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# "You are getting too old, find a man and marry": Social Aspects of Motivation to Choose Teacher Education

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## ABSTRACT

This study examines the roles other people play in individuals' decisions to enter into teacher education. Elements of social cognitive and situated theoretical approaches to motivation are combined, using a newly developed instrument. Participants were 303 Australian and German teacher education students. They indicated other people who had helped or hindered them in their journey to become teachers. The findings reveal the important role played by immediate family and the significance of personal and emotional support across both national contexts. Strengths and limitations of the methodology and directions for future research are discussed.

*Keywords:* motivation; pre-service teacher education; social environment; methodology; cross national

## INTRODUCTION

Psychological factors within the individual, reflecting a social cognitive perspective, have been the focus of traditional motivation research. More situated or sociocultural approaches view individual and social dimensions of motivation as dynamic, and mutually interacting. Social aspects of motivation include relationships and interactions with other people as well as multiple broader contexts within which individuals live (Gurtner, Monnard, & Genoud, 2001, Wosnitza, 2007). The standards and values that motivate an individual are seen to be socially constructed through relationships, social supports, opportunities and interactions and then internalised by that individual (Hickey & Granade, 2004). Other people are regarded as co-constructors of individual motivation. This study examined the roles other people play in the decisions of Australian and German students in choosing teacher education. An innovative method was developed to gather both qualitative and quantitative data in group settings. The study combines elements of social cognitive and situated theoretical approaches to motivation which is conceptualized as a dual psychological and social phenomenon (Järvelä & Volet, 2004). The focus of the research is on social interactions and relationships with others and how these are perceived to have shaped the motivation to become a teacher. In the following, the study's conceptual framework is presented, followed by a brief review of literature relating to motivation and teacher education. The rationale for the methodology is outlined and the specific aims of the study presented.

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The literature regarding social interactions and relationships with other people indicates a variety of roles in relation to motivation. Significant others can range from unknown role models such as famous people to close family members and they can have both a positive and negative influence (Beltman, 2005a). People such as teachers or coaches who give feedback linking effort to improvement are likely to enhance positive motivational outcomes, whereas stressing competition with others, can have a negative effect (Brophy, 1987; Schinke & da Costa, 2001). Other people may also provide, or fail to provide, social and emotional support in everyday life (Gottlieb & Sylvestre, 1996) and times of difficulty (Bianco, 2001). The present study draws upon current theory and research on social aspects of motivation to consider the role others play in decisions to become teachers.

Within the context of tertiary education, various studies and reports have considered what universities can do to maximise retention once students have decided to enrol (e.g., Krause, Hartley, James, & McInnes, 2005). Few studies have considered the social and motivational factors relating to why students decide to enrol in particular courses such as teacher education (Guarino, Santibañez, & Daley, 2006), and when they do the focus has often been on academic and social support offered from within the institution or course (Grant-Vallone, Reid, Umali, & Pohlert, 2003/2004; Packard, 2004-2005; Salinitri, 2005; Topping, 1998) rather than considering broader social contexts.

The context of research findings is important as many are "distinctly culturally specific to western societies such as the US, UK and Australia" (Lai, Chan, & So, 2005, p.155). These researchers found that in Hong Kong, where teaching is a respected career, social influences such as teachers, family members, and peers were ranked quite low. Similarly, social reasons for choosing teaching were ranked low in Singapore (Goh & Aputhasamy, 2001). In Nigeria where teaching is a low status career the influence of parents was one main reason for taking the course (Ejieh, 2005). In the Australian context, the mass media and general public have increasingly seen teaching as a poor career choice (Richardson & Watt, 2006). The ageing trend of teachers and current demand for staff is a concern both in Australia and Germany (Organisation for Economic Co-operation and Development, 2003, 2007) with both countries experiencing and expecting shortages in some areas.

In more proximal social contexts literature reviewed provided mixed findings as to the importance of other people's role in making choices about careers-related courses. Kniveton (2004) found the greatest influence on English high school students' choice of prospective career was their parents, followed by their teachers. Recently graduated teachers in the USA were asked about critical incidents which facilitated their decision to enter teacher education (Alastuey, Justice, Weeks, & Hardy, 2005). Modelling by teachers and professors in the teaching profession, and the persuasion of family, friends and acquaintances were in the top six "incidents". Priyadharshini and Robinson-Pant (2003) interviewed mature age students in the UK about why they had switched to teaching as a career. One common response included teachers who acted as positive role models.

In contrast, Jarvis and Woodrow (2005) asked students in the UK why they enrolled in their teaching course. Responses did not explicitly mention the role of others and the most frequent category was "want a challenging/stable/rewarding career." Richardson and Watt (2006) found that the while the encouragement of others was not a strong influence to choose teaching, participants did report relatively strong experiences of social dissuasion where others had advised them not to become teachers. Negative experiences could lead to the decision to become a teacher as participants felt they could empathise with their own students who were struggling, or improve the system from within. Hammond (2002) found that a negative experience at school had a positive motivational effect on decisions to become a teacher.

In summary, current findings regarding student motivations to enter teacher education courses vary in different contexts, with social relationships being of mixed importance. One of the challenges with conceptualising motivation from a situated perspective, is the development of appropriate methodology, and there is a trend from more traditional surveys to the use of mixed method designs (Volet, 2001). Some researchers have gathered both closed-ended quantitative and open-ended qualitative data across a large sample over time (Watt, Richardson, & Tysvaer, 2007), but the studies reported above have primarily used closed response questionnaires or in-depth interviews. While surveys may not be helpful for understanding individual students' attitudes and motivations (Gorard, See, Smith, & White, 2007), there are also methodological difficulties associated with the often small sample sizes of in-depth qualitative studies (Guarino et al., 2006).

Addressing the challenge to produce both quantitative and qualitative data and to capture individual perceptions of social influences, a graphic representation measurement tool, the "Circles Task", was developed. It was based on an individual instrument used in a previous study (Beltman, 2005b). Concentric circles have been used to develop a visual representation of individuals' social networks by a number of researchers and practitioners (e.g., Neilsen & Bowes, 1996; Pearpoint, Forest, & O'Brien, 1996). Studies of social networks tend to focus on positive relationships but the Circles Task extended this by including both positive and negative relationships. It was further modified for use with groups and a quantitative measure of the relative strength of significant relationships was incorporated.

The present study is underpinned by the theoretical assumption that motivation is shaped through interactions and relationships with other people. Specifically, the aim was to examine the roles other people have played in students' progress towards becoming a teacher. The two universities available to the researchers were set in the national cultural, political and economic contexts of Australia and Germany. With both countries experiencing some current and prospective shortages of teachers, it was not expected that there would be major significant differences between the two groups. The study had three key features. First, it built upon previous research highlighting the importance of social aspects of motivation; second, it used a novel graphic method to measure motivation; and third, it incorporated a national level contextual perspective. The research questions asked were:

1. Who are the people reported by Australian and German teacher education students as most important in shaping their decisions to become teachers?
2. How strong are the relative influences of different categories of other people?
3. What types of influences do other people have in shaping decisions to become a teacher?

## METHOD

### Participants

Participants (*N*=303) were first year early childhood and primary teacher education students in one Australian (*n*=121) and one German University (*n*=182). The study was conducted during regular university tutorial classes and took approximately 20 minutes. Students were informed about the purpose and nature of the research and provided demographic information. Participation was voluntary and anonymous. Response rates were high (91% Aus, 94% Ger). Typical of teacher education courses in both countries, females (86.3%) outnumbered males. There were no significant differences between countries in gender or age (*M*=22 years *SD*=4.4 years; range 17-43 years). Similarly, most students were born in the country of study (Aus. 85.1%, Ger. 93.4%).

### Instrument – the Circles Task

Participants completed the Circles Task. They were asked to think about people who had helped or hindered them in their journey to become a teacher education student at university. Using a printed label for each person nominated, the students wrote their relationship with that person (e.g. father, sports coach), whether the influence was positive or negative, the type of influence (e.g. practical help, showing an interest) and an example of how the other person had influenced them. Two examples were displayed (see Figure 1) and questions clarified.

Students then completed the labels and placed them on an A2 sheet of paper depicting three concentric circles (see Figure 2). The centre of the circles and of each label contained a dot. Students were informed that when the stickers were placed, the distance between these two dots represented the intensity of the influence – the closer to the centre of the circles, the stronger the influence.

| | |
|---|---|
| ❑ positive influence ☒ negative influence<br>Relationship: ***Father***<br>●<br>Type of influence: ***information (or negative opinion)***<br>Example: ***He told me that everybody will hate me***<br>_____ | ☒ positive influence ❑ negative influence<br>Relationship: ***Character in movie***<br>●<br>Type of influence: ***inspiration***<br>Example: ***It was inspiring to see someone making a difference in a child's life*** |

**Figure 1**: Label demonstration examples.

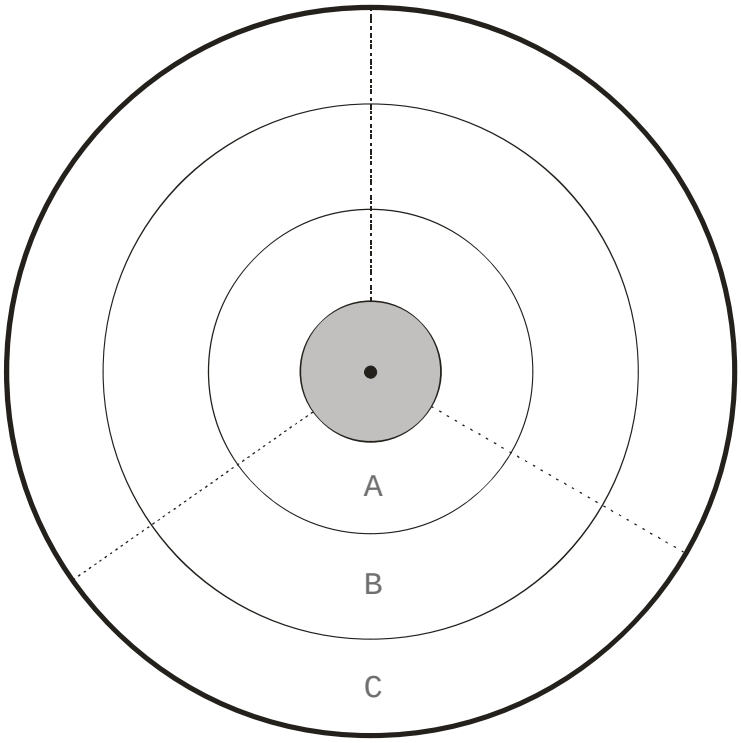


**Figure 2**: Circles task.

## Analysis

Students nominated 1,655 influences (*M*=5.46, *SD*=1.6; range 1-10). The written responses (relationship, type of influence, and examples) of the German students were translated into English as the language of interaction between the researchers. Translations were independently checked by two research assistants who spoke both languages.

For qualitative analyses two coding systems were developed based on a previous study (Beltman, 2005b). Following Mayring (2003) the coding systems were modified during the coding process until they optimally represented the data. The first coding system was for the categories and sub-categories of relationships of those nominated as significant in participants' decisions to become a teacher education student (see Table 1).

**Table 1:** Categories of relationships

| Category | Sub-category | Description |
|---|---|---|
| **R1** self | | self-motivation, self-belief, or lack of these |
| **R2** family | **R2.1** immediate family | partner, mother, father, step father, siblings, girl/boy friend |
| | **R2.2** extended family | grandparents, aunts, uncles, cousins, in-laws, host family |
| **R3** own teachers | **R3.1** teacher in general | context unspecified |
| | **R3.2** primary | classroom teacher |
| | **R3.3** secondary | classroom teacher |
| | **R3.4** tertiary university / technical college | lecturer or tutor |
| | **R3.5** teachers out of school/university | private tutors in educational subjects or areas such as music, dance etc |
| **R4** other people in education | **R4.1** own students | students who have been taught or tutored |
| | **R4.2** known through education contexts | principal, year coordinator, careers adviser; other teachers known |
| | **R4.3** peers/colleagues in education | other students in same or other course; cooperating teacher on practicum or work experience |
| **R5** organizational structures in education | | structural features such as travel, course entry requirements and selection processes |
| **R6** wider community | **R6.1** friends | friends known through education or other contexts |
| | **R6.2** others | people in the community such as neighbours, employers, society and community in general |
| **R7** celebrities | | international and national figures, material written by or about such people; media |
| **R8** fictional characters | | characters in novels, cartoon, movies or TV shows |
| **R9** other | | e.g. God |

Participants were asked to nominate the type of influence and give an example. Table 2 indicates the coding system developed to represent the types of positive and negative influences described by participants and explained in their examples.

In the quantitative analysis, the distance of each label from the centre of the circles was measured (in mm) to determine the strength of that influence. Using the coding categories developed, several analyses were conducted to address the research questions. These examined the frequencies of categories of relationships and types of influence, the strength of various categories of relationships and types of influence, and similarities and differences between groups of students.

**Table 2:** Categories of positive and negative influences

| Category | Code | Sub-Category | Description |
|---|---|---|---|
| **P** Positive | **P1** | Negative to positive | Used negative experience (e.g. having a bad teacher) as a positive influence |
| | **P2** | Specific support | Study help, money, time off work, babysitting, information about courses |
| | **P3** | General support | General interest and encouragement; general positive comments; want the best for person; belief in person; emotional support |
| | **P4** | Positive comments about person | Statements about suitability for teaching or being good with children |
| | **P5** | Positive experiences with children | Good experiences working with or caring for children |
| | **P6** | Positive comments about teaching (as a job) | Statements that teaching is a good career, important job, sensible option… |
| | **P7** | Positive comments about the course | Statements that the course will be interesting, relevant… |
| | **P8** | Inspiration / role model | Another has demonstrated excellent teaching or admirable qualities; want to be like that |
| | **P9** | Personal effect on others | Desire to help others or make a difference; to fulfil others' expectations |
| | **P10** | Self-focus (self is relationship) | Desire to make own decisions, follow own goals |
| **N** Negative | **N1** | Negative experiences | Having a bad teacher or experience as a student |
| | **N2** | Negative comments by others about teaching or course | Low salary; people hate teachers; students can be difficult; not an easy job; teaching isn't fun |
| | **N3** | Negative comments about person's decision or suitability for teaching | You are not smart enough or too smart; you should be earning money; you could do better |
| | **N4** | Lack of expected practical help or support | Not interested; no help with practical aspects |
| | **N5** | Practical or organizational difficulties for self | Having a disability, family illness, distracting friends |

## RESULTS

The findings are organised around the first three research questions. Although not the focus of the research, any differences between Australian and German students are noted within each of the other questions.

### Who is important?

The first research question asked which people were most important in shaping participants' decisions to study teacher education. Of the nominated relationships, 99.6% could be coded according to the categories and sub-categories in Table 1. Table 3 indicates the frequency and percentages for

each of the sub-categories of relationships, and the mean and standard deviations for the strength of each relationship. The sub-category containing the most nominations was the immediate family (34.7% of all nominations). The next most nominated sub-categories were friends in the wider community (19.1%), others in the wider community (9.2%) and extended family (7.9%).

**Table 3:** Frequencies and strengths of nominated relationships

| Category | Sub-category | *f* | % | Distance (mm) *M* | Distance (mm) *SD* |
|---|---|---|---|---|---|
| **R1** self | | 26 | 1.6 | 67.54 | 16.84 |
| **R2** family | **R2.1** immediate family | 574 | 34.7 | 94.63 | 39.97 |
| | **R2.2** extended family | 130 | 7.9 | 121.05 | 42.76 |
| **R3** own teachers | **R3.1** teacher in general | 110 | 6.6 | 122.49 | 42.41 |
| | **R3.2** primary | 48 | 2.9 | 119.33 | 42.83 |
| | **R3.3** secondary | 63 | 3.8 | 127.94 | 50.87 |
| | **R3.4** tertiary university / technical college | 40 | 2.4 | 129.17 | 40.16 |
| | **R3.5** teachers out of school/university | 14 | 0.8 | 128.21 | 40.43 |
| **R4** other people in education | **R4.1** own students | 23 | 1.4 | 109.30 | 37.53 |
| | **R4.2** known through education contexts | 37 | 2.2 | 129.81 | 43.63 |
| | **R4.3** peers/colleagues in education | 84 | 5.1 | 114.44 | 42.33 |
| **R5** organizational structures in education | | 6 | 0.4 | 96.17 | 46.78 |
| **R6** wider community | **R6.1** friends | 316 | 19.1 | 117.72 | 40.08 |
| | **R6.2** others | 152 | 9.2 | 135.53 | 45.44 |
| **R7** celebrities | | 11 | 0.7 | 153.64 | 36.54 |
| **R8** fictional characters | | 14 | 0.8 | 166.07 | 39.14 |
| **R9** other | | 7 | 0.4 | 111.86 | 49.07 |

## How strong are the relative influences of different categories of other people?

The second research question related to the relative strength of the relationships as indicated by the distance between the centre of the circles and the centre of each label (see Table 3). Although participants were asked to nominate people who had influenced their decision to enter teacher education, some nominated people who were encountered after entering teacher education, such as other students in the course, current lecturers and cooperating teachers. The coding system was designed to reflect participants' responses so all such nominations were included in the categories of "other people in education" or "own teachers" (see Table 1). This finding is discussed later. A small percentage (1.6%) nominated self as the most important factor. After self, the strongest relationship was immediate family as it was the closest to the centre of the circles ($M$=94.63mm).

To calculate the relative strength of sub-categories of relationships, a Scheffé multiple range test was used to identify homogeneous groups. Only groups of other people comprising more than 5% of

nominations were included in the analysis. Three groups were identified (see Table 4). Overall, the immediate family (All1) had the strongest influence on the decision to become an education student (*M*=94.63mm, *SD*=39.97). This group was followed by a mixed group (All2) composed of colleagues in the education context (e.g., fellow students in the same course or cooperating teachers on practicum), the students' friends from the wider community, the extended family (e.g. grandparents) and the students' own teachers (R3 in Table 3). The third group (All3), with the smallest influence, was other people in the wider community such as neighbours or employers.

For Australian students, only two groups were identified: Group one (AUS1) contained the immediate family and group two (AUS2) contained all other sub-categories. For German students, the three group structure in Table 4 was applicable, with distances comparable to the overall structure, although the prominent position of the immediate family was less strong. In comparison to the German students, the influence of the immediate family was significantly stronger for Australian students ($t$ =2.73, $df$ =571, $p$ =.01).

**Table 4:** Relative strengths of sub-categories of nominated relationships (Distances in millimetres)

| | All | | | Australia | | Germany | | |
|---|---|---|---|---|---|---|---|---|
| | Groups for alpha =0.05 | | | | | | | |
| | All1 | All2 | All3 | AUS1 | AUS2 | GER1 | GER2 | GER3 |
| immediate family | 94.63 | | | 89.56 | | 98.69 | | |
| peers/colleagues in education | | 114.44 | | | 116.11 | 113.25 | 113.25 | |
| Friends | | 117.72 | | | 120.88 | 115.89 | 115.89 | |
| extended family | | 121.05 | 121.05 | | 116.66 | | 125.73 | 125.73 |
| own teacher | | 124.45 | 124.45 | | 126.53 | | 122.41 | 122.41 |
| others in wider community | | | 135.53 | | 132.16 | | | 138.01 |
| *P* | 1.0 | .42 | .07 | 1.0 | .26 | .20 | .57 | .30 |

## What are the types of influences?

The third research question asked about the types of positive and negative influences other people were reported to have in shaping students' decisions to become a teacher education student. Of the types of influence and examples given by participants 95.7 % were coded according to the categories in Table 2. Table 5 gives the frequency, percentage, mean distance and standard deviation for each category and sub-category of type of influence.

Overall, there were more positive (76.0%) than negative (21.9%) nominations and 2.1% did not indicate if the influence was positive or negative. The negative influences were further from the centre, i.e. significantly less strong, than the positive influences (negative: *M*=152.29mm, positive: *M*=100.70mm, $t$= -22.39, $df$ =1616, $p$<.00). There were no differences between genders. When comparing the numbers of nominations, Australian students nominated significantly more positive influences than German students (Aus: 54.6%, Ger: 45.4%, $X^2$=10.70, $p$<.00).

For types of positive influence, the most nominated category was general support (41.2 %), followed by positive comments about the student (20.8 %), and people who were inspirational or a role model (16.8%). The category of general support included aspects such as showing general interest and encouragement, offering general positive comments, wanting the best for the person, and having a belief in the person (see Table 6 for examples of comments). The five main types of positive influence were the same in the Australian and German samples. General support (P3) was mentioned most often (Aus: 32.9%, Ger: 33.6%) but the Australian students reported this category to be a significantly stronger influence (Aus: *M*=91.5mm, *SD*=30.4; Ger: *M*=100.4mm, *SD*=36.4; $t$ =2.67, $df$ =409, $p$=.01).

**Table 5:** Relative strengths of nominated relationships

| Category | Code | Sub-Category | *f* | % | Distance (mm) *M* | Distance (mm) *SD* |
|---|---|---|---|---|---|---|
| **P** Positive | **P1** | Negative to positive | 35 | 2.8 | 128.31 | 59.12 |
| | **P2** | Specific support | 118 | 9.5 | 98.44 | 38.26 |
| | **P3** | General support | 412 | 33.3 | 96.27 | 34.04 |
| | **P4** | Positive comments about person | 257 | 20.8 | 96.71 | 34.98 |
| | **P5** | Positive experiences with children | 41 | 3.3 | 107.05 | 32.70 |
| | **P6** | Positive comments about teaching (as a job) | 106 | 8.8 | 108.11 | 38.23 |
| | **P7** | Positive comments about the course | 14 | 1.1 | 108.29 | 41.09 |
| | **P8** | Inspiration / role model | 208 | 16.8 | 111.23 | 41.33 |
| | **P9** | Personal effect on others | 34 | 2.7 | 95.50 | 37.12 |
| | **P10** | Self-focus (self is relationship) | 13 | 1.1 | 70.77 | 22.34 |
| | | | 1238 | | | |
| **N** Negative | **N1** | Negative experiences | 32 | 9.2 | 145.31 | 40.95 |
| | **N2** | Negative comments by others about teaching or course | 165 | 47.7 | 160.72 | 34.00 |
| | **N3** | Negative comments about person's decision or suitability for teaching | 115 | 33.2 | 149.03 | 43.35 |
| | **N4** | Lack of expected practical help or support | 23 | 6.6 | 138.48 | 47.27 |
| | **N5** | Practical or organizational difficulties for self | 11 | 3.2 | 140.55 | 40.74 |
| | | | 346 | | | |

**Table 6:** Examples of the most frequent positive influence: "General Support"

| participant | relationship | Example |
|---|---|---|
| 049 age 20 Ger fem | parents | "We stand behind what you do and will always help you!" |
| 202 age 18 Aus male | friend | My friends are very supportive in everything I do and particularly take interest into what I am currently doing at University |

For negative influences, the most nominated category was negative comments by others about teaching or the course (N2) (47.7 %), followed by negative comments about the student's suitability for teaching (N3) (33.2%) (see Table 5). Examples of these negative influences appear in Table 7. There was no difference between the two countries in the strength or intensity of the negative types of influence, there was a structural difference with a significantly greater proportion of responses by German students in the category N2 (Aus: 35.1%, Ger: 57.4%, $X^2$=21.10 $p$<.00).

**Table 7:** Examples of most frequent negative influences

| participant | relationship | example |
|---|---|---|
| N2: Negative comments by others about teaching or course | | |
| 048 age 20 Ger fem | Father | "You earn so little and have so much stress. Do something better with your abilities." |
| 249 age 22 Aus male | news media | News reports regarding unions, problems with outcome based education and issues with male teachers. |
| N3: Negative comments about person's decision or suitability for teaching | | |
| 130 age 24 Ger fem | Aunt | "You are getting too old, find a man and marry." |
| 293 age 20 Aus fem | English teacher yr 12 | Told me in front of the class I wouldn't pass TEE or make it in this world because I am not good at English. |

A further analysis examined whether the categories of people nominated as being significant were differentially more positive or negative. Overall, the influence of the most significant groups of people was positive. However, there were some differences between categories (see Figure 3). While the immediate family and peers and colleagues in education were more positive in their influence, those in the wider community (other than friends) seemed to give more equally positive and negative feedback. Negative influences were more likely to come from extended family than from immediate family.

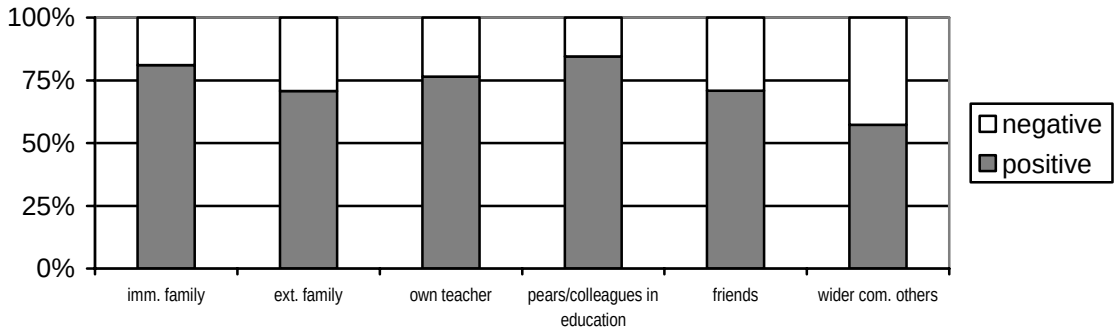


**Figure 3:** Positive and negative influences of nominated relationships.

## DISCUSSION

The following discussion first considers each of the three main research questions with the results for each briefly summarised and discussed. Comparisons between Australian and German students are included for each research question. The methodology, some limitations of the study and directions for future research are briefly considered.

### Who is important and what is the relative strength of their influences?

Participants from both countries most frequently nominated immediate family (e.g., parents, partners, siblings) as the most important people in affecting their decision to choose teacher education. The immediate family also had the strongest influence on decisions and was significantly stronger for Australian than German students. One longitudinal study in Australia found that parental expectations had become increasingly important in students' decisions to undertake tertiary courses in general (Krause et al., 2005). Other studies have also found parental influence the major reason for entering teacher education (Ejieh, 2005; Kniveton, 2004). One interpretation could be that immediate family represents not only the closest personal relationships but generally also the most enduring over

time. So it would be expected that they would have a greater influence than perhaps more distal or transient relationships. Other studies did not find that family were very important but this could be because of methodological differences in the research or the different cultural contexts in which questions were asked.

Participants were asked think about people who had helped or hindered them in their journey to *become* a teacher education student at university. An interesting finding was that although it was expected that the people would be those encountered before students entered the course, in fact many nominations were for people who must have been encountered *after* beginning the program, such as other students in the course, current lecturers and cooperating teachers on practicum. One explanation for this relates to current understandings of motivation as being situated and dynamic. Rather than one-off decisions being made about whether to engage or not, individuals make ongoing appraisals of personal and contextual affordances and constraints of their situation and, based on those appraisals, decide to persist, modify their participation or discontinue (Beltman & Volet, 2007). Another way of conceptualising this is from a pathways framework where students are seen to make continuing decisions over time (Robinson & Bornholt, 2007). Students' responses in this study reflected this ongoing, dynamic process of decision-making.

## What the types of influences do other people have in shaping decisions to become a teacher?

Both Australian and German students indicated that the most common type of positive influence on their decision to become a teacher education student was "general support". Research has shown the importance of a feeling of connectedness or belonging to a person, group or culture (Ryan & Deci, 2000) developed through relationships with significant others (Resnick, Harris, & Blum, 1993). Relationships provide social support which can prevent or alleviate the negative effects of stress (Krause, 2006; Salinitri, 2005). The present study is consistent with these findings.

The most nominated negative type of influence for both Australian and German students was negative comments by others about teaching or comments others made about their perceptions of the course, perhaps reflecting the prevalent public view in both countries of teaching as hard work with low status (Organisation for Economic Co-operation and Development, 2003; Richardson & Watt, 2006).

Students overall reported more positive influences which were significantly stronger than negative ones. This finding is intuitively reasonable as student did decide to enter teacher education despite experiencing some negative influences. It contrasts, however, with Richardson and Watt's (2006) finding that social dissuasion from others to decide on teaching as a career was greater than social persuasion to do so. Their participants also reported perceiving teaching as a demanding career, but nevertheless satisfaction with their career choice was high. It could be that the personal general support, so strong in this study, was also available to Richardson and Watt's participants but was not targeted in the questionnaire items used. Rather than being a motivational factor in itself, perhaps personal general support provides a foundation upon which an individual's decisions can be made and enacted.

## Methodology

In this study a new instrument was used. In different areas of research such as knowledge representation, problem solving or social networking, graphical representation is used quite often (e.g., Eckert, 1999; Wosnitza, 2000) but this type of approach is rare in studies of motivation. The way the data were collected allowed students to spontaneously nominate the main people who had influenced them and explain this influence without being constrained by closed responses. Administering the Circles Task in group settings, although more efficient than an individual interview, meant it was not possible to further explore or clarify responses given by students.

The categorical system used with other target groups (athletes and musicians) (Beltman, 2005b) was redefined during the process of data analysis as responses from within the different context required some refinement of the codes used. Using this coding system as a starting point in future studies in different contexts could further refine the categories of responses. It would also be possible

to use this system to develop more in-depth follow-up studies of specific groups such as comparing those who nominated very few significant others and those who nominated several social influences.

### Limitations of the study and directions for future research

Perhaps the major limitation of the present study was that is did not include a comparison group of people who decided not to enter teacher education. Overall, the participants reported more positive than negative experiences and it may have simply been this balance which affected their decision to actually enrol in teacher education. Without a comparison group of students who decided not to study teacher education, it is not possible to draw any general conclusions (Gorard et al., 2007; Guarino et al., 2006). Future research is required which includes comparison groups since this would indicate whether, for example, students who decided not to enter teacher education had experienced more negative influences, and from whom, than students who did enter the program. From a sociocultural or situated perspective, the importance of congruence between personal and contextual features in relation to ongoing involvement has been illustrated (Volet, 1999). This is a similar idea to the concept of a course or career fitting an individual's values and expectations (Richardson & Watt, 2005) and may be a useful framework for considering decisions to pursue teacher education despite negative comments and experiences.

This research represents a snapshot view and includes retrospective but not longitudinal data. It gives some indication of how student decisions have been shaped, but not, for example, of the role played by family over the whole teacher education program. Other types of social influence may be more important in latter parts of the course, or for those who are achieving poorly in their studies. The present study focussed on the role of others in the process of deciding to enter teacher education but further research is needed to focus on the developmental aspects of social influence. More flexible, online measurements need to be developed to analyse this issue and specify the dynamic interplay between the student and his or her environment. Others support the need for longitudinal research (Robinson & Bornholt, 2007; Watt & Richardson, 2007).

Although the main findings were consistent across groups, there were some subtle differences between Australian and German students. For example, Australian students nominated more positive influences than German students, a finding similar to an earlier study where Australian students were more positive than German students in their assessment of their social learning environment (Wosnitza, 2007). National political and economic contexts need to be considered when interpreting research findings (Ejieh, 2005; Lai et al., 2005),as do different geographical locations and institutional policies within nations (Gorard et al., 2007; Guarino et al., 2006). This was beyond the scope of this paper, but it is recognised that particular research findings may be specific to the context in which they are located and that generalized conclusions may be difficult to determine. We need to continue to examine different contexts to see how a range of factors plays out in particular settings.

This research has focused on the interpersonal interactions and relationships perceived as relevant in the journey to become teacher education students. Studies on retention in teacher education and other university courses do explicitly consider support, but usually only that offered by students and staff within the institution. The more personal and emotional support of family and friends outside of the university seems to be rarely considered. Given its prominence in the present study, this could be a useful factor to consider for those investigating why students select, remain in or fail to complete their university courses.

## CONCLUSION

The present study combined aspects of social cognitive and sociocultural perspectives. It extended existing research by using a novel method to explore how individual beliefs and actions have been shaped through interactions with other people. The findings are a reminder of the need to consider the "social, cultural, and historical contexts" of cognitive functioning (De Corte, Greer, & Verschaffel, 1996, p.497). As Winne (2004, p.263) suggested, there is value in "combining multiple paradigmatic stances" for theorising about constructs such as motivation.

## REFERENCES

Alastuey, L., Justice, M., Weeks, S., & Hardy, J. (2005). Why we complete a teacher education program - credentialed teachers: A critical incident inquiry. *Education, 126*(1), 37-47.

Beltman, S. (2005a, September). *Enabling, encouraging and extending: social interactions and motivation.* Paper presented at the 40th APS Annual Conference, Melbourne, Australia.

Beltman, S. (2005b). *Motivation of high-achieving athletes and musicians: A person-context perspective.* Unpublished Doctor of Philosophy, Murdoch University, Perth, Western Australia.

Beltman, S., & Volet, S. (2007). Exploring the complex and dynamic nature of sustained motivation. *European Psychologist, 12*(4), 314-323.

Bianco, T. (2001). Social support and recovery from sport injury: Elite skiers share their experiences. *Research Quarterly for Exercise and Sport, 72*(4), 376-388.

Brophy, J. (1987). Synthesis of research on strategies for motivating students to learn. *Educational Leadership, October*, 10-18.

De Corte, E., Greer, B., & Verschaffel, L. (1996). Mathematics learning and teaching. In D. Berliner & R. Calfee (Eds.), *Handbook of educational psychology* (pp. 491-549). New York: MacMillan.

Eckert, A. (1999). Die Mannheimer Netzwerk-Elaborierungs-Technik. [The Mannheim Network Elaboration Technic]. In W. K. Schulz (Ed.), *Aspekte und Probleme der didaktischen Wissensstrukturierung [Aspects and Problems of didactical knowledge structuring]* (pp. 93-111). Frankfurt am Main: Peter Lang.

Ejieh, M. U. C. (2005). Students' reasons for entering Nigerian primary teacher education and their career plans. *Research in Education, 74*, 36-48.

Goh, K. C., & Aputhasamy, L. (2001, December). *Teacher education in Singapore: What motivates students to choose teaching as a career?* Paper presented at the Australian Association for Research in Education International Conference, Fremantle, Australia.

Gorard, S., See, B. H., Smith, E., & White, P. (2007). What can we do to strengthen the teacher workforce? *International Journal of Lifelong Education (Online), 26*(4), 419-437.

Gottlieb, B., & Sylvestre, J. C. (1996). Social support in the relationships between older adolescents and adults. In K. Hurrelmann & S. F. Hamilton (Eds.), *Social problems and social contexts in adolescence: Perspectives across boundaries.* (pp. 153-173). New York: Aldine de Gruyter.

Grant-Vallone, E., Reid, K., Umali, C., & Pohlert, E. (2003/2004). An analysis of the effects of self-esteem, social support, and participation in student support services on students' adjustment and commitment to college [Electronic Version]. *Journal of College Student Retention, 5*(3), 255-274.

Guarino, C. M., Santibañez, L., & Daley, G. A. (2006). Teacher Recruitment and Retention: A Review of the Recent Empirical Literature. *Review of Educational Research, 76*(2), 173-208.

Gurtner, J., Monnard, I., & Genoud, P. (2001). Towards a multilayer model of context and its impact on motivation. In S. Volet & S. Järvelä (Eds.), *Motivation in learning contexts: Theoretical advances and methodological implications* (pp. 189-208). Amsterdam: Pergamon.

Hammond, M. (2002). Why teach? A case study investigating the decision to train to teach ICT. *Journal of Education for Teaching, 28*, 135-148.

Hickey, D., & Granade, J. B. (2004). The influence of sociocultural theory on our theories of engagement and motivation. In D. M. McInerney & S. Van Etten (Eds.), *Research on sociocultural influences on motivation and learning* (Vol. 4, pp. 223-247). Greenwich, CT: Information Age Publishing.

Järvelä, S., & Volet, S. (2004). Motivation in real-life, dynamic, and interactive learning environments: Stretching constructs and methodologies. *European Psychologist, 9*(4), 193-197.

Jarvis, J., & Woodrow, D. (2005). Reasons for choosing a teacher training course. *Research in Education, 73*, 29-37.

Kniveton, B. H. (2004). The influences and motivations on which students base their choice of career. *Research in Education, 72,* 47-61.

Krause, K.-L. (2006, September). *Accommodating diverse approaches to student engagement.* Paper presented at the Evaluating and Enhancing Student Engagement in Learning: Quality Enhancement Meeting 11, Wellington, New Zealand.

Krause, K.-L., Hartley, R., James, R., & McInnes, C. (2005). The first year experience in Australian universities: Findings from a decade of national studies. Retrieved June 3, 2005, from http://www.dest.gov.au/sectors/higher_education/publications_resources/profiles/first_year_experience.htm#version

Lai, K.-C., Chan, K.-W., & So, K.-S. (2005). Teaching as a career: A perspective from Hong Kong senior secondary students. *Journal of Education and Teaching, 31*(3), 153-168.

Mayring, P. (2003). *Qualitative Inhaltsanalyse. Grundlagen und Techniken [Qualitative content analysis: Basics and Techniques]* (8 ed.). Weinheim und Basel: Beltz Verlag.

Neilsen, C. M., & Bowes, J. M. (1996, April). *Children's friendship networks: Looking beyond the classroom walls.* Paper presented at the 9th Australasian Human Development Conference, Perth, Western Australia.

Nuttall, J., Murray, S., Seddon, T., & Mitchell, J. (2006). Changing research contexts in teacher education in Australia: Charting new directions. *Asia-Pacific Journal of Teacher Education, 34*(3), 321-332.

Organisation for Economic Co-operation and Development. (2003). Attracting, developing and retaining effective teachers: Country background report for the Federal Republic of Germany. Retrieved March 23, 2007, from http://www.oecd.org/document/

Organisation for Economic Co-operation and Development. (2007). Education at a Glance 2007. Retrieved October 3, 2007, from http://www.oecd.org/dataoecd/4/55/39313286.pdf

Packard, B. W. (2004-2005). Mentoring and retention in college science: Reflections on the sophomore year. *Journal of College Student Retention (online), 6*(3), 289-300.

Pearpoint, J., Forest, M., & O'Brien, J. (1996). MAPs, Circles of Friends, and PATH. In S. Stainbach & W. Stainbach (Eds.), *Inclusion: A guide for educators* (pp. 74-77). Baltimore, Maryland: Paul H. Brokes Publishing Co.

Priyadharshini, E., & Robinson-Pant, A. (2003). The attractions of teaching: An investigation into why people change careers to teach. *Journal of Education for Teaching, 29*(2), 95-112.

Resnick, M. D., Harris, L. J., & Blum, R. W. (1993). The impact of caring and connectedness on adolescent health and well-being. *Journal of Paediatrics and Child Health, 29*(Suppl. 1), S3-S9.

Richardson, P. W., & Watt, H. M. G. (2005). 'I've decided to become a teacher' Influences on career change. *Teaching and Teacher Education, 21,* 475 - 489.

Richardson, P. W., & Watt, H. M. G. (2006). Who chooses teaching and why? Profiling characteristics and motivations across three Australian universities. *Asia-Pacific Journal of Teacher Education, 34*(1), 27-56.

Robinson, R. A., & Bornholt, L. J. (2007). Pathways theory of progression through higher education. *Australian Journal of Educational & Developmental Psychology 7,* 49-62.

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology, 25*(1), 54-67.

Salinitri, G. (2005). The effects of formal mentoring on the retention rates for first-year, low achieving students [Electronic version]. *Canadian Journal of Education, 28*(4), 853-873.

Schinke, R. J., & da Costa, J. L. (2001). Understanding the development of major-games competitors' explanations and behaviors from a contextual viewpoint. *Athletic Insight, 3*(3).

Topping, K. J. (1998). The effectiveness of peer tutoring in further and higher education: A typology and review of the literature. In S. Goodlad (Ed.), *Mentoring and Tutoring by Students* (pp. 49-69). London: Kogan Page.

Volet, S. (1999). Motivation within and across cultural-educational contexts: A multi-dimensional perspective. In T. Urdan (Ed.), *Advances in motivation and achievement* (Vol. 11, pp. 185-231). Stamford, Connecticut: JAI Press.

Volet, S. (2001). Emerging trends in recent research on motivation in learning contexts. In S. Volet & S. Järvelä (Eds.), *Motivation in learning contexts: Theoretical advances and methodological implications* (pp. 319-334). Amsterdam: Pergamon.

Watt, H. M. G., & Richardson, P. W. (2007). Motivational factors influencing teaching as a career choice: Development and validation of the 'FIT-Choice' Scale. *Journal of Experimental Education, 75*(3), 167-202.

Watt, H. M. G., Richardson, P. W., & Tysvaer, N. M. (2007). Profiles of beginning teachers' professional engagement and career development aspirations. In A. Berry, A. Clemans & A. Kostogriz (Eds.), *Dimensions of professional learning: Professionalism, practice and identity.* (pp. 155-176). Rotterdam, The Netherlands: Sense Publishers.

Winne, P. H. (2004). Comments on motivation in real-life, dynamic, and interactive learning environments. *European Psychologist, 9*(4), 257-263.

Wosnitza, M. (2000). *Motiviertes selbstgesteuertes Lernen im Studium.[Motivated self-directed learning]*. Landau: VEP.

Wosnitza, M. (2007). *Lernumwelt Hochschule und akademisches Lernen. Die subjektive Wahrnehmung sozialer, formaler und materiell-physischer Aspekte der Hochschule als Lernumwelt und ihre Bedeutung für das akademische Lernen. [University learning environment and academic learning. The subjective perception of social, formal and material aspects of universities as a learning environment and its relevance for academic learning]*. Landau: VEP.

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