

UDC: 005.411; 005.32-055.2;

005.511:[004.78:316.77

JEL: L26, D54, D85 COBISS.SR-ID: 211195148

ORIGINAL SCIENTIFIC RESEARCH

# The Influence of Social Network Dynamism on Business Start-up Activity: A Longitudinal Examination of Female Nascent Entrepreneurs



---

Redd Tammi Colleen<sup>1</sup>

Ramapo College of New Jersey, Mahwah, NJ, U.S.

---

## ABSTRACT

*Social Networking Theory suggests that social networks are dynamic over time. This study examines this dynamism in the context of nascent entrepreneurship. Hypotheses tested in previous literature are re-tested to build a foundation for newly hypothesized relationships between changes in social network composition and their effects on business outcomes. The replicated hypotheses from past literature regarding gender influences on social network orientation are confirmed and results show that entrepreneurs who experience changes in social network orientation over time were more likely to have successful business outcomes and were less likely to abandon entrepreneurial efforts. Implications for future research are also discussed.*

**KEY WORDS:** *female entrepreneurship, social networks, venture creation*

## Introduction

There is extensive literature regarding differences in social networking for male and female nascent entrepreneurs (Renzulli, Aldrich, & Moody,

---

<sup>1</sup> Corresponding Author: Tammi C. Redd, Ramapo College of New Jersey, Anisfield School of Business, 505 Ramapo Valley Road, Mahwah, NJ 07430, e-mail: tredd@ramapo.edu

2000; Greve & Salaff, 2003; Bruni, Gherardi & Poggio, 2004). In addition to identifying the difference between male and female social networks, there have also been studies which have focused on the role of social networks in the entrepreneurship process of transitioning from idea conception to gestation (Katz & Gartner, 1988; Reynolds & Miller, 1992); while others have maintained focus on the acquisition of resources through social network contacts (Shane & Venkataraman, 2000; Aldrich & Zimmer, 1986).

An aspect often overlooked in the entrepreneurship literature is the idea that social networks are not static in nature. It has already been established that gender has an effect on the type and composition of the nascent entrepreneur's social network. However, it is important to consider the social networks created by these entrepreneurs may be dynamic in nature, constantly evolving over time; which may have an influence over business outcome. Most often in past studies the social networks of nascent entrepreneurs have been examined using cross-sectional data collection techniques (Sequeira, Mueller & McGee, 2007).

This research addresses whether changing social network orientation during the nascent stages of entrepreneurship has an influence on business outcome. This research question has never been addressed using a longitudinal stand point and addressing it in this way extends the literature by illustrating the role of network dynamism in determining a nascent entrepreneur's business outcome. The purpose of this study is to examine how the types of relationships used within the social networking process change over time, giving a better understanding of the resource acquisition process and its influence on the success of launching an entrepreneurial venture.

To achieve this objective the remainder of the paper is organized as follows. First, a brief summary of past literature pertaining to the social networking process of nascent entrepreneurs and its key elements will be presented. Two previously developed hypotheses will be tested to confirm results found in past studies that have focused on gender differences in social network formation. Next, newly formulated hypotheses to test for changes in social network orientation over time and possible influence on nascent entrepreneurial business outcome will be presented (See Figure 1). Finally, the results of the study along with implications for future research are suggested based on the findings of the study.

## **Theory Development**

According to Social Network Theory the contacts maintained within a social network have value in terms of the resources they offer as well as their performance (Caniels and Romijn, 2008). Through the networking process entrepreneurs bond and bridge relationships (DeCarolis & Saporito, 2006) that enable them to access necessary resources which cannot be accessed through any other means (Aldrich & Martinez, 2001). Although the initial creation of social capital at this level is just as important for both male and female entrepreneurs, creation of social networks occur very differently for male and female entrepreneurs (Stoloff, Glanville, & Biene-stock, 1999; Wellman, 1992; Salaff & Greve, 2004).

### **Gender and Network Orientation: Homogeneity vs. Heterogeneity**

Social Networks that contain multiple contacts from various different functional backgrounds tend to provide nascent entrepreneurs with greater access to a variety of instrumental resources. This prevents the entrepreneur from being exposed to the information redundancy that is apparent in more homogeneous social networks which lack numerous information sources (Lin, Cook, & Burt, 2001).

Verheul, Van Stel and Thurik (2006), found that the barriers to entry for female entrepreneurs are very closely related to limitations dealing with the family. Many females have duties and responsibilities in the home and have the responsibility of most child-rearing activities which can limit them from being in contact with key individuals (Dunbar & Spoons, 1995). This may cause many female entrepreneurs to only work toward their new venture on a part-time basis, negatively affecting their capability in creating instrumental network connections.

Social networks formed by women consist mostly of family or kin, and thus are referred to as homogeneous (Renzulli et. al, 2000). The social networks of males, on the other hand have been found to be more heterogeneous, and therefore consisting of more weak ties in addition to the established strong ties of family and kin possessed by female entrepreneurs (Moore, 1990). There are many possible reasons why this may be, however the main reason addressed in the entrepreneurship literature is family responsibility (Skinner, 2001; Menzies, Diochon, & Gasse, 2004). Other barriers faced by women are those also related to social networking such as lack of financial support, credibility and status (Bruni et. al, 2004).

*Hypothesis 1. In the beginning of the venture creation process female entrepreneurs have more family members in their social network than male entrepreneurs.*

It has also been suggested in the literature that social networks leading to successful business outcomes are those that maintain a balanced level of strong ties and weak ties (Greve & Salaff, 2003). The strength of these ties is determined by relationship characteristics such as intensity, time, and reciprocity according to DeCarolis and Saporito (2006). Strong ties are defined as family members; those with whom you have a very strong relationship and contact more frequently (Aldrich, Elam & Reese, 1995). As discussed earlier, the social networks of female entrepreneurs are mostly composed of family and kin who create relationships based on strong ties. Scott (1998) defined kin to include the parents, in-laws, and spouses while weak ties consist of friends, co-workers and any acquaintances outside of the family.

Although most weak ties are casual acquaintances, they are still very important to the entrepreneur's social network (Levin & Cross, 2004) because they often give the nascent entrepreneur access to different resources that may not be supplied by the strong ties of family members (Gargiulo & Benassi, 2000). As suggested earlier, the social networks of male entrepreneurs contain more weak ties, thus giving access to more information sources and instrumental resources.

*Hypothesis 2. In the beginning of the venture creation process male entrepreneurs have more non-family contacts in their social networks than female entrepreneurs.*

*Hypothesis 3. Nascent Entrepreneurs who maintain both strong and weak ties in their social network increase the likelihood of participating in start-up activities.*

In the social networking literature networks are seen as dynamic in nature and change over time. Each contact within a social network offers specific resources that are needed at different times throughout the venture creation process. These contacts are called upon when the sources they provide are appropriate (Doreian & Stokman, 1997). Social networks also evolve over time and as a result the network composition can be adjusted in order to accommodate the ever changing needs of the nascent entrepreneur. The nascent entrepreneur will create and sever ties within the network as necessary in order to acquire the necessary resources at any specific time (Granovetter, 1985; Kossinets & Watts, 2006).

Social networks provide access to advice, introduction to other contacts, financial backing, and access to services, among other sources of support (DeCarolis et. al, 2006). Nascent entrepreneurs need to have access to several of these resources in order to successfully launch their intended business ventures. According to the entrepreneurship literature, female entrepreneurs face many barriers in acquiring resources to start a business due to limited network connections in comparison to men. Women tend to rely more on family members in their social network, whereas men tend to expand their network beyond the family (Renzulli, Aldrich, & Moody, 2000). It is suggested that this may be because women have less opportunity outside of family duties to make connections with established business individuals who may possess information, knowledge, skills and abilities that an entrepreneur may benefit from in the nascent stage of creating a business venture (Greve and Salaff, 2003; Bruni, Gherardi, and Poggio, 2004). Certainly many women have overcome these barriers, thus it must be posited that females are able to overcome these barriers by allowing their social networks to evolve over time.

*Hypothesis 4. In the later stages of the venture creation process, female entrepreneurs have a higher quantity of non-family support sources than in the beginning stages.*

*Hypothesis 5. Nascent Entrepreneurs who alter their social network orientation over time increase the likelihood of participating in Start-Up Activities.*

## **Methodology**

### **Sample**

The sample consists of nascent entrepreneurs, identified as those actively involved in the venture creation process by the Panel Study for Entrepreneurial Dynamics II (PSEDII) for the 2005 cohort. The PSEDII is currently one of the largest and richest set of longitudinal data that were collected for the purpose of studying nascent entrepreneurship and venture creation. Starting in 2005 several waves of telephone screening and interviews in addition to mailed surveys had been carried out and the effort resulted in a sample of 1,216 nascent entrepreneurs who were not only interested in going into business for themselves, but also were actively participating in activities to launch a business venture. The data was carefully collected and

organized by wave and have been made publicly available through the PSED I and PSEDII data sets.

### **Reliability & Validity**

In this particular study only cases that reported information regarding the use of relationships in furthering their business ventures and reported complete information for two different points in time (Time 1 and Time 2) were included in this study, making the sample size 683. These specific cases were selected because they reported information regarding relationships with team members on entrepreneurial teams, help or support received from friends, family, and other contacts as well as the status of their entrepreneurial venture. Of the 683 cases used in this study 327 were male while 356 females. This proportion of males and females is consistent with the U.S. Census gender population estimates for 2007 (U.S. Census Bureau, 2007).

### **Measures**

When using secondary data, content validity is always a concern. In the case of this particular study, each of the variables of interest is uni-dimensional and cannot be measured by a multi-item scale (Houston, 2004). The variables used in this study are measured by questions, which if asked in different ways, will not change the meaning of the question. For example one question on the survey instrument reads: "How is team member #1 related to team member #2?" The responses available are (1) spouse or partner, (2) family member other than spouse, (3) business associate, or (4) stranger until start-up. If this question were rephrased, it may read: "How is team member #2 related to team member #1?" Changing the question would not alter the information collected from the respondent. In other words, there are not a larger number of measurement items that could be used to evaluate this variable.

Since we cannot rely on multiple single indicators of the variables used in this particular study, using measures such as Cronbach's alpha or CFA tests for uni-dimensionality are not appropriate to assess reliability (Houston, 2004). However, we can look at the data collection procedures to give a general idea of the reliability of the measurement items used. The PSED instrument was designed so that the questions used were unambiguous. If the questions and responses can be interpreted with certainty, the tendency for error decreases greatly which in turn promotes reliability. In

addition, with the release of the data for public use, the administrators for the panel study also introduced a user's manual which included the coding schemas used and a copy of the questionnaire. The PSED manual created by Gartner, Shaver & Carter (2004) gives detailed instructions in order to mitigate errors in measurement and interpretation as suggested in Kerlinger and Lee (2000). It is also suggested by Kerlinger et al. (2000) that "measuring instruments should always be administered under standard, well-controlled, and similar conditions" (p.659). The data included in the PSED was collected consistently across the entire sample. The data were collected through a single survey research organization, using the same method at each instance and repeated at the same time intervals for each case. This standardization of procedure allowed for the reduction of error in measurement and data collection, thus improves reliability.

Reynolds and Curtin (2007) explain that the purpose of collecting the PSED data was to examine the profiles of individuals considered to be nascent entrepreneurs, the activities involved in the entrepreneurship process, and to examine which types of activities lead to specific business outcomes. The hypotheses examined in this study certainly fall into the scope of the original goals for the PSED data collection which lends support to the validity of this study.

### **Data Transformation**

It was necessary to transform variables from the data set in order to make them appropriate for the statistical analysis. For example, in order to analyze friend and family relationships among network members, all relationship types were re-coded to 1=related and 0=not related. This allowed for the calculation of totals for each type of relationship in the social network at both *Time 1* (T1) and *Time 2* (T2) where appropriate. *Time 1* refers to the social networking information reported by the respondents during the first interview. *Time 2* refers to the same information reported in the respondent's last interview.

In addition to the data transformations, it was necessary to create a new variable to represent whether there were any observed changes in network orientation. For this analysis the relationship data described above were compared for both T1 and T2 in order to form comparisons of social network orientation and to determine whether any network changes had occurred between T1 and T2. The changes in network orientation variable was coded for each case as 0=no change and 1=change (For example, changing

from a homogeneous network orientation to a more heterogeneous network orientation would be coded as 1).

## **Results**

The hypotheses were tested using the Chi-square test of independence in order to determine (1) whether female entrepreneurs have more family members in their social networks than males at T1 and (2) whether male entrepreneurs have more non-family support sources than female entrepreneurs at T1. These analyses were conducted in order to test the hypotheses of past literature which have been conducted on cross-sectional data. A Chi-square test was also used to find whether there is a significant difference in network composition for nascent entrepreneurs between T1 and T2. This test was conducted in order to address the main premise of this research which is to determine if the social networks of nascent entrepreneurs are dynamic in nature. To further examine whether changes in social network orientation have an effect on business outcome, the results of the Chi-square tests discussed above were examined in order to categorize the participants based on business outcome. Business outcomes were reported in the data set as 1=running business, 2=start-up active and 3=abandoning efforts. Cross tabs analysis was used to determine which entrepreneurs with changes in social network orientation resulted in each type of business outcome.

In testing hypothesis 1, a significant difference was found between male and female entrepreneurs in the number of family members included in the social network at T1. Further examination using crosstabs analysis shows that females have a higher proportion of family members in their social network, lending support to Hypothesis 1. Hypothesis 2 also had a significant Chi-square result, suggesting that there is a significant difference between male and female entrepreneurs in the number of non-family support sources included in the social network at T1. The crosstabs analysis for this test revealed that males have a higher proportion of non-family support sources in their social network, lending support to 2. The results of both of these hypotheses are consistent with the results of the cross-sectional studies conducted on nascent entrepreneurs thus far in the field.

Hypothesis 4 tested whether there is a significant difference for female entrepreneurs in the number of non-family support sources included in the social network between T1 and T2. The Chi-square results were significant and further analysis confirmed that the proportion of non-family support



sources for female entrepreneurs had increased since T1, giving support to Hypothesis 4.

In order to test Hypothesis 3 the network orientation information from T2 was examined to calculate the number of strong and weak ties for each nascent entrepreneur, which in turn, allowed for the cases to be categorized into the three business outcome classifications bases on the types of ties possessed at T2. Cross tabs analysis determined that those nascent entrepreneurs who possessed a combination of both strong and weak ties were more likely to be categorized as still participating in business start-up activities. Using the results of the Chi-square tests from Hypothesis 3 in conjunction with cross tabs analysis it was determined that nascent entrepreneurs who experienced a change in social network orientation since T1 were more likely to be participating in Start-up activities. These results lend support to both Hypotheses 3 and 5, suggesting the importance of a combination of strong and weak ties along with the ability to alter social network orientation are crucial features of the nascent entrepreneur's social network.

## **Discussion**

In beginning a business venture, nascent entrepreneurs need to gain access to advice, contacts, and business resources. The nascent stage of entrepreneurship is the period of time and the series of events leading up to the official launch of a business venture. It encompasses the recognition of an idea or opportunity and the steps taken to act on the intentions of starting a business (Aldrich & Martinez, 2001). During this stage entrepreneurs seek out valuable information and resources that are pertinent to the launch of a successful business. The key to accessing these resources is the creation of a social network that is flexible to change which will allow for the acquisition of the knowledge, skills, financial support, and the physical resources necessary in successfully working toward the launch of a business venture.

The results of this study have confirmed the finding of previous cross-sectional studies pertaining to social networking for nascent entrepreneurs (Aldrich et al., 1995; Bruni et al., 2004). Using a sample from the PSED data set, this study confirmed that the social networks of male and female nascent entrepreneurs differ in orientation. More importantly, to build on past studies on this topic, the results of this study show that nascent entrepreneurs who maintain both strong and weak ties are more likely to be classified as start-up active. In addition, those who experience changes in social

network orientation are more likely to remain engaged in business start-up activities. Another contribution of this study is the use of longitudinal data to examine this phenomenon.

Over time, nascent entrepreneurs are able to accumulate instrumental resources that are crucial to the launch of a new business (Hansen, 2001). Social networking is the creation and maintenance of the connections that can supply these crucial resources (Aldrich & Martinez, 2001). An entrepreneur may be very creative, innovative or be an expert in their field, but they may not possess all of the knowledge, skills and abilities required to start a new business (DeCarolis & Saporito, 2006). Through social networking, entrepreneurs are able to gain access to and obtain necessary resources that would otherwise be unavailable to them (Aldrich & Martinez, 2001). Through creating new ties, nascent entrepreneurs are able to gain access to information about new markets, where to locate their businesses, information concerning cutting edge products and services. Most importantly, social networks are dynamic in nature and the contacts within a network can be called upon whenever the resources they supply are most valuable. These activities that are nascent in nature are crucial in determining the outcome or an entrepreneur's venture creation intentions.

### **Implications for Future Research**

This research is an extension of knowledge regarding the female social networking process of nascent entrepreneurs and suggests implications for future research. In much of the literature, as mentioned earlier, we see that there is a difference in the social networks of male and female entrepreneurs. However the literature still lacks detailed studies of social network dynamism for female entrepreneurs. This needs to be examined further in the context of the nascent entrepreneur. First, we need to further examine the effect of changes in social network orientation of female entrepreneurs and their relation to business outcomes. For instance, do changes in social network orientation necessarily lead to the acquisition of different types of support that were not available initially? Second, research should assess reasons for disconnect from the social network and how this affects resource acquisition. Analyzing the types of relationships which are developed and continued, or even discontinued for that matter, would allow us to better understand which types of support are appreciated most by the female entrepreneur. Third, future research must address the possible hidden agenda of strong ties vs. weak ties. We need to examine exactly where family and

friends fit into the classification of strong and weak ties: (1) Do all family members necessarily constitute strong ties? (2) Is it possible for friends to represent stronger ties than family members? (3) Is there a difference in the types of support provided by ties of different strengths? Finally, future studies can be done to determine whether a higher composition of non-family support sources in the social network constitute more provided help in the form of resources.

## **Limitations**

As can be expected with any research that uses secondary data, this study is not without limitations. It is of a concern that important data may have been lost for the cases that decided not to participate in the second data collection. This is a common challenge faced by most longitudinal data collections. Also, those participants who reported that their business has officially launched can no longer be considered “nascent” entrepreneurs, for they have reached a higher level of the venture creation process. A final concern, the \$25 gift awarded to each participant for each instance of participation in the panel study may also have caused response bias in the data, based on participation just for the sake of receiving the reward.

## **Conclusion**

This study makes a contribution to the literature in two ways. First, the study introduces the concept of change in social network orientation in venture creation, and second it examines social network orientation in terms of gender using longitudinal data. The findings of this study give us a more detailed illustration of the role of social networks in the nascent entrepreneurial process. The study was conducted with hopes of making a contribution to the study of nascent entrepreneurship by introducing the dimension of network dynamics and its possible effects on business outcomes in the venture creation process. The results of the cross-sectional studies from the past were confirmed and the findings from this study lead us to research questions for the future. Support was found for previous studies, maintaining that the social networks of male nascent entrepreneurs contain more contacts outside of the family; that is, having a higher composition of non-family support sources. A significant difference was also found in the orientation of female entrepreneurs' social networks over time, confirming that social

network characteristics are dynamic in nature. Finally, this study suggests that entrepreneurs who maintain an even level of strong and weak ties by changing network orientation over time have better chances of successfully remaining engaged in business start-up activities as opposed to abandoning venture creation efforts.

## References

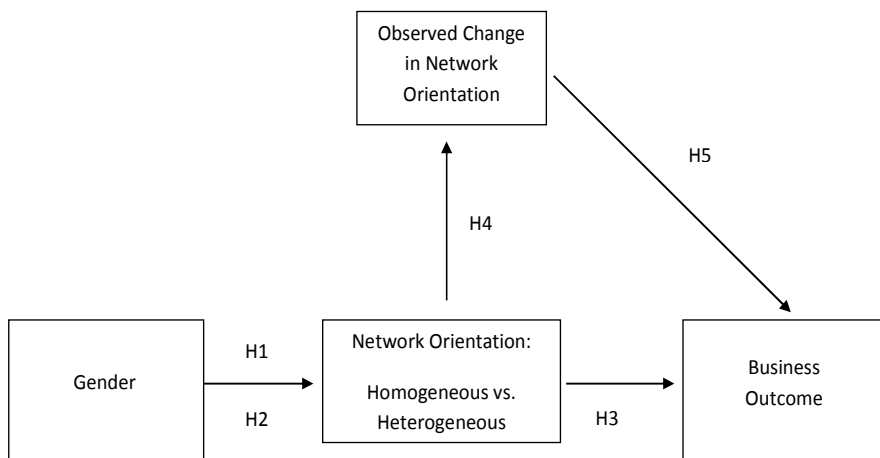
- [1] Aldrich, H., Martinez, M.A. (2001). „Many are called, but few are chosen: An evolutionary perspective for the study of entrepreneurship.“ *Entrepreneurship Theory and Practice*, Summer:41-56.
- [2] Aldrich, H., Elam, A.B., Reese, P.R. (1995). Strong Ties, Weak Ties, and Strangers: Do Women Business Owners Differ from Men in Their Use of Networking to Obtain Assistance? In *Entrepreneurship in a Global Context*, ed. Birley and MacMillan, 1-25, Routledge: MacMillan.
- [3] Aldrich, H., Zimmer, C. (1986). „Entrepreneurship through social networks. In *The art of science of entrepreneurship*, ed. D. Sexton and R. Smilor, 1-23. Cambridge, MA: Ballinger.
- [4] Bebbington, A.C. (1970). „The effect of non-response in the sample survey with an example.“ *Human Relations*, 23:169-180.
- [5] Bruni, A., Gherardi, S., & Poggio, B. (2004). „Entrepreneur-mentality, gender and the study of women entrepreneurs.“ *Journal of International Change Management*, 17(3), 256-268.
- [6] Burt, R. S. (1992). *Structural holes: the social structure of competition*. Cambridge, MA: Harvard University Press.
- [7] Caniels, M.C. and Romijn, H.A. (2008). „Actor networks in strategic niche management: insights from social network theory.“ *Futures*, 40: 613-629.
- [8] DeCarolis, D. M., Saporito, P. (2006). „Social capital, cognition, and entrepreneurial opportunities: a theoretical framework.“ *Entrepreneurship Theory and Practice*, 30(1):41-56.
- [9] Doreian, P., Stokman, F. (1997). „The dynamics and evolution of social networks.“ In Social Network Evolution. In Birley and MacMillan (Eds), *Evolution of Social Networks*, Routledge: MacMillan: pp.17-18.
- [10] Dunbar, R.I., Spoor, M. (1995). „Social networks, support cliques, and kinship.“ *Human Nature*, 6(3): 273-290.
- [11] Gargiulo, M., and Benassi, M. (2000). „Trapped in your own net? Network cohesion, structural holes, and the adaptation of social capital.“ *Organization Science*, 11(2): 183-196.
- [12] Gartner, W.B., Shaver, K.G., and Carter, N.M. (2004). *Handbook of entrepreneurial dynamics: The process of business creation*. California: Sage Publications.
- [13] Granovetter, M. (1985). „Economic action and social structure: A theory of embeddedness.“ *American Journal of Sociology*, 91(3): 481-510.

- [14] Greve, A., Salaff, J.W. (2003). „Social Networks and Entrepreneurship.“ *Entrepreneurship Theory and Practice*, Fall: 1-22.
- [15] Hansen, E.L. (2001). „Resource Acquisition as a startup process: Initial stocks of social capital and organizational foundings.“ *Frontiers of Entrepreneurship Research*. Wellesley.
- [16] Houston, M.B. (2004). „Assessing the validity of secondary data proxies for marketing constructs.“ *Journal of Business Research*, 57: 154-161.
- [17] Kilduff, M., and Tsai, W. (2003). *Social Networks and Organizations*. Thousand Oaks, CA: Sage Publications.
- [18] Kossinets, G., and Watts, D.J. (2006). „Empirical analysis of an evolving social network.“ *Science*, 311(5757): 88-90.
- [19] Lin, N., Cook, K.S., Burt, R.S. (2001). Social capital: theory and research. *Structural holes versus network closure as social capital*. Piscataway, NJ: Aldine Transaction, 31-34.
- [20] Levin, D.Z., Cross, R. (2004). „The strength of weak ties you can trust: the mediating role of trust in effective knowledge transfer.“ *Management Science*, 50(11): 1477-1490.
- [21] Lunkenheimer, E.S., Kittler, J.E., Olsen, S.L. and Kleinberg, F. (2006). „The intergenerational transmission of physical punishment: differing mechanisms in mothers' and fathers' endorsement.“ *Journal of Family Violence*, 10:509-519.
- [22] Menzies, T.V., Diochon, M., and Gasse, Y. (2004). „Examining venture-related myths concerning women entrepreneurs.“ *Journal of Development Entrepreneurship*, 9(2): 89-107.
- [23] Moore, G. (1990). „Structural determinants of men's and women's social networks.“ *American Sociological Review*, 55(5): 726-735.
- [24] Oman, K.S., Krugman, M.E., and Fink, R.M. (2003). *Nursing research secrets: successful research and publication*. Elsevier Health Sciences, 280.
- [25] Renzulli, L., Aldrich, H.E., and Moody, J. 2000. Family matters: Gender, networks, and entrepreneurial outcomes. *Social Forces*, 79(2): 523-546.
- [26] Reynolds, P., and Miller, P. (1992). „New firm gestation: conception, birth, and implications for research.“ *Journal of Business Venturing*, 7: 405-417.
- [27] Salaff, J.W., Greve, A. (2004). „Can women's social networks migrate?“ *Women's Studies International Forum*, 27: 149-162.
- [28] Sequeira, J., Mueller, S. and McGee, J. (2007). „The influence of social ties and self efficacy in forming entrepreneurial intentions and motivating nascent behavior.“ *Journal of Developmental Entrepreneurship*, 12:275-293.
- [29] Scott, J. (1998). „Social Network Analysis.“ *Sociology*, 22 (1): 109-127.
- [30] Shane, S. and Venkataraman, S. (2000). „The promise of entrepreneurship as a field of research.“ *Academy of Management Review*, 25: 217-226.
- [31] Skinner, S. (2001). „Female entrepreneurs in the retail trade: a study of personal and professional traits as they impact on business environments.“ *Journal of Small Business Management*: 183-195.

- [32] Stoloff, J.A., Glanville, J.L. and Bienenstock, E.J. (1999). „Women’s participation in the labor force: The role of social networks.“ *Social Networks*, 21, 91-108.
- [33] U.S. Census Bureau. 2000. *Statistical abstract of the United States*. Washington, DC: U.S. Government Printing Office.
- [34] Verheul, I., Van Stel, A., Thurik, R. (2006). „Explaining female and male entrepreneurship at the country level. *Entrepreneurship & Regional Development*, March: 151-183.
- [35] Wellman, B. (1992). Men in networks: Private community’s domestic friendships. In *Men’s friendships*, ed. Peter Nardi. Newbury Park, MA: Sage Publications.
- [36] Yin, L.C (2003). „Do traditional values still exist in Chinese societies?“ *Asia Europe Journal*, 10: 43-59.

## Appendix A

*Figure 1: Research Model*



## **Uticaj dinamizma socijalnih mreža na biznis „start-up“ aktivnosti: Longitudinalno ispitivanje žena preduzetnika u nastajanju**

### **A P S T R A K T**

*Teorija društvenih mreža sugerise da one postaju dinamične tokom vremena. Ova studija ispituje dinamizam u kontekstu preduzetništva u nastajanju. Hipoteze testirane u prethodnoj literaturi su ponovo testirani u cilju izgradnje temelja za nove hipoteze vezane za odnose između promena u sastavu socijalnih mreža i njihovih efekata na poslovne rezultate. Korišćene hipoteze iz prethodne literature, koje se odnose na uticaje pola na orijentaciju prema društvenim mrežama, su potvrđene. Rezultati pokazuju da među preduzetnicima koji su iskusili promene u odnosu na društvene mreže tokom vremena pokazuju da je bilo više preduzetnika koji su imali uspešne poslovne rezultate od onih koji su odustajali od preduzetničkih napora.*

**KLJUČNE REČI:** *žensko preduzetništvo, društvene mreže, poduhvat stvaranja*

Article history: Received: 1 September, 2014

Accepted: 25 October, 2014