examine path coefficient of the model, there were five linear regressions condu cted with the following results;

Picture 2. The result of multi-regression test to the proposed model

From the results, it shows that some relationships are not significant; intensity of Facebook use with level of life satisfaction, intensity of Facebook use with level of trust, level of life satisfaction with political participation, level of group and networking with political participation, intensity of Facebook Group with political participation. All insignificant relationship –except of level of group and networking with political participation, will be tested against the new model's path—is removed from the model. To developthe new adjusted model, potential relationships between variables will also be examined. The new adjusted model with path coefficient and significance score is as follows;

Picture 3. Adjusted Model with Relationship Coefficients
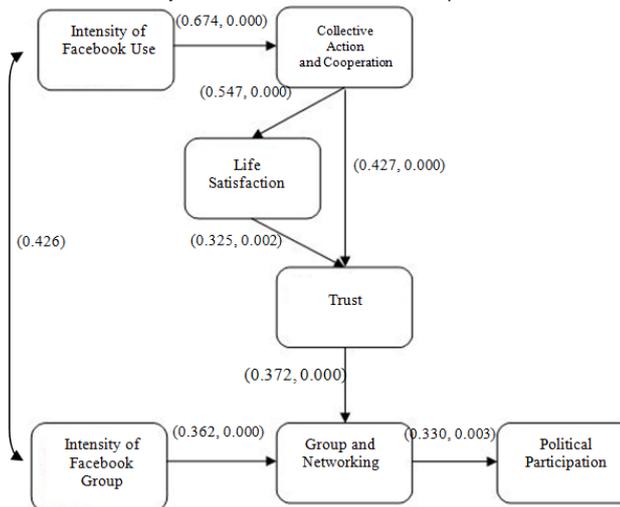
Direct and Indirect Effects

From path coefficient, the score of direct and indirect effects on each endogen variables can be calculated. Total effects on trust is 0.890. It means that 89% of the respondent trust is emerged from the relationship pattern of trust with collective action and cooperation and life satisfaction. The rest 11% is caused by another variables that is not explained in this study. For the pattern of intensity of Facebook use, collective action and cooperation, life satisfaction, trust, and group and networking, it has 1.5% of effect to political participation. The pattern of intensity of Facebook use, collective action and cooperation, trust, and group and networking has 3.5% of effect to political participation. However, intensity of Facebook grup with group and networking, making the path that has 12.3% of effect to political participation. In total, the path has 50.3 % effect to political participation. It means that the rest 49.7% causes of political participation is outer variables that is not explained in this study.

Discussion

Moderate mean score of Facebook use indicates that Facebook is moderately part of daily activity to connect with friends and community. However, various features of Facebook explains how intensity of Facebook Group is lower than intensity of Facebook use itself. Group might be not the main feature for the users, Facebook is more as a bridge to connect and maintain network (Boyd dan Ellison, 2007).

Claridge (2004) cited Inglehart (1997) explanation about social capital; as a culture of trust and tolerance in which extensive network and volunteerism are emerged. The study shows high result on trust, that is implicitly explains that the students of Universitas Indonesia has those trust and tolerance culture. It again strenghten Sheng (2011) arguments that social narration in diversity of ethnic, race, and religion in Indonesia is the impressive one.

In political participation, online political behavior is eliminated from measurement instruments. It explains political characteristics of Indonesian students (and Indonesian, in general) that online political behavior has not been a common. It can be understood that the instruments were adopted from researches which were mostly taking place in United States of America, where, online political behavior as online donation, or online political dicusssion are more than common. While in Indonesia, most of political activities take place in offline world, due to disparity in technological availability and slow internet connection.

From all social capital variables, political participation is the only one with low mean score. The other four variables have moderate mean score. It explains that except of their political participation, students of Universitas Indonesia have moderate social capital. It also arousing the probability of separating political participation from social capital. Blomkvist (2003), Teorell (2000), Letki (2003), Paxton (1999), separated political participation from social capital's dimensions, Putnam (1995a) in Letki (2003) also said that political participation is a behavioral component that is predicted by high level of social capital. Letki (2003) also cited Krishna's argument (2002) that original idea of social capital claimed that it is translating to political participation.

If the model can precisely represents the reality, the results show that intensity of Facebook and Facebook Group use have direct and indirect effects to social capital, particularly on collective action and cooperation, life satisfaction, trust, group and network, and political participation. Direct effect of intensity of Facebook use to collective action and cooperation is consistent with previous study in which Facebook use is proven to have positive relations with user involvement in activities that is conducted together or in general is known as civic engagement (Valenzuela, Park, & Kee, 2009). It explains that Facebook features enables the users to organize activities. People can invite and ask the others to come and join in an activity. Simply, Facebook reduces transactional cost by eliminating distance barriers and allows people to interact, planning an event or activity without having face-to-face or physical interaction (Sheng, 2011).

Intensity of Facebook use also has indirect effect to life satisfaction. Ellison, Steinfield, and Lampe (2007) found that Facebook use has positive relations with students' life satisfaction, after controlled with self-esteem. It shows that life satisfaction have many factors as determinants. From this study, the effect of intensity of Facebook use to life satisfaction is mediated by collective action and cooperation. As Scheufele and Shah (2000) cited the finding of Omoto and Snyder (2000) that people generally doing collective action and cooperation to obtain life satisfaction, both personal or shared life satisfaction. Thus, Facebook se may facilitates students' life satisfaction after they are encouraged to do some collective actions and cooperations by accessing Facebook.

Pasek, More, and Romer (2008); Valenzuela, Park, and Kee (2009) found that intensity of Facebook use has positive relations with social trust. However, this study does not find that intensity of Facebook use has direct effect to trust. Effect of intensity of Facebook use to trust is mediated by collective and cooperation and life satisfaction. It is consistent to Anderson (1985) who showed that life satisfaction has positive effect to one's trust to his/her surrounding (Scheufele dan Shah, 2000). In this study, change on intensity of Facebook use may cause change on students' trust if they do collective action and cooperation, either they satisfied or not with what they do. Letki (2003) said that only under democratic governance, volunteerism will create trust. Volunteerism is also a part of collective action and cooperation, thus, this study is also consistent with Letki (2003) by showing that in this democratic nuance, collective action and cooperation of the students, have positive direct effect to their trust.

Students' trust to their surrounding, has direct effect to their membership in groups and their networking ownership. The explanation is students with higher social trust are tend to be more open to create networks and involve in organizations and groups. Trust and membership are also two main factors of social capital (Cox & Caldwell 2000; Falk & Guenther 1999; Glaeser et al. 2000; Guenther & Falk 1999; Kolankiewicz 1996; Baum and Ziersch 2003; O'Connell 2003; Price 2002; Warde et al. 2003; Wollebaek and Selle 2003; Lappe et al. 1997; Lochner et al. 2003; Veenstra 2002; Isham et al. 2002; Skrabski et al. 2003; Staveren 2003; in Claridge, 2004). Finding on tested missing path in the adjusted model, reconfirm the relationship between the two variables by showing that trust has direct effect to group and networking. Although some researches show that life satisfaction has direct effect to political participation, this study does not show the same thing. Life satisfaction does not has direct effect to political participation because in Indonesia political participation is more mobilized than autonom. Thus, external factors such as social pressure or incentive may be a greater influence to political participation than life satisfaction. However, life satisfaction has indirect effect to political participation, after mediated by trust and group and networking.

Intensity of Facebook group also have direct effect to group and networking. This is consistent with characteristic of Facebook group, that is used to find people with similar interest and ideas to develop offline group and networks as happened in Egypt Revolution. The significane of Facebook group to students' engagement in group and networks strengthening the concept of *imagined community* (Acquisiti and Gross, 2006). Facebook use also providing expectation to form stable network and community because it is also based on similarity of area in the students' offline world. In this study, the life area is campus life as the network that is mostly extended to online networks and *vice versa.*Facebook, in this case, is transforming social capital and also affecting students' daily activity. With similarity and existing offline activity, students having imagined community in Facebook with people from their offline life. In this online community students can discuss, exchange information, or keep updating to imprtant information they needs (Feezell, Conroy, dan Guerrero, 2009). It also explains why intensity of Facebook group also having indirect effect to political participation.

Asosiational membership (group or organizations) relations to political participation has been proven long before concept of social capital is introduced in political sciences. Letki (2003) argued that skills and attitude developed by people in their participation within a group and exposure to political democracy has been valued as the more important factors in forming "civicness' of a community, regardless of trust among individuals. It's also consistent with adjusted model that trust does not have direct effect to political participation. Trust only mediating the effect through engagement in group and networks.

Conclusion

In accordance to the pre-test results, it is concluded that social capital dimensions that is approximately reflecting the context of this research is collective action and cooperation, life satisfaction, trust, group and networking, and also political participation. Furthermore, political participation in this context is more focused on offline political participation, as reflected by the condition in Indonesia, that most of political channel is provided offline.

The result shows that intensity of Facebook use can predict students' collective action and cooperation in mild relation. Changes on collective action and cooperation are further able to change their life satisfaction and trust also in mild relations. As explained psychologically that people with low life satisfaction are tend to question the honesty of others around them, this research shows that trust is also predicted by life satisfaction. Change on trust will also have effect on students' level of group and networking ownership. This group and networking is also directly influenced by intensity of Facebook group. At the end, group and networking has direct effect to political participation.

In accordance to "*Facebook Revolution"* thesis, Facebook and Facebook group use can activate a person's social capital, thus, will have indirect effect to his/her political participation. However, the difference between the context of this study to previous researches is most of political participation is conducted in offline world. Particularly, students in University of Indonesia mostly use day to day interactions, long march, campaign, orations, and other *offline* medium as their means of political participation. Despite of that, there are two indicators of online political behavior that scored somewhat higher than other indicators: giving comments to political news, stories, or *notes;* and signing online petition. For further research, quantitative research can be combined with qualitative research. Content analysis can be conducted to examine students' talk or discussions in particular Facebook group. Moreover, in-depth interview is also a good instrument to better convey individual use of Facebook and the benefits they obtained through it.

Social capital construction in Facebook is accumulative, started from having activities with other people. The activities will create better life satisfaction and trust to others. Having better trust will make an individual more open to groups and organizations, and also having more friends, relatives, and in general, broader social networks. Thus, Facebook use may not cause exclusion to social life as ever be worried. Facebook use is able to increase students' engagement in groups and organizations, as many students talking about campus life and share their daily activities in Facebook. These will encourage students to be involved in the dialogue by also joining groups and organizations inside or outside the campus. It means that to be socially bold in online world, students need to be also bold in offline world. To confirm it, content analysis through students' activity in Facebook use is again encouraged for further research.

References

Acquisiti A., Gross R. (2006). *Imagined Communities: Awareness, Information Sharing, and Privacy on the Facebook.* PET

Blomkvist, Hans. (2003). *Social Capital, Political Participation and The Quality of Democracy in India.* Annual Meeting of The American Political Science Association, Philadelphia 28-31 Agustus 2003.

Bode, Leticia. (2009). "Facebooking to the Polls: A study in online social networking, social capital, and political behavior." Paper presented at the annual meeting of the Association for Education in Journalism & Mass Communication, August 2009.

Boroughs, Bryan. (2010). *Social Networking Websites and Voter Turnout.* UMI Dissertation Publishing, 1475359. ProQuest LLC. [Tesis]

Boyd, D.M, Ellison N.B, *Social Network Sites: Definition, History, and Scholarship.* Michigan State University, 2007.

Claridge, T. (2004), 'Social Capital and Natural Resource Management', Unpublished Thesis, University of Queensland. [Tesis]

Coleman, J.S. (1988). Social Capital in The Creation of Human Capital. *American Journal of Sociology,* 94, 95-120

Diener, E., Emmons, R.A., Learsen, R., Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment, 49, 71-75*

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The Benefits of Facebook "friends:" Social capital and college students use of online social network sites. *Journal of Computer-Mediated Communication, 12*(4), 1143-1168.

Faris, David. (2008). "Revolutions Without Revolutionaries? Network Theory, Facebook, and the Egyptian Blogosphere." *Arab Media & Society.* The Middle East Centre St. Antony's College, University of Oxford. September 2008.

Feezell, Jessica T., Conroy, M., Guerrero M. (2009). *Facebook is… Fostering Political Engagement: A Study of Online Social Networking Groups and Offline Participation.* Presentasi pada the American Political Science Association Meeting in Toronto, Canada, September 2009.

Grootaert,C., Narayan, D., Jones, V. N., Woolcock, M. (2004). *Measuring Social Capital:An Integrated Questionnaire.* Washington: The World Bank

Huysman, M., Wulf, V. (2004). Social Capital and Information Technology. Cambridge: The MIT Press. ISBN 0-262-08331-0

Ingersoll, Minnie. (2011). "What Really Happened Panel Discussion". *The Wave of Freedom: Early Lessons from The Middle East.* Published by George W. Bush Presidential Center. 26 Mei 2011, SMU Campus Dallas, Texas.

Letki, Natalia. (2003). *Explaining Political Participation in East-Central Europe: Social Capital, Democracy, and The Communist Past.* Nuffield College Politics Working Paper 2—3-W2. University of Oxford.

Lin, Nan. (1999). Building a Network Theory of Social Capital. *Connections* 22(1):28-51

Pasek, J., More E., Romer, D., (2008). Realizing the Social Internet? Online Social Networking Sites Meets Offline Social Capital*.* Forthcoming: *Journal of Information Technology and Politics.*

Paxton, Pamela. (1999). Is Social Capital Declining in The United States? A Multiple Indicator Assessment. *The American Journal of Sociology,* Vol. 105, No. 1 (Jul., 1999), 88-127.

Rheingold, H. (2000). *The virtual community: Homesteading on the electronic frontier.* Cambridge, Mass.: MIT Press.

Russel, Jon. "Social Media and Technology in Asia". (2010). http://asiancorrespondent.com/jon-russell/indonesia-facebook-s-second-largest-market-as-asia-surpasses-100-million-members. 4 November 2010.

Scheufele, D. A., & Shah, D. V. (2000). Personality strength and social capital: The role of dispositional and informational variables in the production of civic participation. *Communication Research*, **27**, 107–131.

Shah, D.V., Cho, J.,Eveland, W.P., Jr., Kwak, N. (2005). Information and Expression in a Digital Age: Modelling Internet Effects on Civic Participation. *Communication Research,* Vol. 32 No. 5, Oktober 2005, 531-565. Sage publications.

Sheng, Andrew. (2011). *Social Capital a Key In Middle East Uprisings.* The China Post: 26 Maret 2011. http://www.chinapost.com.tw/commentary/the-china-post/special-to-the-china-post/2011/03/06/293564/Social-Capital.htm diakses pada 26 Juni 2011 22.09 WIB.

Stark, Andrea L. (2009). *A Study of Internet Use and Its Impact on Individual Level Social Capital Indicators and Motivation to Volunteer.* University of Missouri. [Tesis]

Steinfeild, C., Ellison N.B., Lampe, C. (2008). Social Capital, Self-Esteem, and Use of Online Social Network Sites: A Longitudinal Analysis. *Journal of Applied Developmental Psychology.* 29, 434-445.

Teorell, Jan. (2000). *A Resource Model of Social Capital: Networks, Recruitment and Political Pariticpation in Sweden.* Workshop "Voluntary Associations, Social Capital and Interest Mediation: Forging the Link". ECPR Joint Sessions in Copenhagen, Denmark. April 15-19, 2000.

Valenzuela, S., Park, N., Kee, K. F. (2009). "Is There Social Capital in s Social Network Site?: Facebook Use and College Students' Life Satisfaction, Trust, and Participation. *Journal of Computer-Mediated Communication* 14: 875-901.

 "Social Media and The Middle East". (2011). *The Israel Project: Facts for A Better Future.* www.theisraelproject.org