High-school predictors of university achievement: Youths' self-reported relationships with parents, beliefs about success, and university aspirations

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A R T I C L E   I N F O

A B S T R A C T

Associations between youths' reported relationships with their parents, beliefs about how success is attained, educational aspirations, and university completion were examined. Data come from the German Socioeconomic Panel. At age 17, youth ($n = 3284$) reported on their relationships with their parents, beliefs about success, and educational aspirations. University completion was assessed up to eight years later. At age 17, perceptions of parental warmth and interest in youths' academics were associated with beliefs that success is due to merit (positively) and that success is due to external factors or dominance over others (negatively). Beliefs that success is due to merit and external factors were associated with educational aspirations positively and negatively respectively. Educational aspirations positively predicted university completion up to eight years later. Relationships with parents had stronger associations with achievement when parents completed a university degree; beliefs about success had stronger associations with aspirations when parents did not.

Parents have an important influence on their children's beliefs, goals, and in what they invest effort. One area where this has long-term consequences is in children's engagement and achievement in education. Youths' perceptions of specific parenting behaviors, such as parents' involvement in their academics (Kim & Schneider, 2005; McNeal, 1999), as well as the overall reports of relationship quality (Hill et al., 2004; Pomerantz, Moorman, & Litwack, 2007; Spera, 2005), are important for youths' academic aspirations and achievement in high-school and post-secondary school. In addition to high aspirations, youth also need motivational resources in order to succeed: close to half of students across the Organisation for Economic Co-operation and Development (OECD) who begin university programs do not ultimately graduate (OECD, 2014). Those who believe that success is controllable are more likely to succeed (Eccles & Wigfield, 2002), but little research has examined motivational beliefs as a potential mechanism by which youths' perceptions of their relationships with their parents are associated with their academic aspirations and achievement.

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Motivational beliefs and parental relationships

Youths' long-term educational aspirations while in high-school are important predictors of their educational achievement (e.g., Beal & Crockett, 2010; Eccles & Roeser, 2009; Schoon, 2008; Vuolo, Mortimer, & Staff, 2014). However, less is known about the motivational factors associated with educational aspirations. Individuals are more likely to set higher goals and are more highly engaged with their goals when they believe success is due to internally controllable factors (e.g., one's own merit) rather than uncontrollable or external factors (Rotter, 1966; Shane & Heckhausen, 2013, 2016; Weiner, 1985). Those who are more engaged with their goals believe they have more control over attaining these goals (Gollwitzer & Kinney, 1989; Gollwitzer, 2003; Heckhausen & Gollwitzer, 1987), which further stimulates greater engagement as a control–engagement cycle develops (Mirowsky & Ross, 2007; Shane, Heckhausen, Lessard, Chen, & Greenberger, 2012; Skinner, Zimmer-Gembeck, Connell, Eccles, & Wellborn, 1998). Conversely, individuals who believe they lack control over their goals (e.g., that success is attained due to fate or other external factors) are more likely to disengage from their goal pursuit (Shane & Heckhausen, 2013, 2016). Thus, youth who believe their educational goals are controllable are likely to set loftier educational goals and be more engaged in the pursuit of these goals, in turn leading to greater success in higher education.

Youths' perceptions of their parents help shape how they view the world (Parke & Buriel, 2006), and so may also inform their beliefs about the appropriateness and achievability of goals related to higher education. University students who perceive their parents to be warm also believe they have greater control over their actions and academic outcomes, which in turn is positively associated with their grades (Fulton & Turner, 2008). Furthermore, youth who report their parents to be warm tend to put more effort into pursuing their goals (Armstrong, 2012) and believe that the world is fair (Dalbert & Radant, 2009), leading to better academic outcomes over time (Dalbert & Stoeber, 2006). The belief that the world is fair can facilitate individuals' commitment to long-term goal pursuits (Laurin, Fitzsimons, & Kay, 2011; Shane & Heckhausen, 2016), such as completing post-secondary education, possibly because of the corresponding belief that one will be rewarded according to one's own personal merit (Heckhausen & Shane, 2016; Shane & Heckhausen, 2013, 2016). Thus, youths' perceptions of the controllability of success, and ultimately their educational aspirations, may be informed by their relationships with their parents, with parents who are perceived to be warm and supportive setting up an internal working model that their efforts will ultimately be fairly rewarded, leading to higher aspirations and achievement.

Socioeconomic status moderates parental influences

While motivational beliefs and strategies may help youth attain educational goals, sociodemographic factors could constrain the realization of these goals. Youth from higher socioeconomic status (SES) are more likely to succeed in university (OECD, 2014; Schoon, 2008), and have greater academic success, both in the United States (Sirin, 2005) and internationally (Marks, 2005). These associations result in part from differences in the quality of schools youth attend (Perry & McConney, 2010). Parents from higher SES can also provide more financial support and are more able to use social capital to help their children succeed (Roksa & Potter, 2011; Sirin, 2005), and may be more inclined to do so when relationships with their children are stronger.

Parental behavior and attitudes can influence youths' academic motivation and achievement through different pathways depending on SES (Hill et al., 2004). Parents with higher levels of education typically have higher educational aspirations for their children, and their children have greater academic motivation and aspirations themselves, which predict greater academic achievement and continued higher SES (Fan & Chen, 2001; Schoon & Parsons, 2002; Schoon, 2008; Trusty, 1998). Parents' goals for their children are more closely reflected by youths' goals when youth perceive their relationship to be warm (Mortimer, Lorence, & Kumka, 1986), so the combination of high parents' SES and relationships perceived to be warm may be associated with youths' high aspirations for themselves.

On the other hand, youth from lower SES benefit more from social support (Malecki & Demaray, 2006; Sy, Fong, Carter, Boehme, & Alpert, 2011), and from parents' participation in students' academic decision-making processes (e.g., by attending school guidance programs with the student) (Kim & Schneider, 2005). Youth from lower SES may benefit more from motivational beliefs about the attainability of success compared with youth from higher SES, since they face greater challenges. Since motivational resources are most important when tasks are challenging (Heckhausen, Wrosch, & Schulz, 2010), and given that students from lower SES have greater difficulty completing university (Sirin, 2005), motivational resources related to beliefs about how success is attained may be more valuable for these youth.

These issues may be particularly important in the context of a relatively rigidly structured and differentiated secondary education system such as Germany's. In Germany, elementary school teachers make recommendations about whether their students should attend the top tier of high school (Gymnasium), middle tier (Realschule), or lower tier (Hauptschule) after 4th grade. Parents can help select the top tier of high-schools, which channels youth toward university, or lower two tiers of the general-level high-schools from which it is more difficult (although still possible) to attend university (Buchmann & Dalton, 2002; Pietsch & Stubbe, 2007). Because SES is associated with the type of high-schools students attend, this educational tracking makes it more difficult to overcome socioeconomic disadvantages (Maaz, Trautwein, Lüdtke, & Baumert, 2008). However, more than one third of students in Germany's tertiary education system are attempting to complete higher levels of education than their parents (OECD, 2014), indicating that upward mobility is a goal to which many aspire.