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ABSTRACT

This study investigated the influence of social support on a person's career choice and its impact on later achievement, testing the hypotheses that social support that pressures a person into entering a given field will lead to lower achievement, and that social support that contributes to the person's development of a professional identity will result in higher achievement. Subjects were 1,156 medical students who entered medical school between 1976 and 1981. In the first year of this program, they answered questionnaires which dealt with their decision to choose medicine as a career. Sixteen items addressed the question of who had given them social support for entering the field. Career related academic achievement was measured with three indicators: scores on the National Board of Medical Examination I and II and the rating for clinical performance during hospital rotations. The findings from this 4-year panel study provides preliminary support for the hypotheses concerning social support. (Author/NB)

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Social Support for Career Choices and Academic Achievement:  
An Empirical Investigation

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### Abstract

This paper investigates the influence of social support on a person's career choice and its impact on later achievement. We argue that receiving social support can have positive as well as negative consequences. Social support that pressures a person into entering a given field will lead to lower achievement; social support that contributes to the person's development of a professional identity will result in higher achievement. Results from a four year panel study with 1156 medical school students provide preliminary support for these hypotheses. The implications of these findings for understanding the benefits and costs of receiving social support are discussed.

Social support for career choices and academic achievement:  
an empirical investigation

Introduction

Until 1976, social support was a neglected concept in the social sciences. This changed dramatically when Cassel (1976) and Cobb (1976) published their research on the significance of social support for a person's health. From this point on, research increased dramatically and developed in various directions (overview see Inglehart, 1988). While the first wave of publications focused almost entirely on the benefits of receiving social support, more recent research presents evidence that receiving social support can have costs as well. Cohen & Wills (1985) suggest for example that social support can have negative effects when there are network conflicts. Other studies show that negative effects for the person receiving social support can even occur when no network conflicts exist. Wortman & Lehman (1985) describe for example that well intended attempts to give social support can be detrimental if they are excessive, inappropriate, or given at an inappropriate time. Coyne, Wortman & Lehman (1985) point to the negative effects of overinvolvement of family members.

In analyzing the effects of social support on a person's psychological health - i.e. on his or her subjective well-being, productivity, and social functioning - structural as well as functional aspects have to be considered. Structural aspects of social support concerns such questions as who gives social support, how frequently it is given, and what kind of social support is received. Functional aspects concern the underlying psychological processes

that intermediate between receiving social support on the input side and the effects on a person's psychological health on the output side. One major question here is whether social support functions as a buffer that protects a person from stressful events, or whether it has a main effect on the person's psychological health or the amount of stress experienced.

In this paper, we explore how the source and type of social support one receives for a career decision may influence one's academic achievement during professional training for this career. We are interested in whether the source of social support (family versus role models / friends / teachers) and the type of social support (emotionally supportive, demanding or informational support) have differential effects on a person's achievement related to this career.

Social support for a person's career choice and academic achievement is an issue that has been studied extensively in connection with gender differences in achievement (see Eccles, 1987, for an overview). This research demonstrated the significance of parental support for women's academic achievement as well as for their decisions to enter nontraditional career fields such as law, architecture, psychology and medicine (Cartwright, 1972; Farmer, 1985; Haber, 1980; Houser & Garvey, 1985; Standley & Soule, 1974; Trigg & Perlman, 1976). There is also clear evidence that role models play an important role in both women's and men's career choices (see Stake & Noonan, 1985, for an overview).

In this paper, we compare the effects that various types of support for a career choice from different sources have on a person's academic achievement preparing for this career. We expect that positive effects will occur when a person receives social support that helps to develop a strong sense of professional identity. Having a role model in a given career or growing up

with a family tradition that provides numerous occasions for experiencing one's attitudes and feelings about a certain career are two factors that should positively relate to a person's decision. On the other hand, being pushed into a certain career by one's parents because this is important to the parents or having elementary or high school teachers who try to influence a person to enter a certain field might foreclose an identity crisis. A person might very well end up in a given career, but without a clearly developed professional identity the person's career related achievements might not be high. Accordingly, we argue that social support that pressures a person into entering a career (in this case, the importance of entering medical school for the parents, or teachers' early influences) will have detrimental effects on a student's career related achievement; while social support that contributes directly to the person's development of a professional identity -- such as role models, positive impressions of physicians -- will be beneficial to the person's long-term achievement in this career. General support for a given career -- such as parents' or friends' approval -- might have an indirect positive influence on a person's development of a professional identity because it allows the person to explore this career choice freely.

#### Method

These hypotheses were tested on a sample of medical school students (N=1156) who entered the University of Michigan Medical School between 1976 and 1981. In the first year of this program, they answered a self-administered questionnaire which among other topics dealt with their decision to choose medicine as a career. Sixteen items addressed the question who had given them social support for entering medicine as a career. For each item the students indicated on a 5-point rating scale (from 1 = "not at all important" to 5 = "very important") how important this factor had been for their decision. A

principal axis factor analysis of these 16 items with Varimax rotation resulted in six factors (see Table 1 for items and factor loadings).

-- Include Table 1 about here --

Two factors, namely the importance of entering medicine for the parents and early influences by elementary and high school teachers are considered here as social support that is unrelated to developing a professional identity. Two factors, namely the influence of role models and general influences connected with a positive impression of medicine, are interpreted as contributing more or less directly to a student's development of a professional identity. Two factors, the emotional support provided by parents and by significant others such as friends, other adults, and throughout college, are interpreted as positive sources that in a more general way allow the student to feel free and supported to work on the development of his or her professional identity. Indices for these six types of social support were constructed by adding up the responses to the items loading on each factor.

Career related academic achievement was measured with three indicators. The first indicator is the total score in the National Board of Medical Examination I (NBME-I) taken in the third year of the medical school program. This standardized examination is given nation-wide and tries to assess the students' knowledge in general science (anatomy, physiology, biochemistry, pathology, microbiology, pharmacology, behavioral science). The second indicator is the total score in the National Board of Medical Examination II (NBME-II) taken in the fourth year of the program. This examination is concerned with medical knowledge such as in medicine, surgery, obstetrics/gynecology, public health/preventive medicine, pediatrics, psychiatry. The third indicator is the rating for the students' clinical performance during their rotations in the hospital.

The data were analysed with regression analyses.

### Results

We predicted that choosing a career because it is important to one's parents or because of early influences that do not stimulate the person to develop his or her own professional identity would be detrimental for the career related achievement in this domain (hypothesis 1). On the other hand, we also expected that social support that contributes to developing a professional identity such as having role models or a positive impression of medicine will be beneficial to the person's performance in medical school (hypothesis 2). Social support that provides general emotional support without being specifically tied to medicine should at least allow the person to freely explore a professional identity and might thus be also beneficial in a more general sense (hypothesis 3).

As can be seen in Table 2, the results of the stepwise regression analyses support hypothesis 1 clearly. The degree to which it was important to the parents that their son / daughter choose medicine as a career was a negative predictor for each of the three measures of academic achievement. Furthermore, early influences had a negative influence on the students' clinical performance.

Social support that is directly connected with the person's development of a professional identity, namely having a positive impression of medicine, had a positive effect on the person's clinical performance. Emotional support of a general kind did not have any significant influences on a person's later performance.

-- Include Table 2 about here --

### Discussion

The goal of the current study was to examine the positive and the



negative effects of receiving social support for a career choice. We argued that some social support can pressure a person into a decision and can thus foreclose any struggle the person might have with this decision. Such a form of social support can be detrimental to later achievement in this domain and (as Inglehart, Malanchuk & Brown, 1988, showed) to these persons' long term career satisfaction. On the other hand, if social support is connected with the development of a professional identity, it can be quite positive for later achievements. The research on the function of role models for men and women clearly demonstrates this point. Purely emotional support that in a general way supports the students' decisions did not have any significant influence on the achievement in our sample.

There is no doubt that social support for achievement-related choices in general and career choices in particular has a tremendous influence on a person's expectations and values connected with these choices (see Eccles, 1987). But at this point it seems important to reflect on the psychological processes that take place between social support on the input side and achievement-related choices and reactions on the output side. We suggest that social support can either contribute to a person's identity development or can foreclose such a development. Preliminary support for this suggestion is found in this panel study of medical students. More direct measures of these intervening processes are needed in order to unravel the puzzle of how social support influences achievement-related choices.

## References

- Cartwright, L. K. (1972). Conscious factors entering the decision of women to study medicine. Journal of Social Issues, 28, 201-215.
- Cassel, J. (1976). The contribution of the social environment to host resistance. American Journal of Epidemiology, 104, 107-123.
- Cobb, S. (1976). Social support as a moderator of life stress. Psychosomatic Medicine, 38, 300-314.
- Cohen, S. & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. Psychological Bulletin, 98, 310-357.
- Coyne, J. C., Wortman, C. B. & Lehman, D. (1985). The other side of support: emotional overinvolvement and miscarried helping. Paper presented at the APA Meeting, Los Angeles.
- Eccles, J. (1987). Gender roles and women's achievement-related decisions. Psychology of Women Quarterly, 11, 135-172.
- Farmer, H. S. (1985). Model of career and achievement motivation for women and men. Journal of Counseling Psychology, 32, 363-390.
- Haber, S. (1980). Cognitive support for the career choices of women. Sex Roles, 6, 129-138.
- Houser, B. B. & Garvey, C. (1985). Factors that affect nontraditional vocational enrollment among women. Psychology of Women Quarterly, 9, 105-117.
- Inglehart, M. R. (1988). Reaktionen auf kritische Lebensereignisse - eine sozialpsychologische Analyse. Stuttgart: Kohlhammer Verlag.
- Inglehart, M., Malanchuk, O. & Brown, D. R. (1988). Creating versus accepting a professional identity and career satisfaction - a longitudinal analysis. Paper presented at the APA Convention, Atlanta.
- Stake, J. E. & Noonan, M. (1985). The influence of teacher models on the career confidence and motivation of college students. Sex Roles, 12, 1023-1031.
- Standley, K. & Soule, B. (1974). Women in male-dominated professions: Contrasts in their personal and vocational histories. Journal of Vocational Behavior, 4, 245-258.
- Trigg, L. J. & Perlman, D. (1976). Social influences on women's pursuit of a nontraditional career. Psychology of Women Quarterly, 1, 138-150.

Wortman, C. B. & Lehman, D. (1985). Reactions to victims in life crises: Support attempts that fail. In I. G. Sarason & B. R. Sarason (eds.), Social support: Theory, research, and applications. Dordrecht, The Netherlands: Martinus Nijhoff.

Table 1: Results of the factor analysis

Item:	Loading
<u>Factor: Importance to parents</u>	
Importance for parents to go to Medical School	.64
Importance for parents to go to UofM Med. School	.74
<u>Factor: Early influences</u>	
Elementary school teacher	.72
High School teacher	.60
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<u>Factor: Influence</u>	
Mother influenced to go to Medical School	.69
Father influenced to go to Medical School	.79
Pos +ive impression	.43
Encouragement by family or other adult(s)	.60
Others' expectations that I would enter	.48
<u>Factor: Role models</u>	
Influence of physician	.75
Family tradition	.76
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<u>Factor: Emotional support</u>	
Mother approved of going to Medical School	.56
Father approved of going to Medical School	.64
<u>Factor: Friends</u>	
Adult	.52
Friends	.54
College	.58

**Table 2:** Results of the regression analyses

Variable:	partial	coefficient	std error	t-value	p
<b><u>NBME-I:</u></b>					
Importance to Parents	-.083	-3.75	1.5	-2.48	.014
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<b><u>NBME II:</u></b>					
Importance to Parents	-.084	-3.78	1.5	-2.44	.015
Early Influences	-.081	-5.66	2.4	-2.35	.019
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<b><u>clinical score:</u></b>					
influence	.082	1.11	0.5	2.34	.020
Importance to Parents	-.071	-1.61	0.8	-2.00	.046
Early Influences	-.081	-2.87	1.3	-2.29	.022