**Designing Global Leadership Development Programs That Promote**

**Social Capital and Knowledge Sharing**

**Inger Stensaker Paul Gooderham**

**INTRODUCTION**

Firms are increasingly investing abroad not only to exploit their knowledge advantages but also to augment their knowledge bases by “buying into” foreign created knowledge assets (Dunning 1997: Cantwell et al, 2010). However, possessing knowledge across different locations within the multinational enterprise (MNE) does not guarantee competitive success. MNEs are dependent on possessing those capabilities that enable them to make use of their knowledge bases (Kogut and Zander, 1993: Szulanski, 1996). Knowledge sharing across business units encompasses not only transfer, but also reciprocal development through exchange and combination (Nahapiet and Ghoshal, 1998). However, the possession of knowledge sharing capabilities among MNEs varies (Gooderham, 2007).

In the discussion of knowledge sharing capabilities it has been argued that one significant attribute is the degree of social capital the MNE has developed. One way to secure knowledge sharing among diverse and geographically dispersed organizations is by developing the firm’s *social capital* (Tsai and Ghoshal, 1998). Social capital refers to “the assets that reside in networks of relationships and affect the conditions necessary for knowledge transfer to occur” (Nahapiet and Ghoshal, 1998: 243). While there is increasing interest in social capital as a means for securing knowledge sharing, and much of this literature acknowledges the role of social capital (e.g. Taylor, 2007: Mäkelä, Björkman and Ehrnrooth, 2009), little attention has been directed to accumulating knowledge on how to build organizational social capital (Bolino, Turnley and Bloodgood, 2002). On the basis of a literature review, Gooderham (2007) identifies in-house global leadership development (GLD) programs as one means to develop the social capital necessary for knowledge sharing. However, what is unclear is which aspects to GLD programs are significant for the development of social capital for knowledge sharing purposes. The purpose of this paper is to identify critical aspects to GLD programs that aim at enhancing social capital and knowledge sharing across the MNE.

Our research is divided into two phases. Because of the lack of both theorizing and previous empirical research related to this research question, we chose to initially pursue an exploratory approach to the design of GLD programs. The context of our research is a Scandinavian MNE, Conco, which views its GLD program as specifically designed to generate social capital for knowledge sharing purposes as well as increasing the competencies among the leadership. This exploratory approach reveals two salient aspects to the design of such programs. The first concerns the selection of participants not least in the sense of participants’ previous GLD program experience. The second design feature concerns the outcome of a fundamental process of participation in GLD programs, the impact of group membership during the program. We observe that group membership during the GLD program appears to be critical in relation to the development of social capital and knowledge sharing. On the basis of our qualitative data we develop a research model which we then test empirically**.** Prior to presenting our qualitative findings, research model and quantitative findings, we discuss the concept of social capital in relation to knowledge sharing and present our research setting.

**A SOCIAL CAPITAL APPROACH TO KNOWLEDGE SHARING**

A substantial proportion of the research on knowledge management focuses on putting in place appropriate governance mechanisms for knowledge transfer (e.g. Hansen, 1999: Mahnke and Pedersen, 2004). The social capital perspective represents an alternative approach with its focus on the development of strong relations and shared mindsets among managers and employees working more through informal networks rather than hierarchical structures (Tsai, 2002). The perspective has its roots in a number of studies of intra-MNC knowledge transfer that indicate that inter-unit knowledge transfer is possible only when close relationships between senders and receivers exist (Bresman et al, 1999: Gupta and Govindarajan, 2000: Lyles and Salk, 1996: Simonin, 1999). In their review, Eisenhardt and Santos (2002) highlight that knowledge transfer is impaired when the sender and recipient find it difficult to establish interpersonal interactions because of distance, as is often the case in MNEs. However, when integrative mechanisms for collaboration exist, such as teams and norms, knowledge transfer is facilitated. In short, MNEs that achieve superior levels of knowledge transfer do so because managers are able to ‘create a collaborative context through culture and organizational structure’ (Eisenhardt and Santos, 2002: 152). In similar manner Tsai (2002) argues that informal lateral relations, as opposed to hierarchical structures, represent a more voluntary and personal way of coordinating and spreading knowledge, which fosters diffusion of new ideas. Thus the concept of social capital, with its focus on networks and relations infused by “good will” (Adler and Kwon, 2002: 23) appears suitable for facilitating knowledge sharing.

 The social capital construct was originally developed at the individual level based on community studies within the field of sociology (Coleman, 1988), but has since spread to numerous other fields within the social sciences, and also been applied as a more collective trait (Portes, 2000). Nahapiet and Ghoshal (1998) introduced social capital within the organizational context. Leana and Van Buren (1999) define organizational social capital as *“a resource reflecting the character of social relations within the firm”* (pg 538). However, social networks represent relations between *individuals* and knowledge resides primarily within *individuals*. According to Kostova and Roth (2002) individual social capital has the potential to transform into organizational social capital if the organization succeeds in making personal connections available to the organization. We examine individual employee’s social network relationships and the extent to which these reach beyond their immediate organizational division in our study of corporate social capital. Although aggregating individual-level data to the organizational level is fraught with challenges, our focus is in line with recent advocates claiming that organizational phenomena, such as knowledge sharing and organizational social capital, must be grounded in the micro-foundations of individual action and interaction (Felin and Foss, 2005).

 Nahapiet and Ghoshal (1998) have argued that a firm’s social capital consists of three dimensions: the relational, the cognitive, and the structural. The structural dimension refers to the presence or absence of specific network or social interaction ties between units of the MNE and the overall configuration of these ties. The relational dimension encompasses such facets of personal relationships as trust, obligations, respect and even friendship which together increase the motivation to engage in knowledge exchange and teamwork. Hence this dimension describes the quality or the nature of the connections between individuals in an organization (Bolino, Turnley and Bloodgood, 2001). The cognitive dimension refers to shared interpretations and systems of meaning within a social network. The mere existence of a network, even with close and trustful relations is not sufficient; knowledge sharing requires an ability to understand one another. The cognitive dimension refers to the shared language and codes that provide the foundation for communication. These three dimensions are highly interrelated, so that in practice it is problematic to differentiate them.

The literature on social capital also distinguishes between ‘bridging’ relationships referring to linkages between groups (Granovetter, 1973: Burt, 1992) and ‘bonding’ referring to with-in group relationships (Coleman, 1988). Bridging can be a source of new and alternative information and it can be a first step towards developing stronger ties (Putnam, 2002) while bonding facilitates interaction, sharing of knowledge, and can generate trusting relationships, but tends to become less of a source for new and alternative information.

Social capital solves coordination challenges (Bolino, Turnley and Bloodgood, 2002: Tsai, 2002) and facilitates the flow and exchange of information and knowledge (Nahapiet and Ghoshal 1998), and social interaction makes individuals work more effectively and efficiently together and provides easier access to network resources (Bolino, Turnley and Bloodgood, 2002). However, social capital may come at a cost as interpersonal networks can produce strong norms and in-group processes which limit the absorption of new information, openness to alternative views and act as a barrier to change (McFadyen and Cannella, 2004).

Despite the increasing interest in social capital and the positive effects it is argued to have on knowledge sharing, we have only limited insight into how corporate social capital can be developed within a MNE. Gooderham (2007) has argued that social capital across MNEs is enhanced by socialization and by motivation mechanisms. Motivation mechanisms refer to a mix of rewards and sanctions that both establish and maintain particular norms or “rule systems” for knowledge development and combination (Kostova et al, 2008). Osterloh and Frey (2000) argue that it is intrinsic rather than extrinsic motivation mechanisms that are critical for knowledge sharing and empirical research by Gooderham et al. (2010) supports this view. Socialization, on the other hand, refers to such mechanisms as transnational project teams and global leadership programs that promote the internalization of MNC-wide shared goals. Crossborder travel (Bjørkman et a., 2004: Bozkurt and Mohr, 2011) and pursuing global careers (Mäkelä and Suutari, 2009) can also contribute in developing social relationships According to Tsai (2002) social interaction amongst corporate divisions will foster knowledge sharing as long as the divisions do not compete for internal resources.

A GLD program will commonly have as one of its core aims to develop the individual leader, that is to say the individual’s level of knowledge, skills and abilities. However, GLD programs can be designed not only as a means to developing the individual leader (i.e. leader development) but also the leadership of the organization (i.e. leadership development) or both (Day, 2000). While leader development refers to individual skills, leadership development has to do with developing relational and social skills, which is the basis for the development of social capital (Day, 2000). Thus, a GLD program may be perceived as a structured context within which social capital potentially may be developed (Gooderham, 2007). In bringing leaders together, an MNE creates a basis for potentially developing trusting relationships, a shared mindset, and inter-unit networks. The format of a GLD program will typically depend in part on the extent to which the program is aimed at developing the individual leader or the organizations’ social capital or both. In the next section we present the content and format of a GLD program which had a specific aim of developing social capital. After an initial presentation of the context of the GLD program we present an overview of our qualitative data which was collected between Fall 2007 and early 2009.

**RESEARCH SETTING: CONCO AND THE SCANDINAVIAN LEADERSHIP DEVELOPMENT PROGRAM**

Conco ASA is a leading Scandinavian building contractor and property developer operating within construction, property development and industrial operations. It is headquartered in Oslo, Norway. Since the 1990s it has expanded rapidly mainly through acquisitions both in Norway and Denmark. Additionally it has developed green-field operations in Sweden. While the construction industry is a highly cyclical industry significantly affected by the recent and previous economic recessions, since its foundation some seventy years ago Conco has continuously achieved high performance. The strategic basis consists of a strong value-based company culture with an emphasis on high levels of involvement and cooperation. According to the top management, its rapid expansion has created a pronounced need for consolidation and integration across its operations and borders:

*The need for values became apparent when we were doing acquisitions as we suddenly had so many different cultures in Conco. Similar systems did not make us similar. We needed a shared history…We have since developed a series of tools aimed at developing our culture. (Corporate Top Manager)*

Thus, in line with Day (2000), Conco’s leadership program, “Scandinavian Leadership Development” (SLD), represents a corporate effort not only aimed at developing personal leadership skills but also at securing common values and a common identity across Conco’s various operations that can supersede divisional and national cultures and facilitate cross-border collaboration and knowledge sharing.

In an interview conducted with the CEO the aims of SLD were further specified. He defined SLD as going beyond developing personal leadership skills to include:

*…two additional effects (to be achieved) through the leadership program: (1) agreement on values, goals and culture, and (2) the network. (CEO)*

Thus SLD has been designed with the specific purpose of developing collegial relations, trust, and a shared mindset across corporate divisions. Furthermore, our interview with the CEO indicated that this combination of networks, common values and trust – which we will refer to as social capital - is regarded as critical to a decentralized organization, such as Conco, if knowledge sharing across operations is to occur. Top-down and centralized knowledge-sharing systems are regarded as simply unviable. Finally, our interviews with the CEO indicated that these aims had become more pronounced since the inception of SLD in 2004.

In the period since its launch in 2004 and the end of 2008, seven cohorts of SLD participants had completed the program. The program was designed in a cascading fashion first targeting leaders from the corporate level and later also regional leaders. Line managers were then given the responsibility to nominate candidates for the program. In addition, particularly talented managers could be nominated even if they were not yet at a regional or corporate level. Corporate HR followed up on the nominations to ensure participation from the different divisions and countries. The program format was designed as three three-day seminars. The focus of the first seminar was typically on Conco values and strategy, the second seminar emphasized leadership role and organization development, while the third was mainly on communication and presentation. Leadership development lectures and reflections were typically conducted by external consultants. In addition, the CEO made a point of attending each seminar to communicate his views on strategy and values, as well as to share his own experiences on current topics such as change management. Group work ran parallel with the lectures and discussions. Corporate management nominated a current business issue for the group work thereby ensuring “Earning while Learning”. The group membership cut across nations, divisions, gender and great care was taken to avoid putting people with subordinate or supervisory relations in the same group.

Although SLD has generally been consistent in its approach across cohorts, some modifications to the program have occurred. The SLD program was originallyinitiated to develop the leadership skills in Conco, but over time an increasingly emphasized goal was to develop a shared corporate culture across various business areas (divisions) and nations. In general the focus on a common corporate culture and leadership development as a collective effort rather than personal leadership development was increasingly emphasized in the program. The program format was also adjusted so that the proportion of lectures and presentations increased somewhat in relation to plenary discussions. Additionally, in 2007 the program was revised to include more project work, also including group meetings in between the three leadership seminars. The focus of these additional group meetings was mainly project work.

**DATA OVERVIEW**

In order to explore SLD’s impact on the development of social capital and the facilitation of knowledge sharing, we initially draw on three qualitative data sets collected within Conco (see Table 1). The first of these comprised several meetings as well as formal interviews with three corporate managers (the CEO, the HR Director and the Strategy Director) and interviews with divisional top managers from the three Scandinavian countries in which Conco operates (5 Norwegians, 3 Swedes, 2 Danes). All of these divisional top managers had participated in SLD. Each interview lasted between 60 to 90 minutes. The questions focused on tracing the background and history of the company, understanding the internationalization process and strategy, capturing the main business challenges in order to understand what types of knowledge managers viewed as critical, the tools, techniques and processes applied to foster knowledge sharing, and finally what they view as the main barriers to developing dynamic capabilities based on such knowledge sharing. The interviews were transcribed, analyzed and first written up as a broad account of Conco’s history, its strategy and internationalization process. With this backdrop, a within-case analysis was performed probing specifically top management’s perspective on knowledge sharing.

*---Table 1 about here---*

 The second qualitative data set comprises real-time feedback reports from six SLD participants as they progressed through each of the three sessions of the SLD class of the fall of 2008. We first met onsite with the participants in Sweden and informed them about the project as well as instructed them on how to report to us by e-mail within one week after each of the three sessions. Since the participants reported in a written format with predefined categories of questions, our data were already written up and required no further treatment other than being entered into comparative tables. However, the reports we received were rather brief which led us to adjust our questioning in an attempt to obtain richer data material in the third report from participants. The third and final report**s** werestill brief and we therefore supplemented these data with telephone interviews upon completion of the full 2008 SLD program. The telephone interviews which took place late 2008 were tape recorded and notes were transcribed shortly after the conversations. These data were coded in terms of program results, such as: social capital outcomes in the form of any or all three dimensions (structural, cognitive and relational) and personal leadership development (such as leadership skills, competences, tools for leadership etc.). Statements related to knowledge sharing were coded as different perspectives on knowledge sharing (for instance statements indicating that knowledge sharing as positive and worthwhile versus statements suggesting that the respondent viewed knowledge sharing as challenging and time consuming) and as actual references to situations where knowledge sharing had taken place. We also worked inductively searching for factors that appeared important for knowledge sharing and development of social capital. Through this process, we acknowledged that previous program experience and perceived gains from group work could be important for understanding whether knowledge was shared and social capital was developed. A preliminary research model was developed illustrating the factors that appeared to influence what each participant obtained from the program. Early 2009 we used our preliminary model as a basis for a survey submitted through quest-back to all SLD participants who had taken part of the program in the course of its operation. These data will be discussed in more detail below after we have presented the research model.

 The third set of qualitative data consists of corporate documents and plans describing the SLD program from its inception and throughout its history. This includes strategy plans, CEO corporate presentations, SLD presentations and company management and governance models. These documents provide valuable information on what was emphasized in the formal communication within the company and by the CEO, as well as evidence of how the SLD program focus had evolved over time. As such, they enabled data triangulation. The documentary data also served as valuable input prior to our primary data collection.

**QUALITATIVE FINDINGS**

**Corporate intentions with SLD**

In our presentation of Conco above we drew on our first qualitative data set as well as our documentary data to show that although the terminology top management employs differs from ours, it is reasonable for us to construe its aim as being one of developing social capital.Thus when these top managers typically refer to the SLD program “as an arena for getting to know people from other divisions” and as “an opportunity for networking” we view this as referring to the development of the structural dimension of social capital. Similarly when they refer to the aim of “developing trusting relationships among participants” we identify the relational dimension of social capital. Equally when they view SLU as aimed at contributing “to developing a shared mindset”, “a shared set of values” and “common norms” we interpret this as referring to the cognitive dimension of social capital.

Although divisions in Conco are continuously compared in terms of their results and there are incentive systems, such as performance-related bonuses, top management is very explicit in emphasizing cooperative values. Likewise it articulates a view that knowledge sharing is values-driven. As such top management expresses a strong belief in the significance of intrinsic motivation to share knowledge, based on a desire to share one’s own knowledge base and seek other people’s expertise. This latter aspect to Conco thinking is illustrated in the following remarks by Conco’s CEO:

*All people are interested in sharing their knowledge…You have pride in telling others about something you are good at. I cannot stand attitudes like “what’s in it for me?” They make me frown. It’s all about having an open attitude and being generous…Then other people will want to work with you…Contributing even if you don’t get anything in exchange right there and then…*

*I tell the SLD participants that perhaps some networks will not be as relevant, but this is long-term. The networks have to be maintained and taken care of and if they are misused they will be destroyed.*

**Social capital outcomes**

Drawing on our complete set of interview data we observe thatSLD participants emphasized outputs in terms of developing shared values, a common understanding of Conco, increased trust in colleagues and the opportunity to develop a corporate network. In general, our informants reported relatively more modest outcomes in terms of their own leadership development and organization development skills. Thus the primary outcomes of SLD may be construed as comprising social capital development. The quotes in table 2 contain typical statements from the managers regarding these primary outcomes from participation in SLD. We have attempted to group these statements in accordance with Nahapiet and Ghoshal’s (1998) tri-dimensional conceptualization of social capital, but we readily concede that some of the statements span more than one of the dimensions.

*---Table 2 about here---*

 The evidence in Table 2 indicates that SLD appears to create a meeting place for managers who would not otherwise meet. Several participants point out the importance of this initial meeting place. For some of them additional meeting places have been established based on this initial meeting within SLD. Those who set up new meeting places as a result of participating in SLD appear to have a shared business challenge, the same group affiliation during SLD, or the same nationality.

The SLD program thus appears to contribute in developing relationships that bridge different divisions also across nations. The interview data also provide evidence of bonding and the development of trusting relationships between colleagues, suggesting that the relational dimension of social capital is also developed through the SLD program. Participants particularly emphasize that having shared the SLD experience lowers the barriers for contacting previous class mates asking for assistance and advice. Not only do they know whom to contact, but they also trust the competencies of previous program participants and they are able to communicate together through the shared language developed in SLD.

The cognitive dimension of social capital has to do with shared interpretations, systems of meaning, and shared language and codes. As mentioned, top management puts much emphasis on communicating shared values and the Conco strategy. Feedback from participants in the program suggests that a shared understanding of the Conco values and strategy has indeed evolved throughout the program. The last quote in Table 2 points to the time it actually takes for corporate values and attitudes to sink in – suggesting that this is not a one-shot attempt, but multiple meetings are important.

**Knowledge sharing outcomes**

The SLD participants were explicitly asked what was needed for knowledge sharing and why they would want to share knowledge. Their replies indicate a close alignment with corporate management and the CEO. When asked about why people share knowledge, SLD participants emphasize the desire to show others what they know and the ability to contribute to others as well as gain from others. Key findings are displayed in Table 3.

*---Table 3 about here---*

Whereas the quotes in Table 3 illustrate how managers think about knowledge sharing, we were also interested in probing their actual *experience of* sharing knowledge. This distinction was based on the assumption that ‘good’ intentions do not always translate into action. Hence we felt it was important to gather actual examples and illustrations of knowledge sharing taking place in practice, rather than merely statements reflecting people’s thoughts about knowledge sharing, which are often also influenced by what is deemed as politically correct and what the interviewer might like to hear. The quote below is one example of evidence indicating that SLD has not only resulted in convergent perspectives on knowledge sharing, but also in knowledge sharing and collaboration.

*We see results. Previously the Swedes and Danes never collaborated, but now we had a collaboration project between Skåne [Sweden] and Denmark (Corporate Manager).*

The construction industry is generally locally bound and there is limited collaboration across regions and national borders. This is also the reason that construction practices appear so different. Despite differences in regulatory conditions which also hampered cross-national collaboration, the statement above indicates that construction-based knowledge is increasingly shared across national borders.

**SLD design issues**

Our second qualitative data set explored two issues that emerged as potentially important factors in our initial interviews. The first one related to whether participants had previous experiences of similar programs and the way in which these affected their SLD outcomes. The other concerned their experiences within the SLD work-groups. Our data suggested that previous experience with leadership development programs influenced the expectations participants had of SLD and their assessments of the outcomes from the program.

*I have several management programs from before and I did not get any useful tools here. They could have increased the tempo in the program. (SLD participant 4)*

*I had extensive leadership development experiences and had high expectations. The content of the program is a catastrophe. I tried to provide feedback on this, but was not successful…However, I think people without previous leadership development programs find SLD valuable. (SLD participant 3)*

These quotes indicate that participants with previous experience from leadership development programs in other companieshave high expectations, but are not gaining any new leadership development competencies. They are therefore critical to the program contents. This is particularly the case for participant 3 above. However, referring to table 2, we may note that participant 3 is extremely positive about the social capital outcomes. Hence it appears that those with previous program participation derive social capital benefits, but not personal leadership benefits. A possible explanation for this is that they already have leadership development experiences, but they lack a network within the new organization and specific leadership knowledge about corporate strategy and values.

The functioning of the SLD work-groups to which they were assigned also emerged as an important issue through our inductive analyses. It is through the group work that SLD participants have an opportunity to make use of their previous skills and experience and new knowledge acquired during the program. The group work centers on practical, operational and strategic issues which requires that participants share their knowledge and put experience and theoretical knowledge into practice. The groups generate solutions that involve both sharing and creating knowledge. This is also a setting which facilitates the development of closer relationships and trust between participants. Few participants had negative group experiences, but when they were mentioned our impression was that they were closely linked to negative assessments of the whole program. Thus for example,

*The group work did not work well. We had two top managers (in our group) who dominated and they kind of set the scene for others. They did [the group work] without putting any effort into it. (SLD participant 1)*

Summing up our findings from the interviews and the in-process reports, participants reported substantial social capital outcomes. These span the creation of meeting places, opportunities for networking and developing trusting relationships, and the development of shared values and a common understanding of corporate strategy. Although several participants expressed a wish for more functional leadership tools and skills, the main benefits of the program appear consistent with the corporate goals for SLD particularly as SLD increasingly became aimed at developing what we refer to as social capital. As a consequence of our qualitative analyses, two factors emerged that appear to influence the SLD outcomes. The first of these concerns the experience participants have previously had of leadership programs and the second to the experiences of their group work during SLD.

We will refer to the first of these two factors as “Previous program experience” and the second as “Gains from groups”. In Figure 1 we have incorporated these two factors in a preliminary research model that aims at examining their effects on SLD outcomes and knowledge sharing outcomes. The model contains eight hypotheses. In the next section we will now clarify the reasoning underlying each of these hypotheses.

*---Figure 1 about here---*

**Hypotheses**

At the core of the model are the two outcomes of SLD: social capital benefits and personal leadership skills. Our qualitative data lead us to expect that these two outcomes will vary according to whether participants have undertaken such programs in any previous companies and their gains from group work. In other words, the selection of participants and their social interaction during the program are key drivers of social capital and personal leadership skills development. Thus, we hypothesize:

***H1a: Previous experience with leadership programs will positively affect social capital outcomes.***

***H1b: Previous experience with leadership programs will negatively affect personal leadership skills outcomes.***

***H2a: Positive assessments of group work will positively affect social capital outcomes.***

***H2b: Positive assessments of group work will positively affect personal leadership skills outcomes***

Our qualitative data suggest a second set of hypotheses that involve the relationship between social capital gains and knowledge sharing.

***H3a: Social capital is positively related to perspectives on knowledge sharing.***

***H3b: Social capital is positively related to having experienced knowledge sharing.***

Finally our qualitative data indicate that participants who were dissatisfied with the group work were dissatisfied with the GLD in general. This leads us to expect that “gains from groups” also has an impact on knowledge sharing. Thus we hypothesize that:

***H4: Positive assessment of group work is positively related to perspectives on knowledge sharing.***

***H4b: Positive assessment of group work is positively related to experienced knowledge sharing.***

**Operationalizing key constructs**

In order to be able to test our hypotheses we developed a questionnaire which was distributed among all SLD participants throughout the history of the program in January 2009. A total of 159 Conco managers had completed the program by the end of 2008 and we received 103 responses. Thus the overall response rate was nearly 65 %. In the survey, we set out to measure each of the constructs in figure 1. These operationalizations are described in Table 4 which also features their Cronbach Alphas. Not included in Table 4 is the four-fold categorization of previous program experience: Previous participation in Conco leadership development programs; Participation in leadership development programs in previous company/companies; Participation in open (external) leadership development programs; No previous participation in leadership development programs. The latter category is the reference category.

*---Table 4 about here---*

In addition we have included a number of control variables: participant’s home country (Norway is the reference country), corporate division (construction is the reference category) and SLD class (the class of spring 2005 is the reference category). Previous program experience features as a control variable in the testing of H3a and H3b.

Since there is no random data-generating process at work that justifies generalizations to a well-defined population, inference statistics are superfluous. Because nearly the entire target group is included, we assume that the population of interest is covered or close to covered. Thus, where *t-*statistics or other inference qualifying quantities are reported, the main purpose is to point to parameters that are clearly noteworthy i.e. given that we had a random sample, the parameter would be significant. While for purposes of generalization it is an advantage to have such a large proportion of the target population included in the survey measurement errors due to misinterpretations, misunderstandings and individual particularities, such as excessive yes-saying, defensiveness with respect to scales (always answering in the middle) are, however, present in most survey data and cannot be ruled out. On the other hand, when people are highly motivated to answer, as is the case here, measurement errors may be acceptable and most likely random.

**Empirical analysis**

Initially we performed a correlation analysis which is contained in Table 5. The table also features means for our constructs. These indicate that social capital benefits and knowledge sharing outcomes of the SLD program are greater than outcomes in regard to personal leadership skills. This is in line with the Conco corporate aim for the SLD program. In regard to the correlation matrix we note the significant correlations between “gains from groups” and social capital benefits, personal leadership skills and knowledge sharing.

*---Table 5 about here---*

We then conducted a regression analysis to test our hypotheses. The results are displayed in Table 6.

*---Table 6 about here---*

In testing H1a we generally observe no effect of previous program experience on social capital benefits. However, there is one significant exception and that is the positive impact of having undertaken leadership programs with previous companies. It would appear that participants who have such experience from previous employers gain significantly more Conco specific social capital than any other group of participants. In this regard H1a is supported. Likewise experience with leadership programs from previous employers also has a significant negative effect, albeit at the 10 percent level, on personal leadership skills. Thus H1b is also supported.

The results further indicate that assessments of the gains from group work significantly impacts both social capital benefits and personal leadership benefits. Thus hypotheses 2a and 2b are both supported. Thus it appears that Conco has succeeded in developing social capital through the SLD program.

Our final analysis focuses on examining whether social capital has an impact on knowledge sharing. As above, we distinguish between perspectives on knowledge sharing and having actually experienced knowledge sharing. Our analyses confirm a relationship between social capital and both perspectives on knowledge sharing and experiences of knowledge sharing. Hence both hypotheses 3a and 3b are supported. This accords well with previous findings in the literature on social capital and its impact on knowledge sharing (e.g. Tsai and Ghoshal, 1998).

Examining direct effects from “gains from groups” on the two knowledge sharing variables provides support for H4b, and somewhat weaker support for H4a. In other words, the impact of “gains from groups” is primarily on experienced knowledge sharing, but there also appears to be a somewhat weaker effect on perspectives on knowledge sharing.

In regard to our control variables, we note that participants from the Industry Division were negatively disposed to perspectives on knowledge sharing. We speculate that this may be due to the nature of the business, which is highly labor and machine intensive and operates with small margins, whereas for instance the Construction Division depends on high-competence work performed in projects where knowledge sharing is an essential part of the activity. We also note that participants with program experience from previous employers had a significantly negative view of perspectives of knowledge sharing. This is somewhat paradoxical given that these same participants acknowledged significant social capital benefits from SLD. In contrast we note that participants from Sweden have a somewhat more positive view of perspectives on knowledge sharing in relation to their Norwegian counterparts and, to a lesser extent, their Danish colleagues. We speculate that this may be a product of the expansion mode of Conco in Sweden, i.e. unlike in much of Norway and Denmark, Conco expanded on the basis of green-field entry. Thus in Sweden those who joined Conco have done so on a “voluntary” basis and may be therefore more inclined to a positive view of knowledge sharing than those who have joined Conco through acquisitions. This conjecture receives some support when we examine the negative impact of leadership development program experience from previous employers on perspectives on knowledge sharing. Many of those with such experience have likely received this prior to their firms being acquired by Conco. We speculate that this may possibly negatively color their perception of knowledge sharing in Conco. Finally, we note some SLD class effects in regard to perspectives on knowledge sharing and experienced knowledge sharing. We have no explanation for this.

 Finally, we note some SLD class effects in regard to perspectives on knowledge sharing and experienced knowledge sharing.

**IMPLICATIONS and CONCLUSIONS**

Drawing on multiple sources of qualitative and quantitative data collected over a period of 18 months, we have examined the degree to which SLD contributes in developing corporate social capital and subsequently knowledge sharing. This study documents the effects of the SLD program and shows that it has indeed been successful in terms of developing the social capital in Conco and enhancing knowledge sharing. Our analyses show that managers report significantly higher outcomes on social capital benefits as opposed to more traditional personal leadership skills. We interpret this as evidence that leadership programs such as SLD can contribute to the development of social capital. Furthermore, taking into account how the goals with the SLD program evolved over time, we interpret these results as being in line with corporate intentions.

Our qualitative findings indicate that for many Conco managers, SLD clearly functions as a potent meeting place where international, as well as cross-divisional, networks can be established and perhaps later also strengthened. In some cases we also find evidence that SLD has generated new meeting places, but we have limited information on the effects of emerging networks and also their duration. The cognitive dimension of social capital is developed both through the conversations and discussions that take place during the program but also in the presentations by the CEO where he combines corporate information with personal experiences. On the relational dimension of social capital, we conclude that SLD appears to be a successful arena for bridging leaders from different divisions and nations, while there is more limited evidence of bonding.

Our interest in social capital is inherently tied to knowledge sharing, which is an explicitly stated value in Conco. The study reported here confirms the linkage between social capital and knowledge sharing, both when it comes to the perspectives held on knowledge sharing and actual experience with knowledge sharing.

We have identified two factors that are critical for understanding and explaining what the participants derive from a program such as SLD: their previous program experience and their assessments of outcomes from group work.

We observe that previous leadership development program experience has a positive effect for social capital when that experience stems from a previous company. This is a finding that our qualitative data was unable to specify. Our examination of our control variables indicates that previous program experience appears to have a negative effect on perspectives for knowledge sharing and, when we examine nationality and observe that this is not the case for Swedish managers, we speculate as to whether this is tied to the Conco’s modes of expansion.Clearly, if this is the case, this has an important design implication in the sense that MNEs ought to purposefully target individuals according to expansion mode.

“Gains from group work” is not only an important factor for the development of social capital, but it is also significant for both the development of personal leadership skills and the experience of knowledge sharing. In that sense this design aspect to SLD is of considerable significance. Our qualitative data indicate that in the case of SLD, Conco had invested care in ensuring that the groups were balanced in terms of division and nationality. In addition, superiors were never placed in groups where subordinates or anyone reporting to them were a member. Hence there were no competitive dimensions introduced within the groups. Each group was also given a task or challenge which was deemed as strategically or operationally important for the corporation. Our qualitative analysis suggests that when the task was perceived as relevant and interesting, the group members both shared knowledge and developed new knowledge. Our qualitative findings also indicate that the leaders who participated in SLD had a specific aim of networking and getting to know the other participants. This lack of competitive mindset internally among the participants in the program was further manifested through statements of friendly competition on performance, but no personal or zero-sum competition. This resonates with Gratton’s (2007) focus on the need for a collaborative mindset for hot spots and innovation to evolve in organizations.

Related to the lack of competitive mindset, we observe that the SLD program focused on developing organizational leadership rather than developing individual leaders. By this we refer to the focus on group work, collaborative work and drawing on each other’s experiences. This supports the work by Day (2001) indicating that social capital will most likely not be developed to the same degree when leadership programs focus on developing the individual leader as opposed to focusing on collaboration and team work.

These findings carry important implications for managers who design leadership development programs. If the purpose is to promote knowledge sharing and social capital across national and divisional borders, then they need to carefully consider the selection and composition of program participants. Many managers have been through a number of leadership programs; hence management must consider the sequence in which to plan such a program and how to balance participation from both experienced and less-experienced leaders. Managers who have experience with leadership programs from previous companies report the highest gains in terms of social capital and should therefore be included. However, a balance between newcomers and more seasoned managers is necessary since newcomers have not yet been socialized into the corporate values. Additionally, we have argued that the mode of expansion appears to influence perspectives on knowledge sharing and is thus an additional aspect to GLD selection that should be considered. Finally, our findings indicate the importance of well-functioning groups for GLD programs. Not only does this matter in regard to the development of personal leadership skills, but it is also of importance for social capital development and knowledge sharing. Thus careful consideration of how to put together the groups and assigning meaningful tasks to the groups appears crucial.

One major limitation of our study is that it was conducted in Scandinavia and consisted exclusively of Scandinavian managers. Hofstede’s (1980a, 1980b) findings indicates that the Scandinavian countries are low in terms of “masculinity” and “power distance” which suggests that Scandinavian companies are particularly suited to the collaborative ideas within the social capital perspective as manifested in the thinking of Conco top management. One might question whether programs such as SLD could be as successfully employed in settings with different cultural characteristics, such as the UK, the US and Eastern Europe. As argued by Gomes and Sanchez (2005) MNEs will need to take into account the idiosyncratic cultural context of the countries they operate in as they attempt to develop social capital. Successfully developing corporate social capital in other cultural contexts might involve mechanisms other than those we have identified in the context of Conco.

 A second limitation is that while a large proportion of the target population of SLD participants is covered in our quantitative data; neither our qualitative nor our quantitative data sets enable us to compare our findings with managers who have not participated in SLD. Given this lack of control group or point of comparison we cannot be certain that it is the SLD program as such that is generating social capital and knowledge sharing. A third limitation relates to the survey-based part of our research and concerns our use of cross-sectional data. However, our qualitative data does indicate that SLD participants view knowledge sharing as a consequence of increased social capital.

A final limitation is that our focus has been on the formal aspects of SLD. We have for example not investigated “the bar effect”, that is the networks and relations that are generated through purely social gatherings that are not part of the formal program. Thus future research into GLD programs should attempt to distinguish the formal and the informal aspects of such programs.

**References**

Adler, P.S. and Kwon, S.W. (2002), ‘Social capital: prospects for a new concept’, *Academy of Management Review*, 27, 17–40.

Bjørkman, I., Barner-Rasmussen, W, and Li, L. (2004), **‘**Managing Knowledge Transfer in MNCs: The Impact of Headquarters Control Mechanisms’, *Journal of International Business Studies,* 35:5, 443-455.

Bolino, M.C., Turnley, W.H. and Bloodgood, J.M. (2002), ‘Citizenship Behavior and the Creation of Social Capital in Organizations’, *Academy of Management Review*, 27:4, 505-522.

Bozkurt, O. and Mohr, A.T. 2011. ‘Forms of cross-border mobility and social capital in multinational enterprises’, *Human Resource Management Journal*, 21:2, 138-155.

Bresman, H., Birkinshaw, J. and Nobel, R. (1999), ‘Knowledge transfer in international acquisitions’, *Journal of International Business Studies*, 30, 439–62.

Burt, R. (1992), *Structural holes: The social structure of competition.* Cambridge, MA: Harvard University Press.

Cantwell, J., Dunning, J. and Lundan, S.M. (2010), ‘An evolutionary approach to understanding international business activity: The co-evolution of MNEs and the institutional environment’, *Journal of International Business Studies*, 41:4, 567-586.

Coleman, J.S. (1988), ‘Social capital in the creation of human capital’, *American Journal of Sociology*. 94, 95-120.

Day, D.V. (2000). ‘Leadership development: A review in context’, *Leadership Quarterly*, 11:4, 581-613.

Dunning, J.H. (1997), ‘The sourcing of technological advantage by multinational enterprises’, In K. Macharzina, M.-J. Oesterle and J. Wolf (eds.), *Global Business in the Information Age.* Proceedings of the 23rd Annual EIBA Conference, Stuttgart, pp.63-101.

Eisenhardt, K. and Santos, F. (2002), ‘Knowledge-base view: a new theory of strategy?’, In Pettigrew, A., Thomas, H. and Whittington, R. (Eds), *Handbook of Strategy and Management*. Thousand Oaks, CA: Sage.

Felin, T. and Foss, N. (2005). Strategic organization: A field in search of micro-foundations. *Strategic Organization*, 3, 441-455.

Gomez, C. and Sanches. J.I. (2005). ‘HR’s strategic role within MNCs: helping build social capital in Latin America’. *The International Journal of Human Resource Management,* 16:12, 2189-2200

Gooderham, P.N. (2007), ‘Enhancing knowledge transfer in multinational corporations: a dynamic capabilities driven model’, *Knowledge Management Research and Practice*, 5, 34–43.

Gooderham, P.N., Minbaeva, D. and Pedersen, T. (2010), ‘Governance Mechanisms for the Promotion of Social Capital for Knowledge Transfer in Multinational Corporations’,  *Journal of Management Studies* (Forthcoming: Published online:11 Feb 2010).

Granovetter, M. (1973), ‘The Strength of Weak Ties’, *American Journal of Sociology*, 78, 1360-1380.

Gratton, L. (2007), *Hot Spots. Why some companies buzz with energy and innovation and other don’t.* Prentice Hall, Harlow.

Gupta, A. and Govindarajan, V. (2000), ‘Knowledge flows within multinational corporations’, *Strategic Management Journal*, 21, 473–96.

Hansen, M.T. (1999), ‘The search-transfer problem: The role of weak ties in sharing knowledge across organization subunits’, *Administrative Science Quarterly*, 44, 82-111.

Hofstede, G. (1980a), *Culture's consequences: international differences in work-related values*, Beverly Hills, CA: Sage.

Hofstede, G. (1980b), ‘Motivation, leadership and organization: Do American theories apply abroad?’, *Organizational Dynamics*, Summer, 42-63.

Kogut, B. and Zander, U. (1993), ‘Knowledge of the firm and the evolutionary theory of the multinational corporation’, *Journal of International Business Studies* 24. 625-645.

Kostova, T. and Roth, K. (2003), ‘Social Capital in Multinational Corporations and a Micro-Macro Model of its Formation’, *Academy of Management Review*, 28:2, 297-317.

Kostova, T., Roth, K. and Dacin, T. (2008), ‘A Discursive Perspective on Legitimation Strategies in Multinational Corporations’, *Academy of Management Review,* 33, 985-993.

Leana, C.R. and Van Buren III, H.J. (1999), ‘Organizational Social Capital and Employment Practices’, *Academy of Management Review*, 24:3, 538-555.

Lyles, M. and Salk, J. (1996), ‘Knowledge acquisition from foreign parents in international joint ventures: an empirical examination in the Hungarian context’, *Journal of International Business Studies*, Special Issue, 877–903.

Mahnke, V. and Pedersen, T. (2004), ‘Knowledge Governance and Value Creation’ in Mahnke and Pedersen (eds) *Knowledge flows, governance and the multinational enterprise. Frontiers in international management research.* Palgrave Macmillan.

McFadyen, M.A. and Cannella, A.A. (2004), ‘Social Capital and Knowledge Creation: Diminishing Returns of the Number and Strength of Exchange Relationships’, *Academy of Management Journal,* 47:5, 735-746.

Mäkelä, K. and Suutari, V. (2009), ‘Global careers. A social capital paradox’, *The International Journal of Human Resource Management.* 20:5, 992-1008

Mäkelä, K., Björkman, I. and Ehrnrooth, M. (2009), ‘MNC subsidiary staffing architecture: building human and social capital within the organization’, *The International Journal of Human Resource Management*, 20:6, 1273-1290.

Nahapiet, J. and Ghoshal, S. (1998), ‘Social capital, intellectual capital and the organizational advantage’,. *Academy of Management Review*, 23: 242-266.

Osterloh, M. and Frey, B.S. (2000), ‘Motivation, knowledge transfer, and organizational Forms’, *Organizational Science*, 11/5, 538-550.

Portes, A. (2000), ‘The two meanings of social capital’, *Sociological Forum*, 15:1, 1-

Putnam, R.D. (2002), (ed). *Democracies in Flux: The Evolution of Social Capital in Contemporary Society*. New York: Oxford University Press.

Simonin, B. L. (1999), ‘Ambiguity and the Process of Knowledge Transfer in Strategic

Alliances’, *Strategic Management Journal*, 20, 595-624.

Szulanski, G. (1996), ‘Exploring internal stickiness: Impediments to the transfer of best practice within the firm’, *Strategic Management Journal*, 17 (winter special issue), 27-43.

Taylor, S. 2007. ‘Creating social capital in MNCs: the international human resource management challenge’, *Human Resource Management Journal*, 17:4, 336-354.

Tsai, W. (2002), ‘Social structure of “coopetition” within a multinational organization: coordination, competition and intra-organizational knowledge sharing’, *Organization Science,* 13:2, 179-190.

Tsai, W. and Ghoshal, S. (1998), ‘Social Capital and Value Creation: The Role of Intrafirm Networks’, *Academy of Management Journal,* 41, 464-476.

Table 1: Data Overview

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Fall 2007** | **Fall 2008** | **Late 2008** | **Early 2009** |
| **Interviews** | **10**Divisional top mgrs(5 NO, 3 SE, 2 DK) | **3**CEO & corp. top mgrs   | **7**2008 SLD participants |  |
| **Real-time reports** |  | **6 x 3 = 18**6 Program participants report at 3 points in time during the program(2 NO, 2 SE, 2 DK) |  |  |
| **Documents** | Corporate history StrategyValuesCEO pptSLD program description different points in time |
| **Survey** |  |  |  | **103**(Respondents from all 7 SLD cohorts) |

**(SE=Sweden; DK=Denmark; NO=Norway)**

**Table 2: Social capital outcomes**

|  |  |
| --- | --- |
| **Outcomes** | **Empirical evidence** |
| **Structural dimension: creating new meeting places** | *Without SLD, we would not have met. (SLD participant 1)* *SLD functions as a meeting place (SLD participant 2)**SLD is excellent as a meeting place. We get a shared understanding, particularly from [the CEO’s] presentations. (SLD participant 3)**SLD is really essential for knowledge sharing. You have to meet and this does not happen by coincidence. The first point of meeting must be created. (SLD participant 5)**Some of my [countrymen] spent a whole evening talking about concrete molding. Contact was established and this experience transfer would not have happened without SLD. (SLD participant 5)* *My group has planned to continue meeting. It’s easier to contact people who have been in the program with me. (SLD participant 2)* *My group has booked another meeting [after SLD was completed], but I don’t know if I will be contacting anyone after that… (SLD participant 4)* |
| **Relational dimension: developing trusting relationships**  | *SLD has been very valuable. I have met many fine people who have shared their experiences and knowledge… (SLD participant 2)**I have gotten to know other managers in a different way than I would had I not participated in SLD. I have established good relations and some really strong relations. If I need to I can contact the other participants and these are absolutely long-term relations (SLD participant 3)**There is bonding, not just across borders, but also within each nation…We are like old soldiers who have experienced something together (SLD participant 5)**I did not learn anything new [in terms of leadership development], but I developed an extremely good network and I learned the Conco values (Divisional top manager and previous SLD participant)* |
| **Cognitive dimension: developing a shared understanding and culture** | *The Conco values are lived out through SLD. We send people here and get ambassadors among the managers. We should do the same for project managers. (SLD participant 1)**The cognitive part is developed and the person-to-person relations are developed, but this depends on whether or not the participants see this as an opportunity (Divisional top manager and previous SLD participant).* *The value of SLD has emerged over time. Some people were skeptical after the first meeting. But participation triggers some attitudes and thoughts that sink in (SLD participant 2)* |

**Table 3: Knowledge sharing outcomes**

|  |  |
| --- | --- |
| **Knowledge sharing** | **Empirical evidence** |
| Program participants’ perspectives on knowledge sharing | *I don’t believe in bonuses. It is important with similar values, that we are a family, and that we have a network. (SLD participant 1)* *It’s not at all important with incentives or bonuses. You gain by making better profits in your division. It would feel awkward if some people were to get other types of advantages from sharing knowledge. (SLD participant 6)* *Getting the opportunity to come together across divisions…there are no expectations about rewards, but a pat on the back is always appreciated…if I wasn’t backed up it would be difficult to spend time on [knowledge/experience sharing]. (SLD participant 5)* |
| Program participants’ perspectives on why people share knowledge | *Most of us are proud of our competencies and want to share our knowledge. (SLD participant 3)* *The motivation for sharing knowledge is mutual exchange. You get a lot back. You also listen to what they [other SLD participants] don’t say. They tend to avoid those things they don’t do well…(SLD participant 3)**We want to share knowledge because we are vain. It’s good if other people are good, but we want to be the best. Other people being good is not a threat or a barrier, it simply motivates us to do better. We also have bonuses at a group level…Incentives is part of the answer, but it all depends on leaders that want to share. Then we want to share as well. (Divisional top manager and previous SLD participant)* |

**Table 4: Operationalization of key constructs**

|  |  |
| --- | --- |
| **Construct** | **Measurement** |
| Social capital benefitsCronbach’s Alpha: .761 | #11q1: The main outcome of SLD is creating a shared understanding of Conco’s strategy and goals#11q2: The main outcome of SLD is to establish and develop relations#11q3: The main outcome of SLD is to create a meeting place across divisions and nations#41: Conversations and being together with other participants has been very valuable to me |
| Personal leadership skillsCronbach’s Alpha: .711 | #11q1: The main outcome of SLD is that I have developed my personal leadership skills#11q2: The main outcome of SLD is that I have developed a set of practical tools |
| Perspectives on knowledge sharingCronbach’s Alpha: .797 | #27: Sharing new ideas and thoughts with other divisions is positively acknowledged in Conco#31: Collaboration with other divisions is viewed as very valuable in Conco#36: Knowledge sharing among divisions is viewed as very valuable in Conco |
| Experienced knowledge sharingCronbach’s Alpha: .885 | #22: I have received important knowledge from other divisions in Conco#23: I have made use of important knowledge from other divisions in Conco#24: I have contributed with important knowledge to other divisions in Conco |
| Gains from groupsCronbach’s Alpha: .693 | #39: I have had great value from the collaboration in group work#40: I have had great value from the group-based project work |

**Table 5. Correlation matrix**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | *Construct* | *Mean* | *St.dev* | ***1*** | ***2*** | ***3*** | ***4*** | ***5*** | ***6*** | ***7*** |
| ***1*** | Social capital benefits | 3.95 | 0.667 | 1.0000 |  |  |  |  |  |  |
| ***2*** | Personal leadership skills | 3.01 | 0.840 | 0.1875  |  1.0000  |  |  |  |  |  |
| ***3*** | Perspectives on K.S | 3.80 | 0.798 | 0.3497\* |  .3075\* |  1.0000  |  |  |  |  |
| ***4*** | Experienced K.S.  | 3.63 | 0.758 | 0.4880\* |  0.1611  | 0.3193\* | 1.0000  |  |  |  |
| ***5*** | Assessment of group work | 3.79 | 0.756 | 0.4027\* |  .2866\* |  .2620\* | 0.3159\* | 1.0000  |  |  |
| ***6*** | Previous Program Experience | 2.65 | 2.123 | 0.2120\* | -0.1387  | -0.0764  | 0.1545  | 0.0603  | 1.0000  |  |

*\* sig ≤ .05 N=103*

|  |  |
| --- | --- |
| **Table 6: Regression analyses** |  |
|  |  |
| Independent | Dependent variables |
| variables | Social | Personal | Perspectives | Experienced |
|  | Capital | Leadership | on Knowledge | Knowledge |
| COEFFICIENT | Benefits | Skills | Sharing | Sharing |
| Gains from Groups | 0 ,349\*\*\* |  0,317\*\* |  0,179\* |  0,227\*\* |
| *Previous program experience:*Internal Conco | -0,015  | -0,190 |   |   |
| Program in previous company |  0,385\*\* | -0,382\* |  |   |
| Open program/study |  0,153  | -0,224 |  |  |
| Social Capital Benefits |  - |  - |  0,388\*\*\* |  0,447\*\*\* |
| Control variables:*Country*Denmark |  0,169  | -0,210 |  0,153 |  0,043 |
| Sweden |  0,308  | -0,106 |  0,461\* |  0,162 |
| *Division*Property Development |  0,034  |  0,199 |  0,478\* |  0,047 |
| Industry |  0,002  | -0,018 | -0,551\*\*\* |  0,044 |
| Staff-Division | -0,049  |  0,26 |  0,407 |  0,159 |
| Corporate Staff |  0,294  | -0,382 | -0,198 |  0,040 |
| *SLD class*SLD 2004 |  0,067  |  0,322 | -0,257 | -0,065 |
| SLD 2005 Fall |  0,012  | -0,014 | -0,223 |  0,325 |
| SLD 2006 Spring | -0,223  |  0,217 | -0,363 | -0,286 |
| SLD 2006 Fall |  0,034  | -0,344 | -0,167 | -0,544\*\* |
| SLD 2007 |  0,123  |  0,540\* | -0,549\*\* | -0,264 |
| SLD 2008 |  0,031  |  0,180 |  0,0184 | -0,135 |
| Personal Leadership Skills |  - |  - |  0,174\* |  0,060 |
| *Previous program experience:*Internal Conco |  |  |  0,188 |  0,127 |
| Program in previous company |   |  | -0,411\*\* |  0,137 |
| Open program/study |   |  | -0,088 | -0,006 |
| *Observations* | 103 | 103 | 102 | 103 |
| *R-squared* | 0,338 | 0,220 | 0,459 | 0,359 |
| *\*\*\* p<0.01, \*\* p<0.05, \*p<0.1* |  |  |  |  |