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### Peers in careers

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## Chapter 3

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# **Efficacious Peers as Positive Role Models in the Transition from School to Work<sup>4</sup>**

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<sup>4</sup> This chapter is co-authored with Katariina Salmela-Aro, Siegwart Lindenberg, Jan Kornelis Dijkstra, and René Veenstra. A slightly different version of this chapter has been submitted for publication.



### 3.1. Introduction

The transition from school to work is an important developmental accomplishment in late adolescence and young adulthood with implications for individuals' future socio-economic standing and well-being in adulthood (Ashby & Schoon, 2010; Erikson, 1959; Haase, Heckhausen, & Köller, 2008; Piquart, Juang, & Silbereisen, 2003; Savickas, 1999; Zarrett & Eccles, 2006). During this developmental period, the peer group becomes an important source of guidance and support (Cheng & Chan, 2004; Furman & Buhrmester, 1992). Previous research has shown that young job seekers in the transition to working life often refer to their peers as social contacts that aid them during this transition (Jokisaari & Nurmi, 2005, Tynkkynen, Nurmi, & Salmela-Aro, 2010), and that they rely on their social networks with peers to obtain their first jobs (Marmaros & Sacerdote, 2002). Whereas these studies show that young job seekers frequently draw on their peers as relevant social contacts during the transition to work, it is unclear whether and how peer networks can contribute to the mastery of this transition.

The aim of the current study is to investigate the role of peer networks in career-directed behavior and the outcomes thereof during the transition from school to work. Previous research on adult job seekers has shown that social relationships can be an asset in job search behavior through the provision of, for instance, information and practical resources (Coleman, 1988; Granovetter, 1995; Lin, 1999; Van Hove, Van Hooft, & Lievens, 2009). Young adults at the transition to work are about to enter a context in which they and their peers have little prior experience. For this reason, peers are unlikely to be providers of practical or instrumental support concerning this transition. Based on Social Cognitive Career Theory (SCCT; Lent & Brown, 2013; Lent, Brown, & Hackett, 1994; Lent, Hackett, & Brown, 1999; Leung, 2008) and Bandura's (1971) Social Learning Theory, we argue that peers can be positive role models that stimulate the engagement in career-directed activities at the transition from school to work. To investigate this proposition, we draw on two samples of young adults in the Netherlands (Study 1) and Finland (Study 2). We investigate the link between the size of the friendship network in the classroom and friends' self-reported efficacy beliefs on respondents' engagement in job search activities and the outcomes thereof (i.e., number of job applications completed and number of job offers received; Study 1) and respondents' odds of having successfully completed the transition three years later (Study 2).

### **3.2. Peers at the Transition to Work**

Social Cognitive Career Theory (SCCT; Lent & Brown, 2013; Lent et al., 1994; Lent et al., 1999; Leung, 2008), which is grounded in Bandura's (1977) general Social Cognitive Theory (SCT), states that social contexts affect the development of career-related beliefs and influence career-related behaviors (Lent & Brown, 2013; Zikic & Saks, 2009). Research on school transitions has shown that adolescents who experience greater peer support perceive the transition to be less difficult (Waters, Lester, & Cross, 2014), and that career goals and behaviors are jointly developed in interactions with significant others such as one's peers (Dietrich, Parker, & Salmela-Aro, 2012; Kiuru, Salmela-Aro, Nurmi, Zettergen, Andersson, & Bergman, 2012). It has further been shown that networks with friends and peers are important sources of support in the light of educational or career decisions (Tynkkynen et al., 2010). These studies suggest that peers can take a facilitating role in young people's successful mastery of the transition from school to work. However, not all peers may facilitate the transition equally well and peers' capacity to act as positive role models is likely to be contingent on their personal characteristics. The present study investigates the extent to which peers' capacity to act as positive role models at the transition to work depends on their own efficacy beliefs to perform well in the tasks that comprise this transition.

### **3.3. Peers' Capacity to Act as Positive Role Models**

Social Learning Theory (SLT; Bandura, 1971) states that learning takes place in social contexts by observing others who show certain behaviors that lead to desired outcomes. These others can then serve as role models for future behavior. Role models are considered critical to career development (e.g., Gibson, 2004) and have been shown to influence individuals' career salience and their educational and occupational aspirations and choices (Hackett, Esposito, & O'Halloran, 1989). According to SCCT, individuals are most likely to state and pursue career goals once they experience personal competency with respect to the attainment of employment and the pursuit of their future careers, the concept of *job search self-efficacy* (e.g., Saks & Ashforth, 1999; Rogers & Creed, 2011; Zikic & Saks, 2009). Efficacy beliefs have been shown to influence the kinds of occupations that individuals consider suitable and favorable for themselves even in younger samples and children (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001). Studies have further shown that job search self-efficacy is associated with active

engagement in job search behavior and more positive outcomes of these behaviors in terms of, for instance, the number of received job offers (Kanfer, Wanberg, & Kantrowitz, 2001). In line with this, the belief that one possesses the abilities to attain certain career goals has been associated with a more successful transition from school to work (Dietrich, Jokisaari, & Nurmi, 2012), and more efficacious adolescents have shown lower risks of unemployment and higher job satisfaction in young adulthood (Pinquart et al., 2003).

We argue that individuals are more likely to engage in career-directed behavior once they observe others who are similar to them being confident about the pursuit of their careers. More specifically, we argue that an efficacious peer network can be a source of encouragement and provide young people in the transition to work with positive role models that stimulate greater engagement in career-directed activities. For instance, being embedded in a network of peers with low job-search self-efficacy may raise doubts about job seekers' own capabilities to obtain employment and discourage rather than encourage their engagement job search activities. Conversely, being embedded in a network of efficacious peers who believe in their own capabilities to perform well in job search activities and potentially observing their successful progress towards the attainment of employment is likely to stimulate job seekers' own engagement in job search behavior.

We therefore expect that being embedded in a network of efficacious peers exposes individuals to a nurturing environment that enhances their own engagement in job search activities. In detail, we expect them to show increased engagement in career-directed behavior (Hypothesis 1) and more favorable career-related outcomes (Hypothesis 2).

### **3.4. Overview over the Present Research**

We draw on two independent samples to test our hypotheses in a cross-national approach. Study 1 uses a sample of Dutch young adults enrolled in a school of vocational education to investigate the link between friends' self-reported efficacy beliefs on respondents' engagement in job search activities (number of applications completed) and their job search outcomes (number of job offers received). Study 2 uses a sample of Finnish young adults during and after the transition from school to work to replicate and expand the findings of Study 1. Study 2 investigates the link between the

overall efficacy beliefs across respondents' peer network and respondents' successful completion of the transition three years later. Because previous research on adult job seekers has demonstrated that a social network of job-search relevant social ties is a beneficial asset in job search (Coleman, 1988; Granovetter, 1995; Lin, 1999; Van Hoye et al., 2009), respondents' access to instrumental social ties that can support them in the transition has been controlled for in both studies. Both studies further control for the size of the peer network, respondents' gender, and their socio-economic background.

### **3.5. Study 1**

#### **3.5.1. Method**

##### **3.5.1.1. Sample and Procedure**

The data used in Study 1 stem from a study conducted in the Netherlands aimed at young adults' transition from vocational school to working life or further education. In the Netherlands, vocational training is provided as a school-based form of education that students commonly enroll in at the age of 16. All respondents in the present sample attended a form of school-based vocational education (Dutch MBO-BOL) which consists of regular subjects as well as vocation-specific subjects that provide guided training under the supervision of a teacher. Students commonly attend these schools for two to four years during which they attend regular class hours in a fixed classroom structure and gain practical experience in a number of internships. As of 2010, vocational schools follow the principle of competence-based education, which implies that students do not receive grades but are evaluated based on their attained competences (vocation-specific professional skills and more general competences such as good communication and teamwork).

Data collection has taken place during respondents' final year in education in the first quarter of the school term 2011/2012 (T1) and approximately six months later shortly before the end of the school year (T2). Questionnaires have been administered at school during regular class hours and consisted of a self-report questionnaire and a sociometric survey using peer nominations to assess friendship networks in the classroom. Prior to administering the questionnaires, respondents were informed of the aims of the study and were assured of the confidentiality of their answers. Respondents were free to refrain from participation at any moment of the study and no monetary incentives or course credits have been offered for participation.

The overall sample consisted of  $N = 472$  respondents at T1 ( $M_{\text{age}} = 20.02$ ,  $SD = 2.67$ ; 51.2 % female) and  $N = 424$  respondents at T2 ( $M_{\text{age}} = 20.26$ ,  $SD = 2.86$ ; 56.8 % female). For current study purposes, a selection of respondents has been drawn from the overall sample based on their fulfillment of the study criteria. The study sample includes those respondents who had provided information on their number of job applications and job offers at T2 and who had at least one friend (based on a reciprocated friendship nomination) at T1 ( $N = 109$ ;  $M_{\text{age}} = 19.60$ ,  $SD = 3.09$  at T1;  $M_{\text{age}} = 20.11$ ,  $SD = 3.09$  at T2; 58.7% female). Respondents in the study sample did not significantly differ from the overall sample on most of the study variables. Marginal differences were observed at T1 with the study sample containing slightly more females ( $t(465) = 1.80$ ,  $p = .07$ ) and being marginally younger than the overall sample ( $t(468) = 1.89$ ,  $p = .06$ ). Respondents in the study sample further stem from more advantaged socio-economic backgrounds than respondents not in the study sample ( $t(410) = -2.12$ ,  $p = .04$ ).

### 3.5.1.2. Measures

#### 3.5.1.2.1. Job Applications and Offers

Respondents' engagement in job search activities was measured at T2 by asking them to report the *number of job applications* they had completed. No limitations were imposed on the number of applications that respondents could report. Respondents' *number of job offers* was measured at T2 by asking them to indicate the number of job offers they had received. Again, no limitations were imposed on the number of job offers that they could report.

#### 3.5.1.2.2. Friendship Network

Respondents' friendship networks have been assessed using peer nominations within classrooms drawn from the sociometric survey assessed at T1. Respondents received a list with the names of their classmates and were asked to nominate those classmates who are their 'friends in the classroom'. Respondents could nominate as many classmates as they wanted except for themselves. To validate that a respondent who identified a classmate as a friend had an actual friendship relationship with this person, only nominations in which two persons mutually nominated each other as a friend have been taken into account. The average classroom response rate for the sociometric survey in the study sample was 80.4%. The resulting measure of respondents' *friendship network*



*size* in the classroom is indicated by this respondents' total number of reciprocal friendship nominations.

#### **3.5.1.2.3. Friends' Job Search Self-Efficacy**

Friends' job search self-efficacy was assessed using a 10-item scale based on a measure that has been applied in previous research (e.g., Ellis & Taylor, 1983; Saks & Ashforth, 1999). For current study purposes, the original 10-point scale has been adapted to a 5-point scale and all negative items of the original scale have been rephrased to a positive item in the Dutch translation. Respondents were asked to indicate to what extent each of 10 statements such as 'I am confident of my ability to make a good impression in job interviews' or 'I know exactly how to find the kind of job I'm looking for' applied to them (1= *Totally not applies to me*, 5= *Totally applies to me*). The scale showed good internal consistency with Cronbach's  $\alpha=.86$ . Mean scores across all ten items have been formed to yield scores of individual job-search self-efficacy. *Friends' job-search self-efficacy* was calculated as the mean score of job-search self-efficacy across the entirety of individual respondents' friendship networks. It therefore represents the overall level of job-search self-efficacy in the friendship network in which each individual respondent is embedded in the classroom.

#### **3.5.1.2.4. Instrumental Social Ties**

All analyses controlled for respondents' number of instrumental social ties who can provide them with practical and instrumental help. The number of instrumental social ties in the job search process was assessed through respondents' ego networks of people who can help them find employment ('Do you know people who can help you find a job?'). Those respondents who indicated to know at least one person were then asked to report on the total number of persons they knew who could help them find employment. No limitations were imposed on the maximum number of people that could be named. Respondents' number of instrumental social ties is indicated by the total number of people they named.

#### **3.5.1.2.5. Socio-Economic Background**

To assess respondents' socio-economic background, their family affluence has been assessed using the Family Affluence Scale (FAS; Boyce, Torsheim, Currie, & Zambon,

2006; Currie, Molcho, Boyce, Holstein, Torsheim, & Richter, 2008). The FAS has been developed to overcome problems arising through adolescents' difficulties in accurately reporting their parents' educational levels or income by asking respondents to report on their family's wealth at the hand of a number of consumption indices that they are likely to know about. Respondents were asked to indicate whether their family owns a car (1 = *yes*, 0 = *no*), whether they have their own room at their family's home or did have their own room when they were still living at home (1 = *yes*, 0 = *no*), and how many computers their family has at home (0 = *none*, 1 = *1 computer*, 2 = *2 computers*, 3 = *3 computers*). A fourth question asking respondents to indicate how often they have been on holiday with their family in the past 12 months has been omitted in the present study as it was not considered appropriate for the current age group. A point system ranging from 0 to 5 has been applied to the three questions assigning one point for each additional asset (i.e., a score of zero if the family had no car, no computers and the respondent did not have an own room at home; a score of 5 if the family had a car, three computers and the respondent did have an own room at home). Scores have been used as a continuous measure of family affluence.

#### **3.5.1.2.6. Gender**

Respondents' gender was coded as 0 = female and 1 = male.

#### **3.5.1.3. Strategy of Analysis**

The two dependent variables under study, respondents' number of applications and the number of job offers they received, are measured in count data. To account for the distribution of the dependent variables, Poisson regression models were calculated (e.g., Coxe, West, & Aiken, 2009). Regression coefficients in Poisson regression can be interpreted as multiplicative rather than additive changes. A change in the predictor variable results in a multiplicative change in the predicted count of the outcome variable. To make results more easily interpretable, the poisson regression equation is exponentiated on both sides. The exponentiated coefficient of the intercept represents the baseline count, that is, the count of the outcome variable if the score on the predictor variable(s) is zero. The exponentiated coefficient in a predictor variable represents the predicted multiplicative effect of a one-unit increase in the predictor on the base-line count of the outcome variable in the model in which the predictor is included.

Analyses were conducted using Mplus 6.11 statistical software (Muthén & Muthén, 2010). Path analysis using maximum likelihood estimation with robust standard errors was used to estimate the direct effects of respondents' friendship network at T1 on the number of applications and the number of job offers at T2, as well the indirect effect of the friendship network on the number of job offers they received, mediated by their number of applications. We further tested the interaction between friendship network size and friends' job search self-efficacy to examine whether the presumed effect of an efficacious peer network is contingent on the size of the network. All analyses were controlled for respondents' gender, their family socio-economic background, and their number of instrumental job search social ties. Missing data were addressed using the full information maximum likelihood method (Muthén & Muthén, 2010). Monte Carlo integration was used to address missing data on the mediator variable.

Table 3.1.

Descriptive Statistics and Correlations of the Main Study Variables in Study 1 ( $N = 109$ )

	<i>M</i>	<i>SD</i>	Range	1	2	3	4	5	6
1. Job Applications	2.70	2.67	0-15						
2. Job Offers	1.60	1.38	0-7	.30**					
3. Friendship Network Size	2.74	1.75	1-8	-.11	-.05				
4. Friends' Job Search Self-Efficacy	3.30	0.42	2.10-4.60	.24*	-.01	-.12			
5. Instrumental Social Ties	0.90	0.91	0-6	.11	.04	.02	-.13		
6. Socio-Economic Background	2.72	0.64	1-4	.06	-.04	.02	.11	-.03	
7. Gender (1=male)			0-1	.06	.08	-.16	.18 <sup>†</sup>	-.07	.07

Note. \* $p < .05$ . \*\* $p < .01$ . <sup>†</sup> $p < .10$ .

### 3.5.2. Results and Discussion

Descriptive statistics and correlations of the main study variables are displayed in Table 3.1. On average, respondents had completed 2.70 ( $SD = 1.67$ ) applications and had received 1.60 ( $SD = 1.38$ ) job offers. Respondents' number of reciprocal friendships in the classroom ranged from 1-8 with an average of 2.74 ( $SD = 1.75$ ). Respondents' number of job applications was positively correlated with the overall job-search self-efficacy in their friendship network as well as with their number of job offers.

#### 3.5.2.1. Path Analysis<sup>5</sup>

The results of the path analysis are displayed in Table 3.2. A graphic presentation of the path model is displayed in Figure 3.1. Respondents' access to instrumental social ties, their gender, and their socio-economic background did not significantly predict their number of job applications or job offers. Likewise, the size of respondents' friendship network at T1 was not significantly associated with the number of applications they had completed or the number of job offers they had received at T2. In line with the expectation that friends' capacity to act as positive role models lies in the overall job search self-efficacy across the friendship network, results show that respondents who were embedded in an efficacious friendship network at T1 had completed a greater number of applications at T2 (consistent with Hypothesis 1). With every one-unit increase in their friends' job search self-efficacy (on a 5-point scale), respondents' baseline number of applications is multiplied by the factor 1.67 ( $B = 0.51$ ,  $\text{Exp}(B) = 1.67$ ,  $p < .01$ ) or, stated differently, increases by 67%. The interaction between friendship network size and overall job search self-efficacy in the friendship network was not significant and has been removed from the model.

The number of job offers respondents had received was not directly predicted by respondents' friendship network in the classroom. The number of applications respondents had completed significantly predicted the number of job offers they had received. With every additional application respondents had completed, their number of job offers changed with the multiplicative factor 1.09 ( $B = 0.09$ ,  $\text{Exp}(B) = 1.09$ ,  $p < .01$ ). Results support the expectations that an efficacious friendship network in the classroom

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<sup>5</sup> Controlling for respondents' own job search self-efficacy at T1 did not change the results pertaining to the hypotheses under study. The effect of respondents' own self-efficacy was not significant whereas the (direct and indirect) effects of an efficacious friendship network in the classroom remained significant.

is related to respondents' engagement in job search activities, and show that this effect holds irrespective of the size of the friendship network and above respondents' access to instrumental social ties.

Table 3.2.

Path Analysis predicting Number of Applications and Job Offers

Variable	<i>B</i>	<i>SE</i>	<i>Exp(B)</i>
<i>Number of Applications</i>			
Intercept	-.99	.74	0.37
Control			
Gender (1=male)	.02	.18	
Socio-Economic Background	.08	.13	
Instrumental Social Ties	.16	.10	
Peer Network			
Friendship Network Size	-.04	.06	
Friends' Self-Efficacy	.51**	.18	1.67
<i>Number of Job Offers</i>			
Intercept	.84	.72	2.31
Control			
Gender (1=male)	.18	.17	
Socio-Economic Background	-.07	.14	
Instrumental Social Ties	.01	.07	
Number of Applications	.09**	.03	1.09
Peer Network			
Friendship Network Size	.01	.04	
Friends' Self-Efficacy	-.16	.18	
<i>Indirect Effects</i>			
FSE → Applications → Job Offers	.05*	.02	1.05

*Notes.* Exponentiated coefficient of the intercept represents base-line count. Path model estimated by full information likelihood estimation with Monte Carlo integration; estimated coefficients are unstandardized coefficients; all continuous variables are mean-centered; FSE = Friends' (Job Search) Self Efficacy; \*  $p < 0.05$ , \*\*

### 3.5.2.2. Indirect Effects

The initial results show that greater overall job search self-efficacy in the friendship network predicts a higher number of applications, which in turn predict a higher number of job offers. Analysis of the indirect effect of an efficacious friendship network on respondents' number of job offers through a greater number of applications provides us with information on whether the applications that resulted from a more efficacious friendship network were also the applications that resulted in a greater number of job offers. This indirect effect was positive and significant ( $B = .05$ ,  $\text{Exp}(B) = 1.05$ ,  $p = .04$ ), showing that the greater number of applications that is initiated by a more efficacious friendship network ultimately results in an increase in job offers by 5%. Our results show that being embedded in an efficacious friendship network significantly contributes to young job seekers' transition to work by increasing the number of job offers they receive (consistent with Hypothesis 2), through stimulation of greater engagement in job search activities. Study 1 has shown that an efficacious friendship network contributes to the engagement in job search activities and the attainment of job offers. However, respondents in Study 1 are still in the midst of the transition. Study 2 focuses on a longer time frame and investigates whether and how peer networks affect the successful completion of the transition.

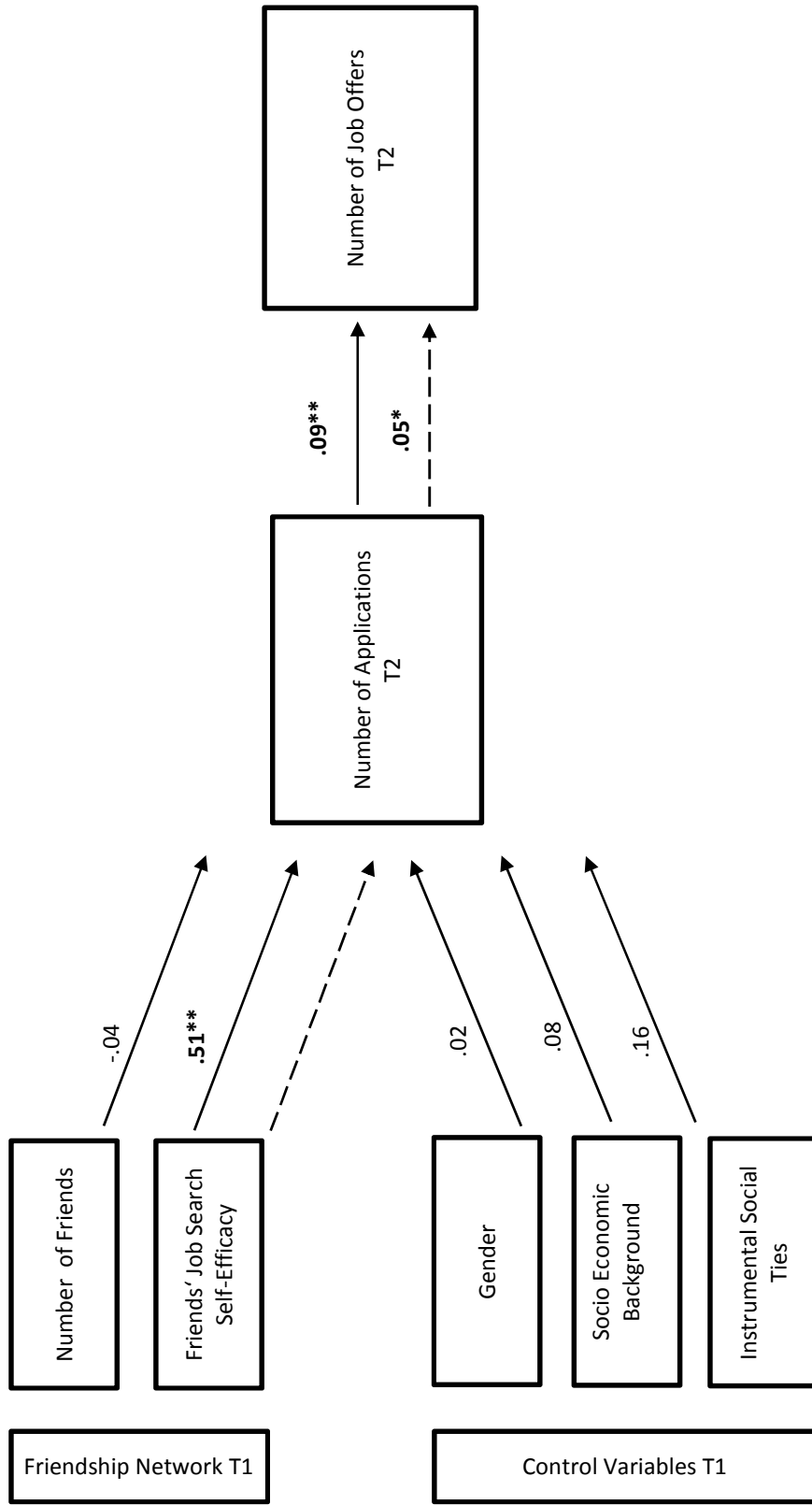


Figure 3.1. Path Model predicting number of applications and number of job offers (Study 1).

Note. \*  $p < 0.05$ , \*\*  $p < 0.01$ . Indirect effect of Friends' job search self-efficacy on respondents' number of job offers indicated by the dotted line.



### **3.6. Study 2**

Study 2 uses a sample of Finnish young adults to replicate the findings of Study 1 in a cross-national sample and to extend these findings by covering a more extensive time frame. The Dutch and Finnish educational systems bear many similarities so that young people in both countries face the transition from school to work around the same age and with comparable educational and vocational options. Study 1 focused on young job seekers' job search during the transition period and consequently does not provide us with any information about the outcomes of this transition. Study 2 tackles this limitation by focusing on the role of peer networks in the successful completion of the transition.

#### **3.6.1. Method**

##### **3.6.1.1. Sample and Procedure**

Data stem from the Finnish Educational Transitions (FinEdu) Studies, a longitudinal research project conducted in Central Finland and aimed at monitoring respondents' educational and vocational transitions and choices throughout adolescence and young adulthood. Respondents' peer networks have been assessed in the school context at the age of 17 when respondents were in their second year of secondary education ( $N = 818$ , 48.4% female, data collected in 2005). Paper- and pencil questionnaires have been administered in the school context. Telephone interviews have been conducted on those study respondents who did not return a completed questionnaire after two reminders. Respondents' success at the transition from school to work (respectively a follow-up education for those not seeking employment) has been assessed three years later ( $N = 599$ , 54.8% female, data collected in 2008), approximately two years after they had graduated. Questionnaires have been sent to respondents by post with the option to also respond to an online version. Analyses have been performed on a study sample of respondents for whom information on all relevant study variables was available at both time points ( $N = 415$ , 51.3% female).

##### **3.6.1.2. Measures**

###### **3.6.1.2.1. Successful Transition**

Based on respondents' information on their educational or occupational status in 2008, a dichotomous variable indicating respondents' successful mastery of the transition has been constructed (0 = transition ongoing, 1 = transition successfully completed).

Respondents' transition has been defined as ongoing if respondents indicated that they had (1) not yet completed an educational degree, (2) completed a degree but had not moved on to further education or working life and have no concrete prospects of doing so, or (3) moved on to further education or working life but are not satisfied with their choice and are still applying elsewhere. Respondents' transition has been defined as successfully completed if respondents had completed their degree and had moved on to (1) further education without currently applying elsewhere, (2) working life with a job related to one's completed degree and no further study plans, or if they (3) had concrete prospects to do one of the above in the near future (i.e., having a job or study to return to after completing military service).

#### **3.6.1.2.2. Peer Network**

Respondents' peer relationships have been assessed using a sociometric survey asking them to nominate up to three classmates with whom they 'liked to spend their time with the most'. Respondents who were not studying at the time of measurement received an adaptation of this question, asking them to nominate peers who 'were at your old school in the same class level as you'. Self-nominations were not allowed. Respondents' *peer network size* is the total number of nominated peers.

#### **3.6.1.2.3. Peers' Self-Efficacy**

Using the revised version of Little's (1983, 2007) Personal Project Analysis method (e.g., Salmela-Aro & Nurmi, 1997) all respondents of the study were asked to write down one career-related goal and name at least one goal pertaining to their future vocational or educational plans. Self-efficacy was measured by asking all respondents to respond to the question 'How able do you think you are to fulfill your goal?' on a 7-point scale from 1 = *very little* to 7 = *very much*. Drawing on previously retrieved information on respondents' peer networks, the overall efficacy beliefs across each respondent's peer network was assessed. For all respondents, the self-report efficacy scores of the peers they nominated in the sociometric survey were retrieved. *Peers' self-efficacy* has been assessed as the average score of self-reported efficacy across each respondent's peer network.

#### **3.6.1.2.4. Instrumental Social Ties**

Comparable to Study 1, we controlled for respondents' access to instrumental social ties. Following up on their response to the revised version of Little's (1983, 2007) Personal Project Analysis method (Salmela-Aro & Nurmi, 1997), respondents were asked to name up to three people who had supported them or with whom they had discussed their career goals. Respondents' *number of instrumental social ties* was calculated as the number of people they named in response to this question.

#### **3.6.1.2.5. Socio-Economic Background**

Respondents' socio-economic background has been measured at the hand of their parents' occupation. Using a standard occupational classification system for the Finnish labor market (Statistics Finland, 1989) and in line with previous research on the FinEdu data (Ranta, Punamäki, Tolvanen, & Salmela-Aro, 2012) respondents' parents have been ascribed to one of the five socioeconomic categories (1) *not employed* (students, retired, or unemployed, i.e., low income households), (2) *self-employed*, (3) *blue-collar occupations* (e.g., mechanics, construction workers), (4) *lower white-collar occupations* (e.g., secretaries, nurses), and (5) *higher white-collar occupations* (e.g., teachers and positions at managerial level). In accordance with the definition of a household reference person (HRP; Department for Communities and Local Government, 2011; Statistics Finland, 2011) the parent with the highest-ranking occupation has been used as a point of reference.

#### **3.6.1.2.6. Gender**

Respondents' gender was coded as 0 = female and 1 = male and has been controlled for in all analyses.

#### **3.6.1.3. Strategy of Analysis**

A hierarchical binomial logistic regression analysis was conducted to predict whether respondents' had successfully completed the transition at age 20 from their peer's efficacy beliefs at age 17, as well as their peer network size and the interaction between peer network size and peers' self-efficacy, again controlling for respondents' gender, their socio-economic background, and their number of instrumental social ties.

### 3.6.2. Results and Discussion

Descriptive statistics and correlations can be found in Table 3.3. Results show that 39% of the respondents had successfully completed the transition whereas in 61% of the sample the transition was ongoing at the time of measurement. On average, respondents had named 2.75 ( $SD = 0.55$ ) peers whom they liked to spend time with, with peers' average efficacy beliefs being 5.80 on a 7-point scale ( $SD = 0.91$ ). Respondents' successful completion of the transition was positively correlated with peers' self-efficacy, but not with their peer network size.

Table 3.3.

*Descriptive Statistics and Correlations of the Main Study Variables in Study 2 (N = 415)*

	<i>M</i>	<i>SD</i>	Range	1	2	3	5	6
1. Successful transition (1=completed)	0.39	0.49	0-1	1				
2. Peer Network Size	2.75	0.55	0-3	.02				
3. Peers' Self Efficacy	5.81	0.91	1-7	.10*	.03			
4. Instrumental Social Ties	2.49	0.88	1-3	.07	.12*	-.01		
5. Socio-Econ. Background	4.20	0.81	1-5	.15**	.05	-.01	.07	
6. Gender (1=male)				-.13**	-.01	.06	-.14**	-.03

Note. \* $p < .05$ . \*\*  $p < .01$ . †  $p < .10$ .

#### 3.6.2.1. Successful Transition<sup>6</sup>

Results of the binomial logistic regression analysis are displayed in Table 3.4 and show that the odds of having successfully completed the transition within a three year time frame were higher for females ( $B = 0.52$ ;  $\text{Exp}(B) = 0.59$ ,  $p = .02$ , 1 = male) and respondents from higher socio-economic backgrounds ( $B = 0.40$ ,  $\text{Exp}(B) = 1.49$ ,  $p < .01$ ). Respondents' number of instrumental social ties did not significantly predict the outcome variable.

As in Study 1, analysis of the variables pertaining to respondents' peer network showed

<sup>6</sup> Similar to Study 1, controlling for respondents' own self-efficacy did not change the results pertaining to the hypotheses under study. The effect of respondents' own self-efficacy did not reach significance whereas the effect of an efficacious peer network remained significant.

no significant effect of peer network size. In line with the expectation, results show that the odds of having successfully completed the transition at age 20 are higher for respondents who were embedded in a more efficacious peer network at age 17 ( $B = 0.31$ ,  $\text{Exp}(B) = 1.36$ ,  $p = .02$ ). With every one-unit increase in peers' efficacy (on a scale from 1-7), respondents' odds of having successfully completed the transition three years later change by the multiplicative factor 1.36 or, stated differently, increase by 36% (consistent with Hypothesis 2). Again, the interaction between peer network size and peers' self-efficacy was not significant and was removed from the model.

Together with Study 1, our results support the notion that peers can act as positive role models and facilitate the transitional progress at the end of secondary education. Our results show in two independent samples from two different countries that the efficacy beliefs of one's peers, irrespective of the size of the peer network, predict greater engagement in career-related activities (i.e., the number of job applications completed) and more favorable outcomes during (i.e., the number of job offers received) and after the transition (i.e., the odds of having successfully completed the transition).

Table 3.4.

Binary logistic regression results predicting the completion of the transition  
(1 = completed) over a three year time frame (Study 2; N = 415)

	<i>B</i>	<i>SE</i>	<i>Exp(B)</i>	<i>CI</i>	
				Lower	Upper
Control					
Gender (1=male)	-.52*	.22	0.59	0.39	0.91
Socio-Economic Background	.40**	.14	1.49	1.13	1.98
Instrumental Social Ties	.10	.13			
Peer Network					
Peer Network Size	.07	.20			
Peers' Efficacy	.31*	.13	1.36	1.05	1.77

Note. \*  $p < .05$ , \*\*  $p < .01$ . *CI* = 95% Confidence Interval for *Exp(B)*.

### 3.7. General Discussion

The present study investigated the role of peers as positive role models at the transition from school to work in two independent samples. Inspired by previous research which showed that young people at the transition to work often nominate their peers as social ties who can help them in the transition (Jokisaari & Nurmi, 2005, Tynkkynen et al., 2010), we investigated whether peer networks contribute to the transition from school to work at the end of secondary education, and what personal characteristics of peers make them potential positive role models that aid young people's initiative and in this transition. We hypothesized and found that being embedded in an efficacious peer network predicted greater engagement in career-directed behavior and better career-related outcomes.

In Study 1, we showed at the hand of a sample of Dutch young adults in the transition from vocational education to work that being embedded in a friendship network of peers with high job search self-efficacy predicted greater engagement in job search activities (i.e., number of job applications completed; consistent with Hypothesis 1) and more favorable outcomes of these activities (i.e., number of job offers received; consistent with Hypothesis 2) over a six months' time frame. In Study 2, we set out to replicate and extend these findings in a Finnish context and showed that greater overall efficacy in the peer network of the school context positively predicted respondents'

successful completion of the transition from secondary school to work (or follow up education) over a three year time frame (again consistent with Hypothesis 2).

The size of the peer network did not facilitate the transition from school to work on any of the outcomes assessed in the present studies. Interaction effects further showed that the interaction between respondents' peer network size and the overall efficacy beliefs in their peer network did not predict any of the outcomes assessed. Consequently, the favorable effects of an efficacious peer network hold equally for people with larger and smaller peer groups. Controlling for respondents' access to instrumental career-related social ties showed no significant effects on any of the outcome variables. This lack of an effect might seem surprising as research on adult job seekers as repeatedly documented the benefits of career-relevant social ties in job search processes (Granovetter, 1995; Van Hoye et al., 2009). It is possible that respondents have access to instrumental social ties but do not identify and use them as such (Lin, 1999, 2008). However, more likely, novice job seekers who enter the labor market for the first time have not yet built a network of career-relevant ties. For this reason, it is support for taking initiative that characterizes the effect of the peer network.

### **3.7.1. Strengths and Limitations**

The consistency of the finding that an efficacious peer network contributes to the successful mastery of the transition from school to work in both the Netherlands and Finland greatly contributes to the generalizability of our findings. The difference in the targeted outcomes of the two studies allows us to extend our initial results on the effects of an efficacious peer network during the immediate transition period to transitional outcomes over a three-year time frame. Moreover, whereas the Dutch sample is restricted to respondents who have engaged in job search activities and who are actively looking for employment upon their graduation, analyses on the Finnish sample focus on the successful completion of the transition and therefore not solely encompass respondents who have transitioned into employment but also those who have successfully transitioned into further (vocational or non-vocational) education. These results show that our finding that efficacious peers positively contribute to young people's transitional progress and outcomes is not restricted to labor market outcomes.

We further applied an extended approach of measurement to our analyses by assessing the role of peer networks over and above respondents' number of instrumental

social ties. By controlling for respondents' access to social contacts that can facilitate the transition through the provision of practical and instrumental resources we take into account previous research on adult job seekers that has stressed the importance of career-relevant social ties in job search processes (e.g., Granovetter, 1995; Van Hoye et al., 2009).

The key question in the present research was whether an efficacious peer network contributes to young people's engagement in job search behavior and their successful completion of the post-secondary education transition. To assess peer networks, both studies draw on sociometric measures using peer nominations to portray the peer network and to access each respondent's peers' self-reported efficacy scores through the obtained network information. Instead of asking respondents how efficacious they think their peers are, we used the information obtained through the sociometric survey to assess peers' self-reported efficacy scores and linked these scores to the target respondent. The use of peers' self-reported efficacy beliefs is a major strength of the present research as it avoids the bias that would have occurred if we had asked respondents to rate their peers' efficacy beliefs. Moreover, investigating peers' efficacy beliefs rather than their behavior allows us to take into account the complete peer network in the classroom irrespective of peers' personal future plans. By focusing on peers' cognitions we are able to also include those peers who are efficacious about their competence to perform well at the transition but who are not actively looking for a job because they have decided to pursue further education, have already attained a job, or have different future plans.

A potential limitation lies in the differences between the measurements that have been employed in the two studies. First, whereas in the Dutch sample respondents were free to nominate as many classmates as they liked, responses in the Finnish sample were restricted to a maximum of three possible nominations. Both limited and unlimited nomination procedures have been applied in previous research and are in line with common methods for the assessment of peer relationships (e.g., Coie, Dodge, & Coppotelli, 1982; Newcomb & Bukowski, 1983; Parkhurst & Hopmeyer, 1998), and we believe that this difference in measurement is of minor concern for the present study. Respondents in the Dutch sample who faced no restriction in the maximum number of possible nominations reported on average less than three reciprocal friends in the classroom, showing that a maximum number of three possible nominations fit the



common number of friendship relationships in these samples. A comparison between respondents' peer network size in both samples shows an average number of 2.74 (reciprocal) nominations in the Dutch sample and an average number of 2.75 nominations in the Finnish sample, which underlines this notion.

Second, whereas in the sociometric survey administered to the Dutch sample respondents were asked to nominate their friends in the classroom, respondents in the Finnish sample received a slightly different question ('Who do you like to spend time with the most?'). Both direct measures (e.g., 'Who are your friends') and indirect measures (e.g., 'Who do you like') have been applied in previous research on peer relationships (Coie et al., 1982; Newcomb & Bukowski, 1983; Parkhurst & Hopmeyer, 1998) and there is reasonable ground to believe that both questions tap into the same concept of friendship. It can be assumed that respondents in the Finnish sample who were facing a restriction in the maximum number of possible nominations will nominate the three persons that are most important to them as persons whom they most like to spend time with and hence nominate their three closest friends in the classroom.

### **3.7.2. Implications and Future Directions**

Taken together, our findings show that young people who are embedded in a network of efficacious peers can draw benefits from this network in their transitional progress and outcomes at the end of secondary education. Our results also show that it is not the size of the peer network but their peers' efficacy beliefs that matter. This shows that young people who have fewer friends in the classroom and hence a relatively small peer network can nevertheless derive benefits from an efficacious peer network. The benefits of peers in the transitional progress are therefore not exclusive to those young people who are well-connected within their classrooms but also apply to those who are less-well connected. The finding that overall self-efficacy in the peer group initiates greater engagement in job search activities on the individual level may further encourage practitioners who are working with young job seekers to stimulate their interactions with efficacious peers and to extend current individual-level intervention approaches to the peer group level. All in all, our findings contribute to unraveling the mechanisms by which peers can contribute to the mastery of the transition from school to work and give leeway to future research on additional characteristics that may turn a peer network into a supportive environment in this transition.





## **Part II**

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# **Behavioral Implications of the Onset of Employment**

