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Antecedents of Attitudes Towards Risky Career Choices

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ANTECEDENTS OF ATTITUDES TOWARDS RISKY CAREER CHOICES

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ABSTRACT

We explore the attitude towards risky career choices of young people in highly competitive environments. We empirically test which factors influence young elite athletes' tendency towards choosing a high-risk career option over a lower risk one; looking at the attitudes, of close to 1000 soccer players in the German "Bundesliga" professional clubs' Youth Academies, towards making real-life decisions. Generally, they face the decision early on as to whether or not they should risk quitting school to solely focus on a professional soccer career. Our study confirms that elements of expected utility, assessment of the likelihood of achievement of the aspired career as well as the potential benefit derived from this decision, explain risk-taking in competitive environments. The longer an individual survives the continuous selection process in the competitive environment, the more he thinks that he will eventually succeed - despite the increasing opportunity costs of quitting a low-risk alternative career. Initial success in the selection processes is a key trigger for the tendency to choose a career in winner-take-all markets.

Keywords: Career choices, Risk attitude, Risk perception, Professional athletes, Young athletes, Opportunity cost, integration

JEL Classification: J24**,** J15, D81, D83, D84, L83

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Are people, in fact, risk-neutral? Unfortunately, the behavioural evidence concerning people's attitudes toward risk is riddled with contradictions.

Robert H. Frank and Philip J. Cook, *The Winner-Take-All Society*, p. 116.

INTRODUCTION

Making the right career choice is not easy for any individual. One needs to judge potential risks and upsides of a particular career from different angles and decide which option to pursue or to reject – often basing the decision on only limited experience and knowledge of job markets. After initial exploration and specification of various suitable career options, one must make a decision. In the process, the individual might experience ambiguity, confusion, and anxiety (Fuqua & Hartman, 1983). A career choice is, hence, a decision in an uncertain situation.

There are, for example, situations in which the individual is required to choose between two options; one involving a higher degree of uncertainty of successful outcome than the other. In the career literature, such decisions have been mostly studied in the context of entrepreneurship (Cramer, Hartog, Jonker, & Van Praag, 2002; Janney & Dess, 2006; Simon, Houghton, & Aquino, 2000). The final decision to engage in the more uncertain career path, e.g., becoming an entrepreneur, vs. taking a more secure career path has been explained by differences in risk-attitudes (Simon et al., 2000; Stewart Jr. & Roth, 2001). Risk-averse individuals tend to choose the less risky option of becoming a company employee.

There are many situations in which career decisions are made under uncertainty, which have not yet drawn as much attention as those found in entrepreneurship literature. In this paper, we explore young soccer players' attitudes towards risky career choices. Young soccer players face the challenge of combining academic education with athletic training, which becomes increasingly difficult as their career advances. They need to decide whether to continue to compete in the high risk environment of professional soccer, or whether to focus solely on their academic education as a potentially lower-risk career alternative. The latter promises smaller short-term revenues, but offers a higher chance of at least some return. In our sample, 58.4% of the players mentioned that becoming a professional soccer player was absolutely decisive in starting to play soccer. Moreover, the consideration begins early in the soccer players' careers,

since each year of hesitation could mean a decisive delay in training and decrease in chance of a successful career in professional soccer.

Individual attitude towards risk is of central importance to these high risk environments (Wärneryd, 2002), since nobody knows in advance who will succeed (Krueger, 2005). Thus far, only little empirical research exists on factors that influence risk-attitudes, risk-aversion, and the decision to engage in high-risk career options; although these phenomenon are often described in economic literature (Hartog, Ferrer-i-Carbonell, & Jonker, 2002). The majority of existing empirical studies have evaluated risk attitudes using surveys or experiments (Holt & Laury, 2002; Kahneman & Tversky, 1979; Shafir, Simonson, & Tversky, 1993) . Study participants were e.g., asked to declare what they would do in a fictional (artificial) situation. These experiments and surveys are of limited empirical evidence due to the problem of external validity; individuals often times act differently when facing the same situation in fiction or in reality (Hartog et al., 2002).

In this paper, we look at individuals who face the real-life decision of choosing a high-risk career path and giving up lower-risk career alternatives. We choose professional soccer as an empirical setting, which has previously been identified as a highly competitive, high-risk environment (Frank, 2001; Frank & Cook, 1995).

Our data set offers a unique opportunity to study the attitude towards risk in a controlled setting, namely sports. We do so by looking at elite performers in a relatively underexplored age group. We study a country's best young soccer players who aspire to become professional players. The soccer field supplies a real-world laboratory to test theories in social science. These athletes have a relatively homogeneous job or task profile and the same aim, namely becoming professional soccer players. This may reduce issues such as the omitted variables problem. All of them attend Youth Academies of the 36 German professional clubs and, hence, represent the primary source of talent for professional soccer in Germany.

Our findings on elite sports athletes aim to contribute to a better understanding of the antecedents of risk attitudes regarding career decisions in highly competitive environments. This enhanced understanding of a young and strongly performing individual's decision process will enable coaches, firms, and career consultants to better support and motivate young players to pursue one alternative or another.

THEORY AND HYPOTHESES

Factors Influencing Risk Attitudes and Risk Behaviour

A common approach, in looking at the risk attitudes and decision making processes of individuals, is to argue from an expected utility perspective (Hartog et al., 2002). Individuals are expected to choose the alternative that promises the highest utility - the one with the highest returns and the lowest risk (Friedman & Savage, 1948). In other words, the decision to choose a certain career path depends on the *probability of success* as well as an estimation of this path's *potential benefit* (Bonin, Dohmen, Falk, Huffman, & Sunde, 2007).

However, scholars found that individuals decide differently, even when their probability of return and estimation of returns are similar. This phenomenon is explained by differences in risk-attitude, as some individuals are more risk seeking then others (Camerer, Loewenstein, & Rabin, 2003; Kahneman & Tversky, 2000; Skaperdas, 1991). In order to explain differences in risk attitude, researchers have identified a number of factors that affect an individual's perception of potential returns and the probability of reaching it.

First, inherent characteristics such as age, personality traits, and gender influence risk attitudes (Byrnes, Miller, & Schafer, 1999). Influential personality traits were, for example, aggression, altruism, anxiety, and lack of morality (Ulleberg & Rundmo, 2003); whereby fear lead to risk-averse and anger to risk-seeking behavior (Lerner & Keltner, 2001).

Second, factors in the individual's environment, shape the risk attitudes of individuals. Some researchers found that risk attitudes change according to levels of education (Dohmen et al., 2005) and call for a more profound analysis of the precise influence of culture on risk-taking behaviour (Watt, 2004).

In existing research on decision-making under uncertainty, empirical evidence is often based on an experimental setting rather than individuals' attitudes towards real-life decisions. To our knowledge, the factors that influence risk attitudes toward career choices in circumstances of uncertainty have hardly been studied thus far (Hartog et al., 2002); even fewer studies considered empirical data.

With our study, we want to evaluate inherent and environmental factors and their influence on risk taking by adolescents. We do so by considering the way these factors affect an individual's *estimated likelihood of success* and achievement of the maximum benefit - notably the goal of becoming a professional player - or conversely, the *size of the potential benefit* linked to the career option. With this study, we would like to shed light upon adolescents' rationale for

making decisions regarding risky career choices and how their attitudes towards risk might change over time.

Estimated likelihood of success – the effect of optimism

Success in professional soccer player is hard to predict. Even soccer coaches and managers find it almost impossible to foresee which of the young players will eventually succeed. An objective assessment of the probability that a young player will become a professional soccer players suggests that the chances are, generally, very low and the potential maximum return very high (Schmidt & Weiss, 2010). Following expected utility theory and considering these low chances, young soccer players are expected to choose a career path of limited uncertainty, which means finishing school.

Nevertheless, we observe that some soccer players want to quit school for a career in professional soccer and hence embark upon a high risk career path. One possible explanation is that some of the young players do not think that the great chances of failure apply to them (Jung, Schmidt, & Torgler, 2012).

Other researchers argue that individuals misperceive control and information they have regarding future events (Frey, 1988; Frey & Foppa, 1986; Frey & Heggli, 1989).This leads to the application of a misperceived set of possibilities. This individual or ipsative possibility set deviates significantly from the objective set of possibilities. However, when making a decision under uncertainty, the individual will choose the alternatives s/he shall follow from the ipsative possibility set. Individuals who systematically overestimate their possibilities and chances of success are characterized as unrealistically optimistic (Weinstein, 1980).

Personality traits, in general (Ulleberg & Rundmo, 2003) and optimism, in particular, have been acknowledged to influence risk attitudes. For example, students with a high level of optimism reported high levels of career planning and exploration (Creed, Patton, & Bartrum, 2002). However, the link of optimism and risky career choices has not yet been investigated.

We argue that an optimistic assessment of the chances of becoming a soccer player reflects an individual's risk perception. When an individual assesses the likelihood of personal success as a professional player as being relatively high, s/he simultaneously estimates the risk of failure to be relatively low. As a consequence, s/he is more likely to engage in this option than an individual with higher risk perception. In contrast, if an individual assesses the risk of failure in

professional soccer to be relatively high, s/he is more likely to shy away from this alternative. This leads us to the following hypothesis:

Hypothesis 1: The higher a young player estimates his chances of becoming a professional player, the more likely he is willing to choose this high risk career path and, hence, give up an academic education for soccer.

Estimated likelihood of success – the effect of experience

Risk perceptions and attitudes are arguably the result of personality traits and inherited factors, but might also develop or alter over time, due to changing life circumstances. Our sample consists of adolescents of different ages who are exposed to a continuous selection cycle. This offers the opportunity to observe whether risk attitudes change over time as a result of maturity and experience.

Adolescents typically engage in risky behaviour that can jeopardize their future. Although adolescent risk-taking has long been attributed to faulty decision making, surprisingly little research has directly examined this link (Wolff & Crockett, 2011). There is disagreement on the cause, with some scholars arguing that risk-aversion increases with age (Reyna & Farley, 2006) and others maintaining that the effect of age on risk attitudes remains inconclusive (Hartog et al., 2002).

In general, researchers found that adolescents are capable of cognitive decision making and taking into account information in order to establish decision rationales (Reyna & Farley, 2006). Their decision making process differs, however, from that of adults in terms of the options they consider, the awareness of consequences, and the value they assign to different options. For example, sensation seeking is a much higher motivation to take risks for adolescents. In addition, perceived risk is more important to decision making than are potential benefits that might result from the decision (Rolison & Scherman, 2002).

Adolescents undergo important development and maturation. In our case, the young soccer players are between 10 and 20 years old. They are assessed by their soccer coaches every year to determine whether their performance is strong enough to remain on the team. In our sample, we only have data on players who are on participating teams at the time of the survey. As individuals grow up, their assessment of potential benefits changes. Scholars found that future orientation increases with age (Grisso et al., 2003). When looking at adolescents aged 11 to 22, they found that with increasing age, adolescents consider future events when making spending

decisions and increasingly save up money. Before, they are mostly driven by their instantaneous wishes and demands. Studies on sexual risk taken among adolescents show that individuals with less knowledge and experience are more likely to engage in risky actions (Luster & Small, 1994).

In addition, scholars have shown that individuals learn from risky situations (Rosen, 1981). Artists for example, adjust their judgment of personal odds according to previous success. In our context this would mean that, with increasing age, soccer players know better what their personal chances of success are. Experience gained from the continuous selection process in the Youth Academies may hence have an influence on their risk perception and attitudes. The more often they observe their teammates being cut from the team, the more they are made aware of the fact that becoming a professional soccer player is very difficult to accomplish. We expect that the longer they have struggled with this experience, the better they are capable of assessing risk involved in becoming a professional soccer player.

In the specific context of professional sports, however, researchers found that athletes are significantly more focused on the present. Due to their eagerness to succeed as early as possible, they tend to neglect long term planning (Krumer, Shavit, & Rosenboim, 2011). Following this line of thinking, athletes might neglect long term planning - including considering an alternative to the current soccer career. Hence, their perception of risk may not be affected by the repeated selection processes.

Given the age group observed, we however believe that risk perception and the ability to judge risk, is affected by the continuous feedback and selection process to which they are subjected. As a consequence, the older they become and the more selection cycles they have "survived", the greater their awareness and their consideration of the particular risk that they might not be good enough for a professional career in soccer. We believe that at younger ages, players are more open to the idea of quitting school as they fail to estimate the involved risk. With growing age, they rather consider their actual risk of failure in focusing on a soccer career and increasingly understand that to the sense in considering alternatives to soccer. At the same time, they realize that quitting school is a risky alternative with potentially negative consequences to them. This leads to the following hypothesis:

Hypothesis 2: The more a soccer player matures during his adolescence, the more he is aware of the risk involved in quitting school for soccer. We expect that the older he is, the less likely he is willing to quit school.

Estimated likelihood of success – the effect of equality of chances

Besides the effects of growing experience and age, the influence of culture on risk attitudes has been identified. Some researchers in the field of cross-cultural studies concluded that individuals adopt behavioral patterns of the culture in which they currently live (Berry, 1997). However, there is only little empirical evidence on how attitudes towards risk change when individuals from a different cultural background are socialized in a different country. Little is known about whether integration into a foreign culture has an influence on risk attitudes.

The adoption of customs and behaviors of another culture is a longer process, rather than an immediate switch (Berry, 1997). These results of the process demonstrate the individual's level of integration into a new culture. A person's social integration into a culture can be expressed by the individual's acculturation, placement in, interaction with, and identification with the new culture (Esser, 2001, 2004). The degree of acculturation is determined by a foreigner's abilities, such as language skills and basic knowledge of the host country, which enable integration and participation in the host country's society. Placement describes the degree to which foreigners believe that there is equality of chances in the host country's society. The dimensions interaction and identification measure how much contact foreigners have with people from the home country and whether they can identify themselves with the norms, values, and the host country, in general.

In considering Esser's dimensions of integration, the ability to succeed, perception of equality of chances, interaction with people from the host country, and identification with the host country's culture, are crucial prerequisites that enable foreigners to successfully finish school. Less integrated individuals might perceive themselves to face disadvantages in their future career in general and might estimate their chances of success as generally lower.

However, when young players feel they have the basic ability to succeed in the host country's society and believe there is an equality of chances, they trust that they can succeed in whatever they want, even if it is a risky option. Therefore, we argue that the more integrated a soccer player with a foreign origin is, ceteris paribus, the more likely he is willing to quit school for a career in soccer. This leads to our hypothesis four:

Hypothesis 3: The higher the level of integration of a soccer player, the more likely he is willing to quit school to seek a professional soccer career.

Potential benefit – the effect of opportunity costs

As well as assessment of likelihood of success, costs and benefits linked to different career options can also change over time. The longer an individual has already attended school or participated in soccer training, the more he has invested in these career paths. In other words, the willingness to engage in the risky activity of quitting school for soccer depends not only on the potential returns in case of success, and the assessment of likelihood of success, but also on the investments that one needs to realize in order to achieve the set goal. Opportunity cost of, e.g., giving up an alternative career path should also be regarded in looking at the returns of a specific option.

In our example, young soccer players must, at one point, decide whether to continue with a soccer career at the expense of further academic education; or, whether to continue with schooling, while playing less soccer. The older they are, the more they have already invested in their academic career. Hence, the later they drop out of school, the higher the opportunity costs of quitting a low-risk alternative.

Taking the idea of opportunity costs one step further, not only the amount of time spent in school, but also the quality of education determines the young soccer players' opportunity costs. The higher the level of their education, the higher their opportunity costs since better education would enable them to eventually pursue a job with a higher income. Opportunity costs, therefore, should rise with increasing age and educational level while both are expected to have an impact on the young soccer players' risk attitudes.

In Germany, pupils attend different types of schools after they've finished Elementary School. According to their academic performance, at the age of 9-11, they are separated into three different types of schools which can be categorized as advanced, intermediate and basic school. They are between 15 and 17 years old when they finish basic or intermediate school. When they successfully have finished 9^{th} grade in any type of school, they earn a basic degree that does not enable them to enrol at a university program, but is sufficient for them to get an apprenticeship with a company. In order to pursue studies at university level, they have to finish advanced school, usually between the age of 18 and 20.

Future salaries and opportunities on the job market besides soccer, hence, depend on the type of school they attend. Consequently, their opportunity costs increase with the level of school they attend. When they quit advanced school, their opportunity costs are higher than in quitting basic school.

In existing literature, we find different opinions regarding the effect of opportunity costs and educational levels on the risk attitudes of individuals. Researchers asked individuals to choose between their present job at fixed salary and a similar job with uncertain income. Their results show a U-shaped relationship between level of education and risk tolerance of the respondents (Barsky, Juster, Kimball, & Shapiro, 1997). In a study on individual characteristics and how they influence risk attitudes, Hartog et al. (2002) however found that attending a university reduces risk aversion. Moreover, the researchers found the same effect for an increasing number of years of schooling.

We argue that increased educational level lead to more conservative attitudes towards risk. The better the quality of their education, the greater is their chance of getting a well-paid job. Therefore, their opportunity cost in quitting school rises the higher their level of education is. We argue that the higher the opportunity costs are, the less likely that individuals choose the high-risk option of quitting school for soccer. This leads us to the hypothesis:

Hypothesis 4: The better the quality of a soccer player's education, the less likely he is willing to quit school.

Potential benefit – the effect of the point of departure

In looking at the subjective assessment of risk and the likelihood of achieving a desired outcome, other inherited factors aside from personality traits, as pointed out in hypothesis 1, are likely to have an influence. Factors that we inherit are, for example, our family background or nationality. Existing studies identified that attitudes may vary according to national or cultural background (Algan & Cahuc, 2010; Müller, Torgler, & Uslaner, 2012; Uslaner, 2008). For example, it was shown that Chinese perceive risk differently; and, therefore, demonstrate less risk-averse behaviour than do US Americans (Weber & Hsee, 1998).

When we think about differences between countries, which are likely to cause differences in risk attitudes, socioeconomic differences come to mind. The same absolute benefits of a professional soccer career are relatively higher to a soccer player coming from a rather poor background than to a player from a richer one. Existing research has recognized sports as a vehicle for upward mobility especially for individuals from countries with humble socioeconomic circumstances and from subordinate ethnic groups (Carrington, 1986; Semyonov & Yuchtman-Yaar, 1981; Spaaij, 2009). Since the potential benefit of becoming a soccer player is higher for

players with a humble socioeconomic origin, we expect them to be more likely to be willing to drop out of school in order to focus on a professional career in soccer.

On the other hand, researchers have shown that immigrants, in general, face difficulties in advancing on the career ladder or improving their status in society (Hardaway & McLoyd, 2009). A possible explanation is social discrimination (Helgertz, 2011) or the lack of a supportive network. The latter has been identified as being crucial to success, e.g., in professional baseball (Cotton, Shen, & Livne-Tarandach, 2011). Researchers also observed that individuals with disadvantages in prerequisites have limited career aspirations (Giroux & Pietrofesa, 2012). Building on these findings, individuals from a less advantageous socio-economic background might have lower aspirations in general. This could lead to their choosing a more conservative career path, which in our case is the pursuit of further schooling.

We, however, believe that differences in benefits attributed to the different background are more influential than the differences in prerequisites the individuals enjoy. In our case, prerequisites for a professional soccer career such as playing fields, coaches, medical treatment, and training time are furnished by the respective clubs and, hence, relatively similar for all players. Therefore, we argue that any differences in potential benefit a player derives from his socio-economic status influences his acceptance of risk and choice of a high-risk career path such as professional soccer. We therefore expect:

Hypothesis 5: Young soccer players with a humble socio-economic background are more likely to be willing to quit school in order to pursue a career in soccer, than players from countries with a more advantageous socio-economic status.

DATA AND METHODS

Each of the 36 professional soccer clubs in Germany is obligated to run a Youth Academy. The players in the Youth Academies are between 10 and 23 years old; playing in teams according to their age group. Overall, around 5000 young players participate in the clubs' Youth Academies (DFL, 2001). During the summer of 2010, we surveyed young soccer players who played in 24 of the 36 the Youth Academies in Germany. In total, there were 5,760 players in the 36 Youth Academies for the season 2009/2010. 1,593 players filled out our questionnaire, equal to 41% coverage of the players in the 24 Youth Academies questioned. 91% of the young soccer players filled out the paper version with their coach present to answer questions and ensure that the

questionnaires were answered independently and thoroughly. 9% of the soccer players responded via an online platform.

The questionnaire asked for the players' judgment of their chances and interest in becoming a professional soccer player as well as their attitudes towards schooling, dropping out, and investments they are willing to make for the sake of a professional career in soccer. In addition, questions were included that reflected dimensions of integration according to Esser (Esser, 2001, 2004) and the players were asked for their demographic information.

For our analysis, we only include players who are still in school. After having applied this restriction, our data covers 928 young soccer players who were between 10 and 20 years old at the time of the survey.

Regarding the influence of socio-economic background and integration, professional soccer offers a great opportunity to study their influence on risk behaviour. In looking at professional soccer teams, one development becomes quite apparent: players have very diverse cultural and national backgrounds. This phenomenon is mirrored in our data. The young players from the Youth Academies in our data set represent 33 different citizenships and are born in 21different countries while living in the same country – Germany. This offers the advantage of a quasi-experimental environment, since we hold the country of socialization constant; which has not been the case in previous studies that compared attitudes of individuals living in different countries. As it can be criticized that including an aggregated variable (socio-economic situation) in our micro data set may produce downward biased standard errors, we provide estimations with standard errors adjusted to clustering on nations.

Dependent variable

Our dependent variable is called *Risk Acceptance*. Studying decision-making by providing a low and a high risk alternative is a method common in the literature modeling behavior towards risk and deriving risk attitudes (Bonin et al., 2007; Furby & Beyth-Marom, 1992; Weber, Blais, & Betz, 2002). We applied the same logic as, for example, Weber et al. (2002) who measure risk taking as the likelihood of engaging in a risky activity. They asked the participants of their study to rate the likelihood of their engagement in risky activities such as betting a day's income on the horse races, shoplifting, bungee jumping, or not wearing seatbelts, on a scale from 1 (very unlikely) to 5 (very likely).

We defined quitting school and trying to succeed in professional soccer as risky activity or risky career choice. According to Weber et al. (2002) we asked the young soccer players to rate the likelihood of engaging in the risky career choice on a five-point rating scale. This reflects the ratings given by the young players regarding the statement "I would quit school for my soccer career anytime!" Possible answers were "absolutely not true", "rather not true", "partially true", "rather true", and "absolutely true". The answers were encoded so that the value 0 of the variable risk acceptance reflects the answer "absolutely not true" and 4 "absolutely true". An overview of the distribution of answers is included in *Table A1* in the Appendix.

Independent variables

As independent variables, we use a number of measures of which summary statistics and a correlation matrix are presented in *Tables A2, A3,* and *A4* in the Appendix.

***Estimated likelihood of success*.** To explore the impact of perceived chances of becoming a professional soccer player as theorized in hypothesis 1, we measure the self-perception of chances. We asked the players to rate their chances on a five-point scale. Possible answers were "very bad" (0), "rather bad", "undecided", "rather good" and "very good" (4). This method to measure optimism with a construct reflecting the likelihood of experience a positive life event was used in the literature before (Endo, 2007). The scores are represented by the variable *Perceived Chance*.

We also include the variable *Age*, which represents the age of the players in years at the time of the survey to reflect the growing experience and selection cycles they undergo. As we look at players who are still in school exclusively, the age of the players in our sample is between 10 and 20 years. We also test a quadratic effect of age, using the variable *Age Squared*.

For players who are not German citizens, we defined their level of integration according to Esser's dimensions of social integration (Esser, 2001, 2004), a tested method of measurement (Michalowski & Snel, 2005). In the questionnaire, we mirrored Esser's dimensions of social integration - including acculturation, placement, interaction, and identification. For each of the dimensions, we included three five-point rating scale questions. We added the score of the questions to obtain the value of the corresponding variables *Acculturation*, *Placement*, *Interaction* and *Identification*. The scores of these four variables were once again added to the overall score, representing the *Level of Integration* of each player. The higher the score of the

overall integration level, the better the person is integrated into German society. An overview of the scales is reported in *Table A5* in the Appendix.

Potential benefit. We argued that the level of education influences risk attitudes of young soccer players. We use binary variables to reflect educational level and type of school they attend. The school system in Germany is singular, as children are separated into different schools according to their academic performance after completing four years of Elementary School together. The strongest students go to the "Gymnasium", which equals the variable *Advanced School* in our data set. Students with weaker academic performance attend the "Realschule" (*Intermediate School*) and the weakest students *Basic School* at the "Hauptschule", which serves as our reference group. A small percentage of students in Germany continue to a *Comprehensive School* after *Elementary School*; these do not split the children according to their academic performance, but offer classes at different levels.

For each young player in our data set, we have information on his nationality according to his citizenship and his country of birth. The young players in our data set are citizens of 33 different countries and were born in 29 different countries. To test the effect of the socio-economic background of the players, we assigned the variable *Socio-Economic Background* to each player, which reflects the Gross Domestic Product per capita in Euro of his country of birth in 2010.

Control variables

We control for some additional influences in the environment of the young players, which might affect risk attitudes. We include binary variables for each club as control variables to test whether playing for a different club and its respective Youth Academy has an impact on the young soccer players.

In addition, we control for differences in risk attitudes which might be caused by Germany as the place of birth. We do so by including the binary variable *Born in Germany* to reflect whether a player is born in Germany.

Besides the potential influence stemming from the soccer clubs, we also want to control for influence from the players' family background. Previous research has shown that children's attitudes are influenced by the behaviour of their parents (Bar-Tal & Guttmann, 1981; Carr & Weigand, 2001; Frome & Eccles, 1998; Georgiou, 1999); which, in turn, might be influenced by

their profession (Alvarez & Barney, 2005; Busenitz, 1999; Cramer et al., 2002). We hence include the binary variable *Father is Entrepreneur* reflecting whether the father of a young player is an entrepreneur (Caner & Okten, 2010).

Methods

To test our hypotheses, we estimate a simple OLS model. In addition, we present an ordered probit model to see whether the results from the OLS regression are robust. We choose an ordered probit estimation because of our scaled dependent variable. To measure the quantitative effect of a specific independent variable on the risk acceptance of the young soccer players, we calculate marginal effects. They estimate the change in likelihood of individuals choosing professional soccer as a career and quitting school when the independent variable increases by one unit. For simplicity, tmarginal effects in all estimates are presented for the highest value of our dependent variable only. To get an indication of the comparative magnitude of influence of the different independent variables, we calculate standardized beta coefficients for the OLS regressions.

We apply regression analyses on three different samples. First, the hypotheses regarding perception of chances, age, education, and socio-economic background are tested using the information of all soccer players in our sample (N=832 players; see equations (1) and (2) in *Table 1*). To better understand the effect of different educational levels represented by different school types after Elementary School in Germany, we run the same analysis as before on a subsample of 697 players who have already finished Elementary School (see equations (3) and (4) in *Table 1*). To investigate the effects of integration, we only look at the 61 players in our sample who were not born in Germany (see equations (5) through (8) in *Table 2*). Descriptive statistics and figures are presented additionally to further illustrate our findings.

RESULTS

Differences in estimated likelihood of success and risk attitudes

In hypothesis 1, we argued that the tendency of an individual to engage in high-risk activities depends on the estimation of the likelihood of success. When looking at the influence of the self-estimation of chances of becoming a professional soccer player in *Table 1*, we find a correlation of perceived chance and engaging in a risky activity in the 0.1% significance level

(see equations (1) through (4)). The more the young players believe in their chances of becoming a soccer player, the more they are willing to quit school for a soccer career. This effect is even stronger among players who are in secondary education (see equations (3) and (4)). In considering marginal effects, we see that the probability of stating that they absolutely will drop out of school for a career as a professional increases by 1.6 percentage points and by 2.2 for players in secondary education, when their perception of chances increases by one unit (from the average). Hypothesis 1 is hence supported by our results.

Enter Figure 1 about here

With regard to age, we expected that with increasing age, players become more aware of the risk involved in quitting school for soccer. Our results however, rather indicate the opposite. As shown in *Figure 1*, the relationship between age and willingness to quit school in order to follow a risky career path decreases first and then follows an inverted U-shape. Between the age of 12 and 19, the players are increasingly more likely to quit school for soccer. Only after reaching the age of 19, does their risk acceptance decline. Our multivariate analysis confirms the inverted U-shape (see equations (1) through (4) in *Table 1*). Age is positively correlated with risk acceptance and age squared is negatively correlated with it which indicates an increasing at a decreasing rate. However, the turning point based on our multivariate analysis is very late, namely age 20. Our hypothesis 2 cannot be rejected by our results.

The influence of the integration process of foreigners on risk attitudes was the subject of our third hypothesis. We wanted to test whether foreigners who are better integrated in a country and rather believe in equality of chances are willing to take more risk in their career choices. To this end, we looked only at young soccer players who are not German citizens in *Table 2*. When we investigate the effect of the different dimensions of integration, namely identification, interaction, placement, and acculturation (see equations (5) and (6)) as well as the aggregated level of integration (see equations (7) and (8)), our findings indicate that only the dimension of placement has a statistically significant influence on the risk acceptance of young soccer players. The better young players score on this variable, the more likely they are willing to quit school for a career in professional soccer.

Enter Table 1 about here

Although our findings do not allow us to confirm or reject Hypothesis 3, we observe that national origin does play a role in explaining differences in risk attitudes. Throughout all estimations in *Table 1*, the variable that indicates whether a player is born in Germany is negatively correlated with the willingness to quit school for soccer. The likelihood of answering the question of dropping out of school for soccer as 'most likely' decreased from 6.2 to 6.6 percentage points for players born in Germany.

Enter Table 2 about here

Differences in potential benefit and risk attitudes

In Hypothesis 4, we argued that players with a higher educational level are more likely they are to choose to stay in school due to increased opportunity costs. When taking a look at the effect of education level in the entire sample, we see that different school types indeed vary in their impact. In examining the differences between primary and secondary education in *Table 3*, we observe students in secondary education to be more risk-seeking. When considering only players in secondary education in the descriptive analysis of the means of risk acceptance in *Table 3,* we see that risk acceptance decreases with increasing level of education. Young players in Advanced School are least likely to quit school for soccer.

Our multivariate regression analyses using *Elementary School* as reference group for the educational variables (see equations (1) and (2) in *Table 1*) undermine the already detected effect. Students are rather hesitant to quit school before beginning secondary schooling. Compared to the group with the lowest education level in secondary education (Basic School), players attending Intermediate and Advanced School are more hesitant to quit school. The beta coefficients show that the willingness of choosing a lower-risk career option rather than a career as a professional soccer player is strongest for Advanced School and consecutively weaker the lower the education level of the players. Overall, our findings remain robust when we look at the

subsample of players who are in secondary education (see equations (3) and (4) in *Table 1*). Our hypothesis 4 is therefore partially supported by our results.

In hypothesis 5, we argued that players, who have a comparably humble socio-economic background, are more likely to quit school for soccer. Our findings suggest that the more humble a player's socio-economic background, the more likely he will quit school to attempt a professional soccer career (see equations (1) through (4) in *Table 1*). The influence of the social-economic background remains similar regardless whether we analyze all players in our data sample or only one the ones in secondary schooling. These findings support our Hypothesis 5 that players from more humble socio-economic backgrounds are more likely to quit school for soccer.

DISCUSSION

With this paper, we want to test whether inherited characteristics and factors in the environment of young soccer players, that shape their estimation of likelihood of success and the potential benefit, can help explain attitudes towards risky career choices. We, therefore, tested the influence on risk attitudes of variables reflecting optimism, age, integration into a host country's culture, education level and their socio-economic background.

Estimated likelihood of success

We argued that the own judgment of chances can be regarded as individual probability estimation for future return of the participation in a high-risk career. Our results indeed show that the estimation of their own chances can help explain why some players are more open to taking risk than others. It confirms that individual perception is a decisive factor (Frey & Heggli, 1989; Weber et al., 2002). Even when objective measurement of chances and historic data is available, individuals perceive their chances as much higher than they are from an objective point of view (Frey, 1988).

In our study, we study adolescents who are between 10 and 20 years old. We expected that the estimation of likelihood of success and hence their risk acceptance might change as they mature. We expected that players start judging their chances more objectively as their information processing capabilities increase over time. This, as a consequence, would lead to more conservative behaviour over time and decreasing willingness to quit school for a career in professional soccer. We found some non-linearity between age and risk acceptance, but the peak

is, ceteris paribus, at the age of 20. Within the Youth Academies, the players are in continuous competition to stay in the team of their respective age group and face a permanent selection process. The more they advance and the more often they have survived the annual review process, the more they justifiably believe they will also overcome the next selection process; hence, they might judge their chances of becoming a professional soccer player increasingly better. This effect is comparable to bettors who believe in winning streaks and tend to continuously bet on previously successful teams (Camerer, 1989).

As well, an underlying feeling of equality of chances and meritocracy among the soccer players may influence their estimation of likelihood of success. Given the uniqueness of our data set with 61 players who were not born, but are living in Germany we looked at the effect of the degree of integration into the host country culture. We expected to find a stronger tendency towards risk acceptance by players who are better integrated. Although the effects of integration remain rather minor, we found that one aspect of integration, notably *Placement* does have an impact on risk acceptance of the young soccer players. *Placement* measures whether the young players estimate that there is equality of chances in a society for achieving a good position and status. The greater the conviction of young soccer players that this is the case; the more likely they are willing to quit school in order to aim for a career in professional soccer. It seems that they rather are risk-seeking when they think there is a fair chance of general success in a society and that, as a consequence, they will not be discriminated against.

Differences in potential benefit and risk attitudes

In the analysis of difference in potential benefit for soccer players, we argued that differences in opportunity cost influence their decision to quit the low-risk alternative of pursuing an academic career vs. focussing on a high-risk career in professional soccer. Our results show that young players seem to consider the opportunity cost of giving up an academic education for a soccer career only after they have finished primary education. Before that, they rather want to stay in school instead of quitting school for a career in professional soccer. Once they have passed from primary to secondary education, some of the players become more open to risk, according to the level of education they are pursuing. Young players in secondary education with the highest educational level are least willing to give up school. Inversely, young players with the lowest educational level are most likely to disrupt their education in favour of a potential career in soccer. Players in secondary education, hence, hence consider the opportunity costs they might

face in choosing professional soccer instead of an academic career. If enrolled in advanced school, their chance of getting a well-paid alternative job increases. This makes them more hesitant to quit school before reaching their final degree.

In addition to opportunity cost considerations, we argued that the potential benefit players can gain from successfully engaging in a professional soccer career also differs according to their socio-economic background. Depending on which "level" they start, the benefit can be greater or smaller for the young players. We expected that the higher the potential benefit is for players, the more likely they might accept a high-risk career path. We indeed found that players who come from countries of comparably lower economic status show a higher tendency of being willing to quit school for a professional soccer career. Soccer players from countries with rather humble economic background may regard the profession of a soccer player as a big advancement in status. By playing soccer successfully, they strive for recognition they believe to gain from a professional soccer career. As it is a greater advancement for those from a humble background, they seem to be willing to risk more in order to achieve the status of a professional soccer player.

Limitations

We conducted our study in highly competitive setting and were able to observe risk-attitudes of almost an entire cohort of those trying to become a professional soccer player. Nevertheless, our findings need to be considered in light of some limitations.

First, we were not able to control for the actual individual achievement at the time of the study. It would be interesting to compare the perception of chances with the actual success of turning professional in retrospect. It would be most advantageous to be able to observe in the long-term, the attitudes of and actual career choices made by a panel of players.

Second, we only looked at male soccer players who face tougher competition than female soccer players. Due to this, we were not able to test for gender differences, which have been identified as a significant driver of risk attitudes and risk-taking in previous research (Byrnes et al., 1999; De Pater et al., 2009; Ying-Ching & Raghubir, 2007).

Third, our findings regarding the influence of dimensions of integration need to be considered with caution. Given the rather low number of observations in our data set which we used for this analysis, the results should be verified with further analysis and larger data sets.

Fourth, one could argue that risk acceptance is a multidimensional construct that includes other facets of consequences, motivations, and emotions. Further research should look into these

aspects to verify whether the influencing factors we identified also hold true for other potential facets of risk acceptance. This could help to build an even more comprehensive picture.

Fifth, as our data comes from a single survey, we assessed common method bias using the Harman's one-factor test (MacKenzie, Podsakoff, & Podsakoff, 2011; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Principal-component factor analysis with varimax rotation suggested seven principal component factors with an eigenvalue of more than one with the major factor explaining less than eighteen per cent of the variance. A single factor accounting for the majority of covariance among variables in our data could not be determined. In addition, the pattern matrix of the factor loadings showed that not all items (variables) load higher on the first factor than on the other factors. Therefore, based on these results common method variance seems not to be a problem in our data set.

CONCLUSION

Our study confirms that risk attitudes regarding career choices vary by inherit characteristics and environmental factors which can be explained by differences in likelihood estimations and in potential benefit for players.

We found that the individual assessment of likelihood of success is an important driver for the willingness to engage in a risky career path. This is supported and increased by repetitive positive performance feedback as well as the degree of integration of foreigners into a host country's culture. We observed that a genuine characteristic of highly competitive environments, the selection process due to the high competition, encourages individuals to consider risky career options. The longer an individual survives this selection process, the more he is willing to sacrifice, for example, higher educational degrees for an uncertain career path. Initial success in selection processes seems to be a key trigger to considering choosing to focus on a high-risk career path.

Additionally, we found that opportunity cost considerations influence the willingness to take risk. Individuals are less willing to give up a low-risk option, such as academic education, for a high-risk alternative the better the low-risk option is.

In sum, it seems reasonable to apply our findings to other competitive environments, which can be found in a variety of corporate and political career environments (Frank, 2001) as for example professional service firms or investment banks that often follow an "up-or-out" or "grow-or-go" career policy. Our findings imply that the longer individuals survive in such a

context the less they look after establishing alternatives in case their career in a competitive "up-or-out" system ends. Firms should, in the interest of responsibility for their employees, establish coaching programs that aim at a more generalist foundation and develop awareness of the risks involved. The ultimate goal should be to enable individuals to more realistically judge the risks involved in their career choices and to mitigate these risks, e.g., by building up knowledge and expertise for alternative career paths.

Our findings indicate that national origin plays a role in risk attitudes towards risky career choices. Further research should dig deeper into the systematic differences in risk attitudes of individuals of different nationalities and, especially, why they persist among second or third generations after immigration.

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TABLES AND FIGURES

Figure 1: Relationship of Age and Risk Acceptance

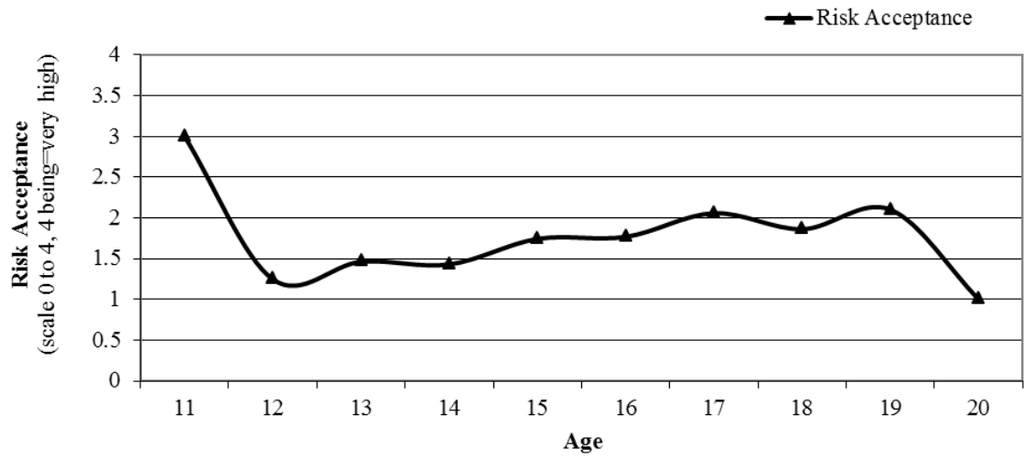

Table 1: Influence of Perception of Chances, Socio-Economic Background, Education, and Age on Risk Acceptance

Dep. Variable: Risk Acceptance		**OLS**	**Ordered Probit**	**OLS**	**Ordered Probit**
		(1)	**(2)**	**(3)**	**(4)**
		All players in school		**Players in secondary education**	
Independent Variables					
Age	Coef.	0.499**	0.550***	0.660***	0.686***
	St. Error	0.175	0.161	0.162	0.149
	Beta Coef.	0.712**		0.909***	
	Marginal Effects		0.082		0.099
Age squared	Coef.	-0.0124*	-0.0145**	-0.0174**	-0.0187***
	St. Error	0.006	0.005	0.005	0.005
	Beta Coef.	-0.527*		-0.723**	
	Marginal Effects		-0.002		-0.003
Perceived Chance	Coef.	0.126***	0.110***	0.173***	0.154***
	St. Error	0.023	0.020	0.026	0.024
	Beta Coef.	0.073***		0.097***	
	Marginal Effects		0.016		0.022
Advanced School	Coef.	-0.297***	-0.276***	-0.598***	-0.530***
	St. Error	0.031	0.027	0.083	0.076
	Beta Coef.	-0.116***		-0.234***	
	Marginal Effects		-0.040		-0.079
Intermediate School	Coef.	-0.210***	-0.211***	-0.505***	-0.459***
	St. Error	0.030	0.028	0.082	0.075
	Beta Coef.	-0.073***		-0.185***	
	Marginal Effects		-0.029		-0.059
Comprehensive School	Coef.	-0.083	-.0931*	-.46***	-.418***
	St. Error	0.053	0.045	0.099	0.089
	Beta Coef.	-0.018		-0.105***	
	Marginal Effects		-0.013		-0.047
Basic School	Coef.	0.342***	0.288***		
	St. Error	0.085	0.076		
	Beta Coef.	0.058***			
	Marginal Effects		0.051		
Socio-Economic Background	Coef.	-6.9e-14**	-5.8e-14**	-6.8e-14*	-6.1e-14*
	St. Error	2.50E-14	2.20E-14	3.20E-14	3.00E-14
	Beta Coef.	-0.056**		-0.054*	
	Marginal Effects		-8.65E-15		-8.80E-15
Born in Germany	Coef.	-0.374*	-0.341*	-0.414*	-0.365*
	St. Error	0.169	0.145	0.193	0.170
	Beta Coef.	-0.065*		-0.074*	
	Marginal Effects		-0.062		-0.066
Father is Entrepreneur	Coef.	0.034	0.040	0.001	0.007
	St. Error	0.039	0.032	0.047	0.040
	Beta Coef.	0.011		0.000	
	Marginal Effects		0.006		0.001
Clubs		YES	YES	YES	YES
R^2 / Pseudo R^2		0.127	0.043	0.131	0.045
N		832	832	697	697

Notes: The symbols +, *, **, *** represent statistical significance at the 10% 5%, 1% and 0.1% levels, respectively.
Marginal effects for the probability of outcome 4, Pr(y=4) are reported additionally.
Standard errors adjusted to clustering in 27 nations (socio-economic background).

Table 2: Influence of Level of Integration on Risk Acceptance among non-German soccer players

Dep. Variable: Risk Acceptance		**OLS**	**Ordered Probit**	**OLS**	**Ordered Probit**
		(5)	**(6)**	**(7)**	**(8)**
		Only players not born in Germany			
Independent Variables					
Age	Coef.	2.910*	2.790*	2.519+	2.288*
	St. Error	1.288	1.169	1.294	1.127
	Beta Coef.	4.518*		3.911+	
	Marginal Effects		0.691		0.607
Age squared	Coef.	-0.0922*	-0.0885*	-0.0799+	-0.0728*
	St. Error	0.042	0.038	0.042	0.037
	Beta Coef.	-4.418*		-3.829+	
	Marginal Effects		-0.022		-0.019
Father is Entrepreneur	Coef.	-0.646	-0.625	-0.642	-0.560
	St. Error	0.468	0.409	0.451	0.379
	Beta Coef.	-0.219		-0.217	
	Marginal Effects		-0.131		-0.129
Identification	Coef.	-0.044	-0.045		
	St. Error	0.100	0.088		
	Beta Coef.	-0.083			
	Marginal Effects		-0.011		
Interaction	Coef.	-0.073	-0.074		
	St. Error	0.141	0.122		
	Beta Coef.	-0.096			
	Marginal Effects		-0.018		
Placement	Coef.	0.226+	0.219*		
	St. Error	0.116	0.106		
	Beta Coef.	0.332+			
	Marginal Effects		0.054		
Acculturation	Coef.	-0.107	-0.091		
	St. Error	0.077	0.068		
	Beta Coef.	-0.220			
	Marginal Effects		-0.023		
Level of Integration	Coef.			-0.009	-0.008
	St. Error			0.038	0.032
	Beta Coef.			-0.042	
	Marginal Effects				-0.002
R^2 / Pseudo R^2		0.232	0.084	0.118	0.041
N		45	45	45	45

Notes: The symbols +, *, **, *** represent statistical significance at the 10% 5%, 1% and 0.1% levels, respectively.
Marginal effects for the probability of outcome 4, Pr(y=4) are reported additionally.

Table 3: Differences in Average Risk Acceptance by School Type – Results from Wilcoxon-Mann-Whitney Rank-Sum Test and Mean-Comparison Test

	School Type	**Risk acceptance**		**1**			**2**			**3**			**4**		
		Mean	Obs	Obs	z-scores	ttest	Obs	z-scores	ttest	Obs	z-scores	ttest	Obs	z-scores	ttest
1	Advanced School	1.49	390												
2	Intermediate School	1.68	238	625	1.73+	1.82+									
3	Comprehensive School	1.76	69	455	1.75+	1.68+	304	0.58	0.48						
4	Basic School	2.37	46	434	4.10***	4.54***	283	3.13**	3.29**	113	2.37*	2.44*			
5	Elementary School	1.57	147	530	0.53	0.68	379	-0.83	-0.77	209	-1.18	-1.01	188	-3.40***	-3.61***
	Average entire population	1.62	890												

Notes:
Null-hypothesis: The difference between the means regarding the risk acceptance of the respective school type subgroups is zero.
Z-values based on normal approximation of two-sample Wilcoxon-Mann-Whitney rank-sum test by respondent category pairs according to schooling types
The symbols +, *, **, *** represent statistical significance at the 10%, 5%, 1% and 0.1% levels, respectively.

APPENDIX

Table A1: Dependent Variable “Risk Acceptance”: Answers to the question "I would quit school for my soccer career anytime!"

Answer	Freq.	Percent	Cum.
Absolutely true	89	9.59	34.27
Rather true	141	15.19	75.32
Partially true	240	25.86	60.13
Rather not true	229	24.68	24.68
Absolutely not true	229	24.68	100
Total	**928**	**100**	

Table A2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Risk Acceptance	928	1.60	1.27	0	4
Age	945	14.53	1.82	10	20
Age squared	945	214.55	54.01	100	400
Advanced School	890	0.44	0.50	0	1
Intermediate School	890	0.27	0.44	0	1
Comprehensive School	890	0.08	0.27	0	1
Basic School	890	0.05	0.22	0	1
Father is Entrepreneur	906	0.22	0.41	0	1
Born in Germany	945	0.94	0.25	0	1
Perceived Chance	927	2.63	0.74	0	4
Soc.-Eco. Background	937	3.18E+12	1.00E+12	8.07E+08	1.46E+13
Identification*	57	7.09	2.40	3	12
Interaction*	51	8.08	1.74	4	12
Placement*	55	5.93	1.81	2	11
Acculturation*	58	7.53	2.84	0	12
Level of Integration*	48	29.13	5.95	15	42

*only for non-German players

Table A3: Correlations for entire sample[a]

	Variable	1	2	3	4	5	6	7	8	9	10	11
1	Risk Acceptance	1.00										
2	Age	0.16	1.00									
3	Age squared	0.16	1.00	1.00								
4	Advanced School	-0.08	0.16	0.16	1.00							
5	Intermediate School	0.02	0.11	0.10	-0.54	1.00						
6	Comprehensive School	0.04	0.00	0.00	-0.26	-0.18	1.00					
7	Basic School	0.12	0.06	0.06	-0.20	-0.14	-0.07	1.00				
8	Father is Entrepreneur	0.01	0.00	0.00	-0.03	0.01	0.06	-0.07	1.00			
9	Born in Germany	-0.13	-0.04	-0.05	0.04	0.02	-0.01	-0.17	-0.01	1.00		
10	Perceived Chance	0.10	0.03	0.04	-0.10	-0.03	0.04	0.06	0.10	-0.02	1.00	
11	Soc.-Eco. Background	-0.09	0.04	0.05	0.04	-0.03	-0.03	-0.05	-0.05	0.34	0.00	1.00

[a] N=832 observations; entire sample of young soccer players still in school

Table A4: Correlations for players with foreign citizenship[b]

	Variable	1	2	3	4	5	6	7	8	9	10	12	13	14	15	16
1	Risk Acceptance	1.00														
2	Age	0.00	1.00													
3	Age squared	-0.03	1.00	1.00												
4	Advanced School	-0.06	0.30	0.32	1.00											
5	Intermediate School	0.00	-0.06	-0.08	-0.40	1.00										
6	Comprehensive School	-0.05	-0.06	-0.06	-0.18	-0.13	1.00									
7	Basic School	0.16	0.11	0.09	-0.40	-0.29	-0.13	1.00								
8	Father is Entrepreneur	-0.21	0.04	0.02	0.02	0.20	0.16	-0.13	1.00							
9	Perceived Chance	-0.06	0.00	-0.03	-0.01	-0.11	-0.09	0.17	-0.02	1.00						
10	Soc.-Eco. Background	-0.24	0.22	0.25	0.15	-0.19	-0.09	-0.01	-0.22	-0.01	1.00					
12	Identification	0.13	-0.29	-0.30	-0.39	0.03	0.33	0.11	-0.12	-0.07	-0.24	1.00				
13	Interaction	0.03	-0.27	-0.30	-0.16	0.00	0.29	0.00	0.30	-0.13	-0.36	0.44	1.00			
14	Placement	0.19	-0.33	-0.35	-0.02	0.08	0.06	-0.13	0.11	0.19	-0.32	0.48	0.37	1.00		
15	Acculturation	-0.17	-0.20	-0.22	0.06	0.05	0.01	0.00	0.32	0.14	-0.10	0.04	0.27	0.22	1.00	
16	Level of Integration	0.04	-0.39	-0.42	-0.18	0.06	0.24	0.00	0.22	0.07	-0.35	0.69	0.70	0.73	0.63	1.00

[b] N=36 observations; players with citizenship other than German

Table A5: Definition and items of the variable level of integration

Construct	Definition	Indicator	Scale: 0-4
Acculturation	People with foreign origin have sufficient knowledge and skills to participate in the new society. This includes for example knowledge about rules and customs in society, and language.		
		How well do you speak German?	0 = rather bad; 4 = very well
		How well do you know the German culture?	
		How well do you know the German school system?	
Placement	People with foreign origin can reach or have a good position in significant areas of society such as job and housing market, the educational and legal system.	*Please rate the following statements:*	
		I am interested in German politics and follow the news about it	0 = not at all true; 4 = totally true
		Foreigners and Germans with foreign origin are discriminated in Germany	0 = totally true; 4 = not at all true
		How well are foreigners or Germans with foreign origins integrated in German society?	0 = bad; 4 = very well
Interaction	People with foreign origin overcome ethnic boundaries when establishing social networks and relationships with e.g., their friends, partners, and neighbors.		
		How many of your friends are Germans?	0 = none; 4 = all
		How often do you speak German with your friends?	0 = never; 4 = always
		How many of your parents' and siblings' friends are German?	0 = none; 4 = all
Identification	People with foreign origin are emotionally and mentally attached to the new culture, can identify themselves with it and feel that they are part of society.	*To which extent do you agree with the following statements?*	
		I can identify myself with the German culture	0 = not at all true; 4 = totally true
		I consider myself German	
		I want to live in Germany if possible	