

Introduction

eSports or electronic sports is an organized and competitive gaming with a specific goal at the end of a game where single players or teams compete against each other (Khromov et al. 2018). Within a few years, this emerging sport of the new generation has finally grown from just a casual gaming experience into one of the biggest industries in the world, comparable to any other major industries. eSports have rapidly grown and exploded into mainstream in recent years, the competitive gaming's biggest event of the year, the League of Legends World Championship sell out full stadiums and drew nearly 100 million unique online viewers in late 2018 surpassed the Super Bowl with the viewership of 98 million and surpassed other well-known professional leagues including MLB, NBA and NHL.

Compared to traditional sports, the eSports audience has increased by 60% since 2017, fueling the rapid growth of this fastest growing industry. The global audience is expected to grow to 276 million by 2022 (Cunningham et al. 2018). Moreover, the growth of eSports will be even more surging with the major event in which esports shall be included in Asian Games 2022 that could pave the way for full Olympic status. Therefore, with great viewership and promising growth come a great amount of money in the game, the traditional sports does not forgo this emerging industry, nor see it as a threat but consequently, several league of traditional sports started to take this into account and acquired eSports teams, franchises or individual athletes to form eSports teams of their own in order to secure their place and their viewers in this fast-paced trend.

Following these large streams of investment in the eSports industry and the alternation in the lifestyle of the youth, pursuing a career in eSports can be portrayed as a dream job for the upcoming generation (The strait Times, 2015). Even though sitting in front of a computer and playing video games is not the image that comes to mind when a person thinks of an athlete.

Conversely, now, countries have begun to recognize professional gamers as athletes (Kane and Spradley. 2017). As a matter of fact, In this research we will define an athlete as a professional player with a work contract with a professional eSports team while “a player” will be referred to a person without the eSports contract while having relevant game skills or status (Khromov et al. 2018) and despite the inconclusive on whether or not we should recognize eSports as a sports(Kane et al, 2017), the growth of the eSport economy still continue to expand along with the popularity that still continuingly to surge that came with the attractive prize pool over US\$34 million in which the value exceed the several traditional sports with the example of the top eSports athlete who have earned more than 6.8 million USD of prize money in addition to their salaries and sponsorship rewards (eSports Earnings, 2019).

Despite the hype, it is still difficult for eSports athletes to make a career out of it and as similar to the traditional sport athletes, there are only a small number of pro players who become successful and are able to gain recognition among this extremely competitive industry. There are numerous drawbacks and an extremely high risk in this career path.

Aside from its small likelihood of success, its rewards also deem to be unproportionate to the risk in which the athletes have to endure. Thus being an eSport athlete would not be suitable for people who seek certainty. In addition, most eSport athletes spend time for 5.5 to 10 hours per day, 7 days per week practising while their career only lasts until they reach their mid-20s(iQ Intel,2016).

For this research, the goal is to look for the factors which can influence the likelihood of the individual who decides to pursue a risky career of becoming an eSports athlete.

Literature Review

Due to the explosive popularity in the eSports industry, there is numerous research covering many aspects of the industry while there exists only a few of the research in which are recognized as the empirical research that is not just the observations of one of the authors with first-hand experience in this area. The lack of empirical research in this field plays an essential part in motivating the current call for research in this paper. The studies in which the scope of the review will emphasize on are the psychology factors in becoming an eSports athlete determining by both internal or characteristics of eSport players (personality traits, motivational patterns, etc.), and external factors (peer pressure, family status, support, etc.) with the criteria of research being empirical study and the data that up to date.

Banyai et al (2018) filter numerous researches in finding the empirical research with recent data on the psychological perspective in eSports that was published between 2000 and 2017. The total of eight empirical studies met inclusion requirements, these eight researches comprise three main topics but to the scope of our research, only two of which will be considered. The two main topics that will be considered are the process of becoming an eSport athlete and the characteristics of an eSport athlete.

By analyzing the factors influencing the players to be motivated and invest their time duration in eSport gaming, in the research of Lee & Schoenstedt (2011) have shown interesting data which discuss the overall 14 influential factors. Thus, the three most significant results behind the motivation were found: “competitive spirit”, “skill learning” and “peer pressure”. While another source also found a similar finding, the other important influential factors in becoming an eSport athlete are “discipline” and “support”. On average, eSport athletes spend on actual playing is 5.5 to 10 hours daily. Fifteen percent reported 3 hours or more of sitting and playing without standing to take a break (Donoghue et al. 2019). Some other source does also state

about 12 to 14 daily hours taken up by esports activities, the additional hours seem to really come from time spent in esports related activities such as participation in team meetings, video / recording based game tactics analysis, strategic discussions, sponsored events and so on (Kari et al. 2019). Consequently, similar to traditional sport athlete with all these training regimen and motivation, the athletes will yield higher performance and by analysing recorded Counter Strike tournaments games, Kadan et al. (2018) concluded common factors indicating victory in this game where the higher features values will lead to higher winning potential which finally translate into the closer step in becoming eSport athlete.

In addition to these empirical research, there are still some limitations in which researchers have paid very limited attention to investigate the psychological profile of eSport athletes. Compared to the previous study in this field, most of which only cover some part of the internal factors while overlook the relevant external factors. In short, there are still a number of relevant factors that are neglected by the researchers both internal and external factors that could have an impact on the decision in pursuing eSport athlete as a career.

As a contribution, this paper aims to take further observation towards understanding of the eSport athlete's initiation along with the ability to carry out a better understanding in pursuing eSport as a career path while also opening up the possibilities for the future research in order to improve the eSports industry.

Methodology

The purpose of the research on “Influential factors in becoming an eSport athlete” is to understand the reason behind the decision dilemma and initiation stage (Salo. 2017) of individuals pursuing a career in this highly competitive industry. The data will be analyzed including both descriptive and inferential analysis where the process of inferential analysis will be executed using Regression Analysis method to determine which factors have the largest impact on the decision and for the descriptive analysis will be collecting the data from various empirical research papers and using these previous studies and hypothesis to analyze to get the final conclusion.

1. Data

The population of this study are eSports athletes and eSports players which combine to 308 samples. Data were collected by a survey from both eSports athletes and eSports players. The survey includes 22 questions for the athletes and 18 questions for the players, covering all 3 separated factors including demographic, personality traits and influences.

The survey was sent to the group of various university students, highschool students, sent individually to the popular eSports athletes and also posted on a facebook group of well-known gaming channels. One particular problem of the data collected is the age distribution of this data is quite narrow since most of the online game players are at the age between 12 to 35 years old.

2. Variables

The focus of this study is on whether or not the individual decides to pursue a career as an eSports athlete in which this will be dependent variable(y) as a dummy variable. The independent variables(x), will be divided into 3 parts:

First as a “demographic factors” which will indicate the respondents gender, age and education level to see the demographic of both players and athletes in order to determine whether or not these variables in this factor also have an effect on the decision making process based on the hypothesis of most athletes in this industry is dominated by male and the image of the eSports athletes are consist with only teenagers and young adults along with the lack of support in training facility with only few emerging colleges and universities who offer varsity esports programs causing many eSports athletes to dropout of school/university.

Second, is “Personality trait factors” will include the social interaction and fame seeking behavior in which determined by the total number of the respondent’s follower on the online social media platform (Youtube, Instagram, Facebook, Twitch and Twitter) and also the respondent’s opinion toward the case of the fame receiving from becoming an eSports athlete, whether or not they would like to become well-known for playing online game. Then, discipline and determination will also be included in the personality trait factors that will be measured by the number of hours which the respondents spend on playing online games or their training regimens. And lastly, this factor will include the willingness to take risk of the respondent to find their risk preference since the eSports athlete is considered a high risk career with a low chance to make it in the industry.

The last part is “Influence factor” coming from both family and friends will include the family support in the case of respondents deciding to pursue a career in becoming eSports athletes. Next is family influence, which is the respondents who have a family member that also have an interest in playing online games or eSports based on the sibling dynamic study(Hopwood et al. 2014). Followed by the measure of peer pressure, asking the respondents on whether or not they are among a group of friends who have an interest in playing online games or eSports in which could have influenced the decision-making and created a

competitive environment. Then, the exposed age variable to support the hypothesis in which most athletes have been exposed to playing video games at an early age. Finally, the family status variable to determine the family financial support in each respondent.

The descriptions of each variable are summarized in Table 1.

Table 1. Shows the variables of each factor used in the equation.

Factor	Variable	Definition
Dependent variable (Y)		
eSports athlete	ATHL	Being an eSports athlete (If yes = 1, no = 0)
Independent variables (Xi)		
Demographic variables		
Gender	BOY GIRL LGBTQ	Male gender (If yes = 1, otherwise = 0) Female gender (If yes =1, otherwise = 0) LGBTQ gender (If yes = 1, otherwise = 0)
Age	AGE	Current age of the participant (year)
Education	EDU	Highest education level of participant PRI_EDU : Primary education or lower (If yes = 1, no = 0) SEC_EDU : Secondary education (If yes =1, no = 0) BACH_EDU : Bachelor degree (If yes =1, no = 0) MAS_EDU : Master degree (If yes = 1, no = 0) PHD_EDU : Doctorate degree or higher (If yes = 1, no = 0)
Personality trait variables		
Fame	FAME	Opinion toward fame from becoming an athlete (If desire = 1, otherwise = 0)
Follower	FOLLOWER	Number of social media followers of participant to determine fame seeking behavior FOLL0 : Lower than 1,000 followers (If yes = 1, no = 0) FOLL1 : 1,000 - 3,999 followers (If yes =1, no = 0) FOLL2 : 4,000 - 6,999 followers (If yes =1, no = 0) FOLL3 : 7,000 - 9,999 followers (If yes = 1, no = 0)

		FOLL4 : 10,000 followers or higher (If yes = 1, no = 0)
Discipline	DISC	Discipline of each participant in hours spent in training regimen DISC0 : Less than 1 hour per day (If yes = 1, no = 0) DISC1 : 1 - 3 hours per day (If yes = 1, no = 0) DISC2 : 4 - 6 hours per day (If yes = 1, no = 0) DISC3 : More than 6 hours per day (If yes = 1, no = 0)
Risk	RISK	The willingness to take risk in each participant RISK0 : Risk averse (If yes = 1, no = 0) RISK1 : Neutral (If yes =1, no = 0) RISK2 : Risk seeking (If yes =1, no = 0)
Influences		
Family support	FSUPPORT	Family support of participant in pursuing eSports athlete as a career (If yes = 1, no =0)
Family influences	FAM	Participant who have sibling that also interested in game (If yes = 1, no =0)
Influences		
Peer pressure	FRIEND	Participant being among friends who have interest in game (If yes = 1, no =0)
Expose age	EXP_AGE	Age in which participant was introduced to video game (year)
Family status	FSTATUS	The level of monthly family income of participant FSTATUS0 : Less than ₦15,000 (If yes = 1, no =0) FSTATUS1 : ₦15,000 - ₦30,000 (If yes = 1, no =0) FSTATUS2 : ₦30,001 - ₦45,000 (If yes = 1, no =0) FSTATUS3 : ₦45,001 - ₦60,000 (If yes = 1, no =0) FSTATUS4 : ₦60,001 - ₦75,000 (If yes = 1, no =0) FSTATUS5 : ₦75,001 - ₦90,000 (If yes = 1, no =0) FSTATUS6 : ₦90,001 - ₦105,000 (If yes = 1, no =0) FSTATUS7 : More than ₦105,000 (If yes = 1, no =0)

3. Statistical treatment of data

The data collected will be classified and prepared to use in a regression analysis on STATA. Probit regression model is used to measure the impact of each variable in affecting the decision-making process in becoming an eSports athlete.

The probit regression model is developed as follow:

$$\begin{aligned} A\hat{T}H = & \beta_0 + \delta_0(\text{boy}) + \delta_1(\text{girl}) + \beta_1(\text{age}) + \delta_2(\text{fame}) + \beta_2(\text{follower}) + \delta_3(\text{sec_edu}) + \\ & \delta_4(\text{bach_edu}) + \delta_5(\text{fstatus2}) + \delta_6(\text{fstatus3}) + \delta_7(\text{fstatus4}) + \delta_8(\text{fstatus5}) + \delta_9(\text{fstatus6}) + \\ & \delta_{10}(\text{fstatus7}) + \beta_3(\text{exp_age}) + \delta_{11}(\text{fam}) + \delta_{12}(\text{disc1}) + \delta_{13}(\text{disc2}) + \delta_{14}(\text{disc3}) + \beta_4(\text{risk}) + \\ & \delta_{15}(\text{friend}) + \delta_{16}(\text{fsupport}) + u \end{aligned}$$

Where δ represent dummy variable and β represent either discrete or continuous variables.

The data using probit regression analysis because of the dependent variable(y) is a dummy variable.

Result

Table 2 shows descriptive statistics of 308 observations, which are the mean value of each independent variable. The result from the survey can be indicated that the majority of respondents are between teenagers and young adults (12 - 35 years old). From the total of 308 observations, 62 percent come from male respondents while 33 percent come from female and only 5 percent come LGBTQ group.

Table 2 : Summary statistics

Independent Variable		Obs	Mean	Std. Dev.	Min	Max
Demographic factors	boy	308	0.8188831	0.4889375	0	1
	girl	308	0.3344158	0.4725535	0	1
	lgbtq	308	0.0487013	0.2155931	0	1
	age	308	21.85714	2.899913	12	35
	edu	308	1.878623	0.4819602	0	4
	pri_edu	308	0.0032468	0.0569803	0	1
	sec_edu	308	0.1688312	0.3752123	0	1
	bach_edu	308	0.779874	0.4178178	0	1
	mas_edu	308	0.0487013	0.2155931	0	1
	phd_edu	308	0.0032468	0.0569803	0	1
Personal trait factors	fame	308	0.7438065	0.437408	0	1
	follower	308	0.4058442	0.8855187	0	4
	foi0	308	0.8818182	0.4685285	0	1
	foi1	308	0.25	0.4337174	0	1
	foi2	308	0.0551648	0.2287317	0	1
	foi3	308	0.0084635	0.0804509	0	1
	foi4	308	0.0084635	0.0804509	0	1
	disc	308	1.37987	0.938789	0	3
	disc0	308	0.1823377	0.3893804	0	1
	disc1	308	0.4545455	0.4987309	0	1
	disc2	308	0.224026	0.4178178	0	1
	risk	308	1.094156	0.7314914	0	2
	risk0	308	0.224026	0.4178178	0	1
	risk1	308	0.4577922	0.4890261	0	1
risk2	308	0.3181818	0.4685285	0	1	
Influence factor	fstatus	308	3.883117	2.459908	0	7
	fstatus0	308	0.1071429	0.3097981	0	1
	fstatus1	308	0.1038961	0.3058223	0	1
	fstatus2	308	0.1331169	0.3402538	0	1
	fstatus3	308	0.1383636	0.3437328	0	1
	fstatus4	308	0.0941558	0.2925207	0	1
	fstatus5	308	0.0748753	0.2632945	0	1
	fstatus6	308	0.1008494	0.3013535	0	1
	fstatus7	308	0.25	0.4337174	0	1
	exp_age	308	7.848104	3.810709	1	22
	fam	308	0.5770221	0.4948948	0	1
	friend	308	0.8403508	0.4779408	0	1
	fsupport	308	0.4253247	0.4951987	0	1

Table 3 shows the regression result according to 2 different models. Note that *lqbtq*, *pri_edu*, *mas_edu*, *phd_edu*, *disc0*, *fstatus0* and *fstatus1* are omitted due to the small size. Column (1) explains the result of the model with all of the variables (2) explains the result of the model when dropping demographic factors and personal trait factors.

		(1)	(2)
	variable	dy/dx	dy/dx
Demographic	boy*	0.1858308	
Demographic	girl*	-0.0297297	
Demographic	age	0.0111292	
Trait	fame*	0.0579202	
Trait	follower	0.0817222	
Demographic	sec_edu*	0.8700***	
Demographic	bach_edu*	0.2967***	
Influence	fstatus2*	0.1198538	0.1573838
Influence	fstatus3*	0.5466***	0.4941***
Influence	fstatus4*	0.5977***	0.6141***
Influence	fstatus5*	0.5438***	0.5672***
Influence	fstatus6*	0.6763***	0.7072***
Influence	fstatus7*	0.7735***	0.7129***
Influence	exp_age	0.0086645	-0.0072214
Influence	fam*	0.1853***	0.2183***
Trait	disc1*	0.1783389	
Trait	disc2*	0.5207***	
Trait	disc3*	0.7798***	
Trait	risk	-0.0380187	
Influence	friend*	0.3001***	0.3338***
Influence	fsupport*	0.2160***	0.2814***

(*) dy/dx is for discrete change of dummy variable from 0 to 1
 *** p<0.01, ** p<0.05, * p<0.1

From the result, start with the demographic factors, it shows that gender is insignificant or does not have an impact that affects the decision in becoming an eSports athlete along with gender which also does not have an impact on the decision. Therefore, this contradict to the hypothesis in which this eSports industry used to be dominated by male but now with the regression, it can support the idea that the eSports industry is now developing and it can gain more interest not only for male but also female and now it can create more diverse environment in the industry. However, for the age variable, it is inconclusive since from both hypothesis and the data, it shows that the age range of people who playing online competitive games is quite

narrow between the age of 12 to 30 years old (ถิ่นฑาว, 2008). The only demographic factor that is significant and has an impact on the decision is education but the education level that is significant are only secondary education and bachelor degree education. The secondary education has the highest impact among any other significant variables in which it can increase to 87 percentage point with statistically significant at 1 percent significance level in becoming an eSports athlete and it can be interpret as most of eSports athlete has the highest education at the secondary level since in Thailand, eSports or gaming industry has such a bad reputation contributing to violence and an gaming addiction or even gambling. So, this industry lacks support not only from the discouragement from the adults in the society but also the lack of support in training facilities with only a few emerging colleges and universities who offer varsity esports programs. Furthermore, an eSports athlete's career usually starts at an early age of 17 years old and with the peak age for player performance was just 24 years old. In the end, most eSports athletes decide to drop out of highschool or stop pursuing further education.

From the personality trait factors, only discipline and determination(*disc*) is the only variable in this factor that is significant. However, discipline and determination will have an impact on decisions only when the respondents spend their time for more than 4 hours per day in training or playing an online game. While, other factors like fame and followers does not have an impact on decision which mean an athlete did not pursue their career in hoping to become famous or fame that comes from being an eSports athlete does not have enough effect to motivate the players to become professional athletes. The same goes with risk preference (*risk*), it does not affect the decision even though pursuing an eSports career is highly risky, but it does not mean that the people who like to take risk are going to pursue a risky career path or can not assume that all eSports athletes like to take risk.

Lastly, the factor that seems to have the highest impact variable is the influence factor that consists of the significant variables including family status, family support, peer pressure and family influence. For family status in which determined the effect of the income level of the family on the decision-making process, it can be imply that the level of family income is highly influence the decision in middle (฿30,000 - ฿60,000) and high income level (฿60,001 or higher) family. It has the probability of 77 percentage point with statistically significant at 1 percent significance level in the family income of more than ฿105,000 per month(*fstatus7*). So, it can be concluded that the higher the family income level, the probability in becoming an eSports athlete also increases from this readiness in financial support. For the family influence, having family members who are interested in playing online competitive games also impact the decision for 19 percentage points with statistically significant at 1 percent significance level. For the peer pressure, it can also imply that being among friends who are interested in playing online competitive games can influence and create a competitive environment for individuals to play and become proficient enough to pursue an eSports career. For all that, the one variable in influence factor that is insignificant is the exposed age of the respondents. It can be interpreted that being exposed to online games at a young age does not influence individuals to become an athlete, even though most athletes start playing video games at the early age.

Comparing the full model to the model that drop the demographic and personality trait factors to see only the degree of the effect of friends and family influence, there is only a small different on the percentage point that is a little bit higher in family support(*fam*), peer pressure(*friend*) and the greater dispersion among family income level(*fstatus*).

In conclusion, from analyzing the regression result, the variables which have the largest impact on decision are proper education level, discipline and determination, family income level, and lastly, friends and family support, respectively.

Conclusion

The main contribution of this paper is to gain a better understanding on the impact of the factors affecting the decision-making process of becoming an eSports athlete with other attributes than those of previous research are added in order to improve and learn the impact in a wider scope of factors; demographic factors, personality trait factors and influence factors.

According to the result, it is consistent with the previous research even when adding the additional factors. Most of the variables give the same implication while only few of them become less impactful.

The result provides broader factors dynamic that affect the decision in pursuing an eSports athletes career and in the case of developing and improving this fast-growing industry especially using this research to develop the most important component in the eSports industry, which is the human factor or the eSports athletes. By knowing the insight on the impact of each factors will help with the nurturing and strategic planning process to support this most essential factor to create the future talented young athletes there by providing the proper program both in secondary level and tertiary education institutions(postsecondary education) that will play an important role in moulding future professional esports athletes before they decided to pursue eSports as full-time career after graduate, providing the financial support and also portraying the healthy eSports culture to correct the misunderstanding in order to get a better perception along with raising the awareness to get the support from family and friends. With these strategic plans, it will be beneficial in expanding Thai's eSports industry to become the eSports hub of Southeast Asia.

However, this study encountered some limitations. During the time of Covid-19 pandemic, many of the eSports events and tournaments got canceled causing the difficulty in collecting the data that will provide the wider scope of income, age, occupation and gender

distribution since this study collected the data mostly from the groups of friend of the researcher and only a few from posting on a facebook page of athletes and gaming channels. So, the result might be biased since the data has a high density among high income level and bachelor degree education. Nevertheless, the future research can be improved by acquiring the bigger sample size and wider range of the distribution: income, age, occupation and gender

References

- B. Borders, J. (2012). RELATIONSHIP BETWEEN PERSONALITY AND VIDEO GAME PREFERENCES. Retrieved 27 April 2020, from <http://csus-dspace.calstate.edu/bitstream/handle/10211.9/1807/Thesis%20final.pdf?sequence=1>
- B. Cunningham, G. (2017). ESport: Construct specifications and implications for sport management. Retrieved 27 April 2020, from https://www.researchgate.net/publication/321629701_ESport_Construct_specifications_and_implications_for_sport_management
- Bányai, F. (2018). The psychology of esports: A systematic literature review. Retrieved 27 April 2020, from http://irep.ntu.ac.uk/id/eprint/32858/1/PubSub10417_Griffiths.pdf
- D Griffiths, M. (2013). Competitive and Professional Gaming: Discussing Potential Benefits of Scientific Study. Retrieved 27 April 2020, from https://www.researchgate.net/publication/273861242_Competitive_and_Professional_Gaming_Discussing_Potential_Benefits_of_Scientific_Study
- Graham, L. (2013). Personality Profiles Associated with Different Motivations for Playing World of Warcraft. Retrieved 27 April 2020, from https://www.researchgate.net/publication/235747070_Personality_Profiles_Associated_with_Different_Motivations_for_Playing_World_of_Warcraft
- Hopwood, M. (2014). Sibling dynamics and sport expertise. Retrieved 27 April 2020, from https://www.researchgate.net/publication/271603040_Sibling_dynamics_and_sport_expertise

Kane, D. (2017). Recognizing ESports as a Sport. Retrieved 27 April 2020, from
https://www.researchgate.net/publication/317929457_Recognizing_ESports_as_a_Sport

Saxtorff, M. (2019). The human factor in esport. Retrieved 27 April 2020, from
https://books.google.co.th/books?id=uJifDwAAQBAJ&pg=PA16&lpg=PA16&dq=nurture+esports+athlete&source=bl&ots=FhMG5baCd3&sig=ACfU3U0jPA_kqP1yTJdlb9x1SguhoCkU6g&hl=en&sa=X&ved=2ahUKEwiBhLqRkonpAhXVxzgGHZJrD7wQ6AEwAHoECAwQAQ#v=onepage&q=nurture%20esports%20athlete&f=false

Seo, Y. (2014). Beyond solitary play in computer games:The social practices of eSports.
Retrieved 27 April 2020, from
https://www.researchgate.net/publication/265216615_Beyond_solitary_play_in_computer_games_The_social_practices_of_eSports

STRATEGIC PLAN FOR ESPORTS DEVELOPMENT MINISTRY OF YOUTH AND
SPORTS 2020-2025. Retrieved 27 April 2020, from
<http://www.kbs.gov.my/iklan-strategik-kbs.html?download=1084:strategic-plan-for-esports-development>

ถิ่นขาว, พ. (2008). ปัจจัยที่ส่งเสริมและสนับสนุนการเล่นเกมออนไลน์ กรณีศึกษา: เกมฟุตบอลออนไลน์.
Retrieved 27 April 2020, from
<https://scholar.utcc.ac.th/bitstream/6626976254/2449/1/213276.pdf>

Appendices

Appendix 1

Full probit regression model

Marginal effects after probit
 $y = \text{Pr}(\text{athl})$ (predict)
 0.14051398

variable	dy/dx	Std. Err.	z	P>z	[95% C.I.]	X
boy*	0.1858308	0.12306	1.51	0.131	-.055364 .427026	0.616883
girl*	-0.0297297	0.14268	-0.21	0.835	-.309372 .249912	0.334416
age	0.0111292	0.01328	0.84	0.402	-.014906 .037165	21.8571
fame*	0.0579202	0.06496	0.89	0.373	-.06939 .18523	0.743506
follower	0.0617222	0.05505	1.12	0.262	-.046175 .169619	0.405844
sec_edu*	0.8700***	0.14123	6.16	0	.593188 1.1468	0.168831
bach_edu*	0.2967***	0.0833	3.56	0	.133429 .459956	0.775974
fstatus2*	0.1198536	0.23385	0.51	0.608	-.338488 .578196	0.133117
fstatus3*	0.5468***	0.18422	2.97	0.003	.185701 .907837	0.136364
fstatus4*	0.5977***	0.17843	3.35	0.001	.248015 .947438	0.094156
fstatus5*	0.5438***	0.20712	2.63	0.009	.137884 .949796	0.074675
fstatus6*	0.6763***	0.176	3.84	0	.331351 1.02126	0.100649
fstatus7*	0.7735***	0.11265	6.87	0	.552697 .994277	0.25
exp_age	0.0086645	0.01034	0.84	0.402	-.011598 .028927	7.6461
fam*	0.1853***	0.06264	2.96	0.003	.062469 .308032	0.577922
disc1*	0.1783389	0.12129	1.47	0.141	-.059379 .416057	0.454545
disc2*	0.5207***	0.17049	3.05	0.002	.186505 .854814	0.224026
disc3*	0.7798***	0.13417	5.81	0	.516803 1.04273	0.159091
risk	-0.0380187	0.05039	-0.75	0.451	-.136789 .060751	1.09416
friend*	0.3001***	0.05918	5.07	0	.184071 .416061	0.649351
fsupport*	0.2160***	0.07801	2.77	0.006	.063152 .368928	0.425325

(*) dy/dx is for discrete change of dummy variable from 0 to 1
 *** p<0.01, ** p<0.05, * p<0.1

Appendix 2

Dropped demographic & personality traits regression model

Marginal effects after probit
 $y = \text{Pr}(\text{athl})$ (predict)
 0.18748427

variable	dy/dx	Std. Err.	z	P>z	[95% C.I.]	X
fstatus2*	0.1573836	0.19686	0.8	0.424	-.228449 .543216	0.133117
fstatus3*	0.4941***	0.16407	3.01	0.003	.172485 .815641	0.136364
fstatus4*	0.6141***	0.14095	4.36	0	.337824 .890341	0.094156
fstatus5*	0.5672***	0.15829	3.58	0	.256929 .877433	0.074675
fstatus6*	0.7072***	0.11567	6.11	0	.480508 .933923	0.100649
fstatus7*	0.7129***	0.10229	6.97	0	.51243 .913402	0.25
exp_age	-0.0072214	0.0094	-0.77	0.442	-.025646 .011204	7.6461
fam*	0.2183***	0.05682	3.84	0	.106955 .32968	0.577922
friend*	0.3338***	0.05052	6.61	0	.234766 .432806	0.649351
fsupport*	0.2814***	0.06593	4.27	0	.152142 .410582	0.425325

(*) dy/dx is for discrete change of dummy variable from 0 to 1
 *** p<0.01, ** p<0.05, * p<0.1