

10120

# Passion for Success: The Role of Humor and Personality in Passion Development

Bachelor's thesis in Psychology

Supervisor: Wei Wang

May 2023



10120

# **Passion for Success: The Role of Humor and Personality in Passion Development**

Bachelor's thesis in Psychology  
Supervisor: Wei Wang  
May 2023

Norwegian University of Science and Technology  
Faculty of Social and Educational Sciences  
Department of Psychology





**Passion for Success: The Role of Humor and Personality in Passion Development**

Bachelor thesis in Psychology, PSY2900

Candidate number: 10120

Trondheim, spring 2023

Norwegian University of Science and Technology (NTNU)

Supervisor: Wei Wang

## Preface

The factors investigated in the present study, using ZKA-Personality Questionnaire Short Form, Humor Styles Questionnaire and Passion Scale, were chosen by the author's supervisor. NSD-approval was conducted by the supervisor as well. The research question, how personality and sense of humor can predict passion for success, was inspired by the supervisor's hypothesis, but developed independently, with some guidance with formulation. The method of analysis was chosen independently thereafter. The literature obtained was mainly found by the author, using Google Scholar, with some collaboration with fellow students from the bachelor group. Based on my own reflections on the literature, the hypotheses were developed. Two of the questionnaires were translated from English to Norwegian by the bachelor group and proofread by the student assistant. The student assistant administered the online survey, consisting of the questionnaires and control-questions added by the group. Recruiting participants was a shared responsibility in the group, where the members recruited on average 46 respondents each. The answers were transformed to useable data in SPSS by the author, after collective instructions from the student assistant. After the student assistant carried out a collective repetition of quantitative analyses, the present analysis was independently conducted by the author. Limited guidance was given when the bachelor thesis was written. Feedback on the thesis was received by a supervisor from the institute towards the end of the period.

I wish to thank my supervisor for being inspiring and the opportunity to write this specific thesis. I also would like to thank my fellow students for valuable discussions regarding the topics of this study, as well as grammatical and statistical questions. One particular student was important in this regard. Special thanks to the student assistant for helping us with the technical aspects of research and being available for questions. Finally, and especially, thanks to my boyfriend, for being utterly supportive throughout this semester.

### **Abstract**

While passion is often considered a key ingredient for success, little is known about how personality traits and sense of humor may play a role in passion development. To investigate individual differences in this regard, the research question is: How can personality and sense of humor predict passion for success? By using multiple regression, the present study hypothesizes that individuals that are social and active, and use positive, social, and self-enhancing humor styles are more passionate. The results supported some of the pre-assumptions, whereas the traits Activity and Sensation Seeking, and the humor style Self-Enhancing humor could positively predict passion in versus degrees. The hypotheses were therefore only partially met. The absence of Extraversion and Affiliative humor, as predictors, might indicate that passion is depended by more internal factors. The results indicate that individuals who are active, want to engage in new activities and have a positive and proactive mindset might be more passionate. These findings can contribute to further research investigating individual differences in passion.

## **Passion for Success: The Role of Humor and Personality in Passion Development**

We all have interests and activities that occupy our time and attention, but some of us develop a passion for attaining success in this interest. This success could be something grandiose, for example, become world champion in swimming, or become Norway's next prime minister. Passion for success can also be achievements that may be perceived as smaller things in life, for example become better in a video game, sew home designed clothes or be the best parent the person can be. It is a diversity in what passion for success is. One can strive to be successful in the workplace or the educational area, or succeed through sports, art forms or their hobbies. But what determines people's passion for success is not clear.

The research field often investigates what is needed to be successful. Research has found that excellence requires systematic training, passion, grit, positive mindset, and support (Sigmundsson & Haga, 2020). One of the things experts have in common is precisely that they are passionate, but it is less known what the passionate have in common. According to Vallerand and colleagues (2003), something is more likely to become a passion if a person's basic psychological needs are satisfied. The Self-Determination Theory, by Ryan & Deci (2017), presents three basic psychological needs: autonomy, competence, and relatedness. With autonomy we can engage freely in the activity and feel a sense of ownership that allows us to gain skills and feel competent (Dalpé, et al., 2019; Diseth, 2017; Skaalvik & Skaalvik, 2005). When developing new skills and accomplishments it can give us higher self-efficacy and if we believe that we can succeed, it is more likely that we will put in the effort to accomplish new tasks (Diseth, 2017; Skaalvik & Skaalvik, 2005). This can provide us opportunities to make friends and engage in meaningful social interactions, where the engaging activity could become a passion (Dalpé, et al., 2019).

Motivational factors as mentioned above can contribute to and influence passion development, but there is still little research about this particular topic. There are individual



differences in the way individuals can self-regulate (Skaalvik & Skaalvik, 2005), enjoy engaging in new activities (Langvik & Martinsen, 2015), seek support or gain from it (Fritz, 2020), and think proactively and positively after setbacks (Falanga, De Caroli, & Sagone, 2014; Fritz, 2020). Based on individual differences our personality might explain how some are more passionate than others (Balon, et al., 2013; Dalpé, et al., 2019). Some people are more sociable, active, and adventurous, whereby others are the opposite (Aluja, et al., 2018). Another aspect that might be an underrated phenomenon in the context of achievements, which is fundamental for humans, is namely our sense of humor. Many of us use humor every day to connect with others or just to make the day brighter (Martin, et al., 2003; Spurkeland, 2020). Our sense of humor can bring us together with those who share common interests and can help us through challenges using self-enhancing humor. With these individual differences in one's personality and humor styles, they might contribute to understanding what determines people's passion for success.

### **Passion**

Passion is considered important and necessary for us to achieve our goals (Duckworth, et al., 2011). Jachimowicz, and colleagues (2018, p. 9981), define passion as “a strong feeling toward a personally important value/preference that motivates intentions and behaviors to express that value/preference”. In other words, passion is a strong interest of something we value, and that motivates us to spend time on it. Vallerand, and colleagues (2003, p. 757), define passion towards an activity as “a strong inclination toward an activity that people like, that they find important, and in which they invest time and energy.”. With this strong interest or activity, we get mentally engaged, which is considered a key mechanism with beneficial effects on performance (Jachimowicz, et al., 2018). This kind of interest often occurs in

specific areas of interest, and passion is therefore thought to be domain specific (Sigmundsson, Haga, & Hermundsdottir, 2020).

How we understand passion today is based on more recent research (e.g. Jachimowicz, et al., 2018; Vallerand, et al., 2003), but has roots from earlier perspectives. When passion was first introduced it meant loss of control and reason. A passionate person was considered controlled by passion, not the other way around (Vallerand, et al., 2003). This view is found from Plato (429-347 BC), and from Latin, passion can be translated to the word “suffering”. Later on, Rene Descartes (1596-1650) saw passion as something more positive and viewed it as a strong emotion where people are more active in relation to their passion. Further it was argued that passion was necessary to reach the higher level of achievement, something that shares similarities with the more modern view. Thus, passion has been a philosophical topic for many centuries, but over the last 20 years passion has received more attention in psychology. (Curran, et al., 2015).

Today, the dominant approach to passion is the Dualistic Model of passion (DMP) by Vallerand, and colleagues (2003). This model includes both historical perspectives. On one hand passion towards an activity can be obsessive and controlling, so-called obsessive passion (OP). In contrast, Harmonious passion (HP) is positive and a passion toward an activity that one enjoys spending time on. HP is shown to be positively related to attention, concentration, and flow when we are engaged in an activity (Vallerand, et al., 2003). This kind of passion is associated with positive affect, high-quality relationships, and psychological well-being (Vallerand, 2012). OP on the other hand, is positively related to negative affect, conflict, and rumination (Vallerand, et al., 2003). The latter kind of passion is either negatively associated with or unrelated to concentration, positive affect, and life satisfaction (Vallerand, et al., 2003). When investigating passion, the Dualistic Model of Passion is frequently used, but

questions regarding the validity of categorizing passion into the OP and HP types have emerged (Moeller, Keiner, & Grassinger, 2015).

An alternative passion scale to the Dualistic Model of Passion is the Passion scale by Sigmundsson, and colleagues (2020). DMP considers people in three groups, those who have a harmonious passion, those who have an obsessive passion and those who are not passionate (Moeller, Keiner, & Grassinger, 2015). These distinguished lines between groups might not be as clear realistically. The Passion scale on the other hand, does not investigate types, but to what degree people are passionate (Sigmundsson, Haga, & Hermundsdottir, 2020). Further the DMP investigate passion specifically towards an activity, whereas in the Passion scale, passion is not limited to activities, but consider whatever one may be passionate about. Since the research so far often focuses on the value and the importance passion has for skill development or achievement, but less on what predict passion or the underlying factors, the Passion scale can more efficient when exploring that aspect of passion. By using the Passion scale, research can investigate factors that lead to different degrees of passion.

## **Personality**

Personality is a set of stable patterns of individual differences in behavior, emotions and thought process (Kennair & Hagen, 2015), thus it is reasonable to believe it might influence our passion development. Personality is considered as something more or less stable throughout our life, but also something that changes in line with the situation we find ourselves in (Larsen & Buss, 2017). How our personality develops is based on our genes and influenced by the environment surrounding us (Loehlin, et al., 1998). This influence is especially relevant to the first years after we are born, before the personality slowly settles (Larsen & Buss, 2017; Packer, 2017, Kennair & Hagen, 2015). Though our personality is something stable, it can change in line with the situation we are in. A contextual example of

this process can be the way one responds to a situation one way and responds different in another, and how one may behave in a specific way with family and behave differently with colleagues. According to Banduras theory, there is a mutual relationship between our personality, our behavior and the environment, and it is a dynamic process (Kennair & Hagen, 2015; Skaalvik & Skaalvik, 2005). Therefore, personality can be understood as stable structures and processes in relation to the environment (Kennair & Hagen, 2015).

Personality has been an area of interest for many years, with different ways of understanding it and several methods have been developed to investigate personality. The most common way to measure personality may be more structural, namely using taxonomy, where personality traits are investigated. A trait says something about a specific tendency a person has and can be defined as a dimension of individual differences in thought patterns, behaviors and emotions (Kennair & Hagen, 2015). The Big Five is a set of five famous traits and is dominant in personality research. The taxonomy is composed of the traits Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. These traits have sub traits, called facets, which are even more specific. The model originally was formed from the selection of trait terms used in natural languages and has become dominant in investigating genetic and environmental factors in individual differences (Loehlin, et al., 1998).

An alternative five factor model is the Zukerman-Kuhlman-Aluja Personality Questionnaire (ZKA-PQ; Aluja, et al., 2010). This taxonomy is based on biological and temperamental approaches to human personality and developed through existing scales and years of analysis. In addition, the ZKA-PQ has been replicated and validated in several cultures, suggesting that it can be used in a large diversity of cultures, and that the model is as universal as other dominant models. The traits included in ZKA-PQ are Aggressiveness, Activity, Extraversion, Neuroticism, and Sensation Seeking, and each trait comprises four facets each. Aggressiveness includes the facets: Physical Aggression, Verbal Aggression,

Anger, and Hostility. Activity is divided into Work Compulsion, General Activity, Restlessness, and Work Energy. Extraversion consists of Positive Emotions, Social Warmth, Exhibitionism, and Sociability. The facets of Neuroticism are Anxiety, Depression, Dependency and Low self-esteem. Finally, Sensation seeking is divided into Thrill and Adventure Seeking, Experience Seeking, Disinhibition, and Boredom Susceptibility/ Impulsivity. ZKA-PQ is less known than the Big Five and others but can contribute to new knowledge and perspectives in the research field.

Some research has looked into whether personality can predict passion. Balon, and colleagues (2013), and Dalpé, and colleagues (2019) have done research about this specific relation, using instruments based on the traits from Big Five and the passion scale from the Dualistic Model of Passion. Balon, and colleagues (2013), found that Harmonious passion correlated positively with Conscientiousness, Extraversion, Agreeableness and Openness, and Obsessive passion correlated negatively with Agreeableness. Dalpé and colleagues (2019) on the other hand, found that Harmonious passion, additionally, correlated negatively with Neuroticism, and Obsessive passion correlated positively with Neuroticism and negatively with Conscientiousness and Openness. Factors that may explain the different results are that passionate activities differed between the two studies, and Balon, and colleagues, used the short form of the instrument NEO, while Dalpé and colleagues, used the complete inventory. Based on the lack of consistency in the conducted research, there is a need for replication and further research.

### **Sense of Humor**

Humor may also affect passion. Sense of humor is something often associated with laughter, making jokes and happiness (Moreira, Inman, & Cloninger, 2022). Further, humor is linked to people's optimism, mental health, well-being, social capacity and job success

(Spurkeland, 2020). Children develop and experiment with this ability from a very young age. They gradually discover their own sense of humor by seeking feedback from their surroundings (Spurkeland, 2020; Packer, 2017). For this kind of communication, they smile, laugh and show a cheerful behavior to get attention (Spurkeland, 2020). This ability is fundamental for both oneself and for making social bonds and important for our health (Schneider, Voracek, & Tran, 2018).

To define sense of humor, Martin and colleagues (2003), define it as a stable component of personality or variables explained by individual differences. We can understand sense of humor as a multi-faceted construct which can be viewed as a class of loosely related traits (Martin, et al., 2003). Concepts within this multi-faceted construct can be the cognitive ability we have to understand and remember jokes, and our preferences for what kind of humor we enjoy. Other concepts can be our habitual behavior patterns, how we tend to laugh frequently, tell jokes and laugh at others jokes. On the other hand, it can be an emotion-related temperament trait, and how we can use humor as a coping strategy or defense mechanism. As we can see, the concept of humor is complex and accommodates a variety of concepts.

In addition to the variety of humor, the humor we use in everyday life can affect us and those surrounding us in various ways. Humor that is considered warm can be characterized by the intention to please others and do others good (Spurkeland, 2020). It is a suitable way to build new relationships or nurture the connection we already have, by being joyful and kind, or entertaining. Affiliative humor is a kind of humor style that wants to enhance one's relationships with others (Martin, et al., 2003), and this style of humor is associated with greater social support (Fritz, 2020). Self-enhancing humor on the other hand is a positive humor style as well, where the humor is used to enhance the self (Martin, et al., 2003). This humor style is positively associated with well-being and can work as a coping mechanism (Falanga, De Caroli, & Sagone, 2014). In a study by Fritz (2020), Self-Enhancing humor was

associated with greater cognitive reappraisal (reinterpreting negative events to viewing them as positive), that can reduce level of distress. When people are engaging in these positive styles of humor, they appear more adaptable to their environment and show higher levels of social and mental well-being (Schermer, et al., 2021). These positive effects might contribute positively with passion development.

Although humor is assumed positive and healthy, it can be unhealthy (Moreira, Inman, & Cloninger, 2022). Humor can be negative, both self-defeating and aggressive/hostile (Martin, et al., 2003). Firstly, self-defeating humor is a humor style where humor is used to enhance relationships at the expense of the self (Martin, et al., 2003). This kind of humor is correlated with greater psychological distress (Fritz, 2020). Secondly, hostile and aggressive humor can be interpreted as cold, where the person wants to enhance the self at the expense of others (Martin, et al., 2003; Spurkeland, 2020). Cold humor can hurt others, by using irony, being sarcastic or making jokes at other's expense (Spurkeland, 2020). It is found that the use of aggressive humor is associated with increased negative interactions over time (Fritz, 2020). Another aspect of humor is that absence of sense of humor can indicate psychopathology (Moreira, Inman, & Cloninger, 2022). In summary, humor can both strengthen and weaken social bonds and one's own wellbeing.

As a part of the definition by Martin, et al., (2003), humor is a component of our personality. A meta-analysis by Mendiburo-Seguel, and colleagues (2015), investigated different personality trait instruments and the humor style scale by Martin, et al. (2003). These findings tell us that the humor style Affiliative humor was correlated with all Big Five traits, except Conscientiousness, and Self-Enhancing humor was correlated with the Big Five traits as well. Regarding Aggressive humor, the style correlated with every Big Five trait, and finally, Self-Defeating humor was correlated with Big Five traits, except for Openness. A study by Čekrljija, and colleagues (2022), investigated the same types of humor styles with

the alternative five factor model Zuckerman-Kuhlman-Aluja Personality Questionnaire (ZKA-PQ). They found that the humor style Affiliative humor was positively associated with Extraversion and Sensation Seeking, and negatively with Neuroticism, when the humor style self-enhancing humor was associated with every personality trait, negatively with Neuroticism and Aggressiveness. Aggressive humor was positively correlated with Aggressiveness and Sensation Seeking, while self-defeating humor style was positively associated with Neuroticism. The findings illustrate a connection between humor and personality, whereas the latter study may be the first to investigate this relationship using these instruments, which can contribute to further research.

### **The present study**

There is a lacking knowledge in the field about the connection between personality and passion and there is possibly no research investigating sense of humor in relationship to passion. The research so far often investigates the value, and the importance passion has for skill development or achievement (Sigmundsson, 2020), but less on what predict passion or the underlying factors of those who are passionate. Personality can potentially be a key factor to better understand the variation of passion in a population (Balon, et al., 2013; Dalpé, et al., 2019). Sense of humor can contribute to the social aspect (Fritz, 2020), as well as mental well-being (Schermer, et al., 2021) and positive thinking, which is considered an important factor for motivation and achievement (Skaalvik & Skaalvik, 2005). Therefore, this study will look at individual differences to try to better understand people's predisposition for passion towards success and see if personality and sense of humor could be a predictor for this.

The present study will investigate the relationship between personality and sense of humor and look at how they predict passion of success, by using the short form version ZKA-Personality questionnaire (Abuja, et al., 2018), Humor Styles Questionnaire (Martin, et al.,



2003) and Passion Scale (Sigmundsson, Haga, & Hermundsdottir, 2020). The research question is: How do personality and sense of humor predict passion for success? The hypotheses are:

**Hypothesis 1:** Individuals who are social and active are more passionate.

**Hypothesis 2:** Individuals who use positive humor styles to enhance social relationships and the self, are more passionate.

## **Method**

### **Sample**

Participants in Norway were recruited through a convenience sample and 420 participants answered the survey. 14 participants had to be excluded based on the exclusion criteria: All questions must be answered, participant must be an adult and participants must be Norwegian citizens. The reduced sample consisted of 406 Norwegian adults, where 150 were men (37%), 251 woman (62%) and 5 something else/would not like to answer (1%). The age varied from 18 to 83 years old with a mean of 34.95 (SD = 14.92).

### **Procedure**

Respondents were recruited through acquaintances of the bachelor group and by posting the survey on Facebook, Instagram and other media platforms between February and March 2023. The project was presented as a study on personality, humor styles and interests. The survey was online, and the front page informed the participants that it was voluntary and anonymous, and that they could withdraw at any time without their data being collected. The study was submitted for approval from the Norwegian Centre of Research Data (NSD) in December 2022.

## **Instruments**

In the survey, three main questionnaires were used. The three questionnaires were investigating personality traits, different humor styles and passion for achievement.

The Zukerman-Kuhlman-Aluja Personality Questionnaire (ZKA-PQ/SF) (Aluja, et al., 2018) includes 80 items and was used to measure five personality traits: Aggressiveness, Sensation Seeking, Neuroticism, Extroversion and Activity. Every trait has four underlying facets and four items per facet. A Likert-type scale was formed ranging from 1 (strongly disagree) to 4 (strongly agree), and a typical statement they had to answer is: "I like to let myself go and do impulsive things just for fun". The original paper of ZKA-PQ/SF showed that the alpha reliabilities of the factors were higher than 0.86, similar to original ZKA-PQ validation results (Aluja et al., 2010; Aluja, et al., 2018). In the present study Cronbach alpha ranged from .76 to .88.

The Humor Styles questionnaire (Martin, et al., 2003) includes 32 items that measure four styles of humor: Affiliative humor, Self-Enhancing humor, Aggressive humor and Self-Defeating humor. All four humor scales show adequate internal consistencies in the original study, as demonstrated by Cronbach alpha ranging from .77 to .81 (Martin, et al., 2003). In the present study Cronbach alpha ranged from .67 to .83. Participants answered on a Likert-type format scale ranging from 1 (totally disagree) to 7 (totally agree). An example of a statement the participants would get in the questionnaire is: "I laugh and joke a lot with my friends.", and they had to answer to what degree they agreed. Both the personality and the humor style questionnaire were translated to Norwegian from English by members in the bachelor group and controlled by other members within the group.

The Norwegian version of the Passion Scale (Sigmundsson, Haga, & Hermundsdottir, 2020) was used to measure the participants level of passion for success. The participants answered eight questions/statements, using Likert-type scale from 1 (not like me at all) to 5

(very much like me), and one example of one of the eight statements is “I have an area/theme/skill I am really passionate about “. The maximum score on this scale is 5 (extremely passionate) and the lowest is 1 (not at all passionate). The Cronbach's alpha value for the standardized items was .86 in the original study (Sigmundsson, et al., 2020), and .89 in the present study.

### **Statistics analyses**

For the statistical analysis, SPSS was used. For the descriptive analysis, mean, SD and the frequency of the participants were looked at. Both correlation and regression analysis are used to investigate the relationship between passion, humor styles and personality traits. Multiple regression is the main analysis for this study, with the intention to see if the independent variables humor styles and the personality traits could predict the dependent variable passion for success.

### **Results**

A bivariate correlation analysis was performed to investigate the relationship between personality traits, humor styles and passion. Since some of the variables are defined as ordinal, Spearman correlation is used.

**Table 1***Bivariate correlation analysis of passion, personality, and humor styles (N = 406)*

Variable	<i>M</i>	<i>SD</i>	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Passion	3.77	0.73	-									
2. AG	2.02	0.73	.03	-								
3. SS	2.61	0.73	.25***	.04	-							
4. AC	2.46	0.48	.37***	.02	.29***	-						
5. EX	3.15	0.45	.21***	-.10	.31***	.20***	-					
6. NE	2.43	0.56	-.04	.43***	-.01	.04	-.26***	-				
7. AFH	5.61	0.88	.19**	.10	.22***	.06	.60***	-.06	-			
8. SEH	4.61	1.03	.23***	-.14**	.24***	.13**	.39***	-.29***	.37***	-		
9. AGH	3.34	0.85	.07	.32***	.21***	-.06	.02	.03	.22***	.14**	-	
10. SDH	3.73	1.08	.04	.28***	.13**	.03	-.05	.47***	.19***	.04	.27***	-

*Note.* 1. Passion, 2.-6. personality traits; Aggressiveness (AG), Sensation seeking (SS), Activity (AC), Extroversion (EX), and Neuroticism (NE), 7.-10. Humor styles; Affiliative humor (AFH), Self-Enhancing humor (SEH), Aggressive humor (AGH), and Self-Defeating humor (SDH).

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

As we can see in Table 1, the analysis showed that there was a significant correlation between Passion and the personality traits Activity,  $r(404) = .37, p < .001$ , Sensation Seeking,  $r(404) = .25, p < .001$ , and Extroversion,  $r(404) = .21, p < .001$ . There was not a significant correlation between Passion and the two remaining personality traits, Aggressiveness,  $r(404) = .03, p < .583$ , and Neuroticism,  $r(404) = -.04, p < .396$ . The correlation analysis between humor styles and passion, showed that Passion significantly correlated with Self Enhancing Humor,  $r(404) = .23, p < .001$ , and Affiliative Humor,  $r(404) = .19, p < .001$ . Between Passion and the two remaining humor styles, Aggressive Humor,  $r$

(404) = .07,  $p < .142$ , and Self-Defeating Humor,  $r(404) = .04$ ,  $p < .408$ , there was not a significant correlation.

Between personality traits and humor styles, there was a significant correlation between Sensation Seeking and every humor style; Self Enhancing Humor,  $r(404) = .24$ ,  $p < .001$ , Affiliative Humor,  $r(404) = .22$ ,  $p < .001$ , Aggressive Humor,  $r(404) = .21$ ,  $p < .001$ , and Self Defeating Humor,  $r(404) = .13$ ,  $p = .009$ . The trait Extroversion was significantly correlated with Affiliative Humor,  $r(404) = .60$ ,  $p < .001$ , and Self Enhancing Humor,  $r(404) = .39$ ,  $p < .001$ . Aggressiveness showed a significant correlation with Aggressive Humor,  $r(404) = .32$ ,  $p < .001$ , Self-Defeating Humor,  $r(404) = .28$ ,  $p < .001$ , and Self Enhancing Humor,  $r(404) = -.14$ ,  $p = .006$ . There was a significant correlation between Activity and Self Enhancing Humor,  $r(404) = .13$ ,  $p = .009$ . Lastly, Neuroticism was significantly correlated with Self Defeating Humor,  $r(404) = .47$ ,  $p < .001$ , and Self Enhancing Humor,  $r(404) = -.29$ ,  $p < .001$ .

A regression analysis was performed to investigate how personality and sense of humor can predict passion. The conditions for regression analysis were fulfilled, with a sample size over 300, normal distribution, linearity, and homoscedasticity. The conditions were detected through the residuals, scatterplot and boxplot, and multicollinearity was controlled for using VIF. Boxplot showed that there were some outliers, but due to a minimal influence on the results, they were not removed.

**Table 2**

*Multiple hierarchical regression of personality and humor as predictors for passion (N = 406)*

Variable	<i>b</i>	<i>SE b</i>	$\beta$	$R^2$	$\Delta R^2$
Model 1				.18***	.18***
AG	0.05	0.08	0.02		
SS	0.26**	0.08	0.16**		
AC	0.48***	0.07	0.31***		
EX	0.11	0.08	0.07		
NE	-0.07	0.07	-0.05		
Model 2				.20***	.02***
AG	0.03	0.09	0.02		
SS	0.21*	0.09	0.13*		
AC	0.49***	0.08	0.32***		
EX	-0.01	0.10	-0.00		
NE	-0.03	0.08	-0.02		
AFH	0.05	0.05	0.05		
SEH	0.09*	0.04	0.13*		
AGH	0.03	0.05	0.04		
SDH	-0.00	0.04	-0.01		

*Note.* Personality traits; Aggressiveness (AG), Sensation seeking (SS), Activity (AC), Extroversion (EX), and Neuroticism (NE), Humor styles; Affiliative humor (AFH), Self-Enhancing humor (SEH), Aggressive humor (AGH), and Self-Defeating humor (SDH).

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

Table 2, show hierarchical multiple regression analyses where Model 1, with the personality traits: Aggressiveness, Sensation Seeking, Activity, Extroversion, and Neuroticism, was a moderate predictor for passion ( $R^2 = .18, p < .001$ ). In Model 2, with the humor styles: Affiliative Humor, Self-Enhancing Humor, Aggressive Humor, and Self-Defeating Humor, the explanation percentage increased to 20% ( $R^2 = .20, p < .001, \Delta R^2 = .02, p < .001$ ). In the model with every predictor, the personality trait Activity was the strongest predictor ( $\beta = 0.32, p < .001$ ), followed by Sensation Seeking ( $\beta = 0.13, p = .012$ ), and lastly Self Enhancing Humor ( $\beta = 0.13, p = .015$ ). The other variables were not significant ( $p > .05$ ).

### **Discussion**

The purpose of the present study is to investigate how personality and sense of humor can predict passion for success, using ZKA-PQ/SF (Aluja, et al., 2018), Humor scale (Martin, et al., 2003) and Passion scale (Sigmundsson, Haga, & Hermundsdottir, 2020). The key findings between personality, sense of humor and passion were that Passion correlated positively with Activity, Sensation Seeking, Extraversion, Self-Enhancing humor, and Affiliative humor (Table 1). These findings are in line with what was assumed, whereas the significantly associated factors are considered positive, social, active, and self-enhancing. Further, every trait and humor style that correlated with passion, correlated with each other as well, where Sensation Seeking and Extraversion correlated positively with Self-Enhancing humor and Affiliative humor, and the trait Activity correlated positively with Self-Enhancing humor (Table 1). The results of the correlation analysis cannot tell us about the causality, but in an attempt to better understand the prediction of passion, using regression, there were some surprising findings. The traits Activity and Sensation Seeking could positively predict passion (Table 2). When adding the factors of humor in Model 2 (Table 2), the effect of the personality traits remained and only the humor style Self-Enhancing humor could positively

predict Passion. According to what was hypothesized, the variables that correlated with passion, would also make an impact as predictors. Surprisingly, neither Extroversion nor Affiliative humor could predict passion, despite the correlation (Table 1). The hypotheses were therefore only partially met.

The absence of social factors as predictors is surprising. Social bonds, feeling of belonging and support are strong motivational factors for us to achieve our goals (Deci & Ryan, 2017; Skaalvik & Skaalvik, 2005), but the results indicate that passion is not dependent by that factor. Social interaction can still have an enhancing effect on achievement, but it does not necessarily mean it is the same as enhancing the feeling of passion. One explanation could be that even though passion is pursued within a social context, the social context is not necessary for the development or maintenance of passion. Another explanation could be that if one is very driven by social engagement, the social drive can be greater than the activity or interest itself. However, this would not be passion. Passion is characterized by an important personal value that motivates us to spend time on it, and that internal motivation drives us towards our goal within that passion (Jachimowicz, et al., 2018). Therefore, the degree of passion we have seems to be more dependent on the individual and caused by more internal factors.

The thesis first hypothesized that individuals who are social and active are more passionate. The first hypothesis was only partially met, as only Activity and Sensation Seeking could explain passion in Model 1, whereas Extroversion could not predict passion (Table 2). Both these traits tell us something about the activity level of an individual. When comparing these findings with other studies, there is a lack of research investigating these relations, and none using ZKA-PQ and Passion scale measuring passion for success/achievement. Even so, the research that has been conducted show that the trait Conscientiousness, Openness, Agreeableness and Extraversion, from Big Five, are positively



associated with harmonious passion, from the Dualistic Model of Passion (Balon, et al., 2013; Dalpé, et al., 2019). To compare these findings, Activity is associated with Conscientiousness, and Sensation Seeking is associated with Openness and Agreeableness (Aluja, et al., 2018; García, et al., 2012). One specific facet that Activity is highly associated with, is Achievement Striving from Conscientiousness (García, et al., 2012). Despite the absence of research and the challenges that occurs when comparing research using different measurements, the connection between Achievement Striving and Activity can offer an extended perspective on how Activity is connected to passion for success. If one tends to be active, one might want to use that energy to achieve personal or external goals. Further, those who feel the need to achieve ambitious goals may tend to be more active as well. Individuals who score high on the trait Activity can feel a general need to be active in some form or feel a compulsion to work (Aluja, et al., 2018). It is reasonable to believe that spending time on an activity is necessary for developing a passion for said activity. Therefore, activity may be important in this relation.

As for Sensation Seeking, a higher level of this trait can increase adventure seeking, experience seeking, disinhibition, and boredom susceptibility (Aluja, et al., 2018). Further, the trait is based on the idea of individual differences in seeking interactions and experiences from the environment, which can increase the stimulation of excitement (Cekrljija, et al., 2022). Whereby seeking stimulation from exciting sensations can provide joy and a “rush”, Sensation Seeking is often associated with obsessive passion in the litterateur that have investigated this relationship (Aikena, Beeb, & Walkerc, 2018; Burnay, et al., 2015; Waaler, et al., 2022). The earlier findings show that the trait can explain passion to some degree, based on engaging in activities that can stimulate the optimal level of excitement, and repeating those activities. Essentially, passion is based on the individual’s repeated experiences of an activity over time (Jachimowicz, et al., 2018; Moeller, Keiner, & Grassinger, 2015; Vallerand,

et al., 2003). Further, by exploring new activities and gaining new experiences, Sensation Seeking can contribute to discovering new interests that can potentially become a passion, as well as repeating those enhancing excitement.

The present study does not distinguish between harmonious and obsessive passion, but when comparing with earlier findings, it is inevitable. In addition, Moeller, Keiner, & Grassinger (2015) found that individuals experiences are either high HP and high OP, or low HP and low OP, not one or the other. Suggesting that the Passion scale by Sigmundsson, and colleagues (2020), can be compared to earlier findings using OP and HP (DMP).

The second hypothesis, suggested that individuals who use positive humor styles to enhance social relationships and the self, are more passionate, was partially met. When the humor styles were added in Model 2 (Table 2), only Self-Enhancing humor could predict passion, and the effect of the personality traits remained. Despite that Self-Enhancing humor was not the strongest predictor, there might be something to it. This humor style is associated with a positive mindset and the use of cognitive reappraisal, by being self-enhancing (Fritz, 2020). Further, the humor style shows a positive and a direct effect on mental well-being (Reizer, Munk, & Frankfurter, 2022; Schermer, et al., 2021). When facing difficulties within a passion, or what potentially can become a passion, self-enhancing humor can change the mindset in a more proactive way. By considering earlier achievements and having a positive mindset, self-efficacy can increase, and it can be easier to overcome setbacks (Skaalvik & Skaalvik, 2005). The lack of the ability to reappraise and think positively may on the other hand weaken the internal motivation to pursue a passion for success. Lafrenière, Vallerand and Sedikid (2013) found that individuals with a high level of obsessive passion could benefit from self-enhancement, whereas it is beneficial for life-satisfaction. Those who strongly identify themselves with their passion, as one with a more obsessive passion, can feel personally threatened if facing challenges in the pursued activity (Lafrenière, Vallerand and

Sedikid, 2013). Self-Enhancing humor can work as a coming mechanism (Falanga, De Caroli, & Sagone, 2014), and might explain the significant association between the concepts, and why self-enhancement has a beneficial effect on passion. Thus, a positive and a proactive mindset can potentially increase passion for success.

Looking closer on mental well-being, it is a factor shared with both harmonious passion (Lalande, 2017; Vallerand, 2012), and Self-Enhancing humor (Reizer, Munk, & Frankfurter, 2022; Schermer, et al., 2021). It is found that those who have a harmonious passion will increase their psychological well-being and positive emotions (Vallerand, 2012). It is clear that having a passion that feels voluntary to engage in and is enjoyable, enhances positive feelings in the self and towards that specific interest or activity. Research about this specific topic often investigates if passion can increase or decrease specific psychological outcomes, like positive affect, high-quality relationships, and psychological well-being. There is considerably less research on whether these psychological outcomes can affect passion. Based on the fact that Self-Enhancing humor can be positively associated with (Table 1) and predict passion to some degree (Table 2), it is reasonable to believe that the beneficial affect from this humor style, like mental well-being, can increase passion. That it might go both ways. In a positive state of mind, it is easier to engage in the things we enjoy, compared to a more negative state of mind (Sigmundsson, 2020).

Further, it might be useful to investigate the relationship between Personality and Humor toward Passion. When examining the relation between personality and humor, there are not yet many who have investigated that specific relationship, using ZKA-PQ (original or short form) and Humor scale by Martin, et al. (2003). Čekrljija, and colleagues (2022), may be the first and only, until now, to examine the relationship between these two factors using these scales. An interesting finding is that Sensation Seeking can be associated with every humor style (Table 1), something Čekrljija and colleagues (2022) found as well. Higher value

of the trait Sensation Seeking is drawn toward thrill, new experiences and sensations, something that humor can contribute to by providing interactions and experiences from the environment, which can increase the stimulation of excitement (Čekrljija, et al., 2022). One specific aspect Self-Enhancing humor might contribute to in this relation, is the proactive and positive mindset when activities turn out to be boring, to advance or when facing setbacks. Without the ability to reappraise one can think that one who scores high on Sensation Seeking might lose interest and move on. Since Sensation Seeking is associated with those who strongly identify themselves with their passion (Aikena, Beeb, & Walkerc, 2018; Burnay, et al., 2015; Waaler, et al., 2022), and the beneficial effect of the concept self-enhancement is associated with the same kind of passion (Lafrenière, Vallerand and Sedikid, 2013), Self-Enhancing humor might be an assessment in this relation. To investigate this relationship further, it requires more research.

To combine the knowledge this thesis has conducted, personality and humor can explain passion for success to some degree. The research on passion development is so far mostly based on motivational factors (Lafrenière, Vallerand and Sedikid, 2013), but by investigating individual differences, this thesis has contributed more knowledge about that topic. The findings can tell us that a person who is active, wants to seek new experiences and has a positive and proactive mindset, might be more passionate. Whereas some want to engage in social activities, the results of this thesis suggest that passion is more dependent on internal factors, rather than external.

### **Strengths and Limitations**

The present study uses data gathered from Norwegian adults. The study used a convenience sample, and did not limit respondents based on age, except for being over 18 years old, where in Norway the participants were settled or whether the participants studied

on university, employed or something else. The strength by including a broad spectrum of Norwegians, is the large sample of participants we conducted, 420 in total, reduced to 406 based on the specific exclusion criteria for this thesis. By having a large sample size, it can provide more accurate and reliable results (Andrade, 2020). The chance of type one error also declines. The limitation of using a convenience sample on the other hand, is that the sample may be skewed and generalizing the results to a population presents some difficulties. This sample comprises of more women than men, disproportionately many students, and age is not distributed similar to the wider population. Confirmation of the results using a sample that is more demographically similar to the wider population is needed.

The method used for data-collection was self-report. Self-report is found to be a valid method of data-collection, but it is not without its flaws (Gonyea, 2005). The participants' attention might decline throughout the time they are spending on the survey. This can affect the answers towards the end of the survey, and thereafter the reliability of the results. Additionally, when the respondents answer the survey, different kinds of bias might be presented, like social desirability bias. Likely, there are some who will be reluctant to answer truthfully but rather answer something thought to be more “desirable”, hence social desirability bias. This can have an effect on whether the results can be counted as representative. Securing anonymity might prevent this effect, the desire to enhance one's own answers. For this thesis, respondents were completely anonymous when answering the online survey, and it was voluntary to participate. From an ethical perspective, anonymity and voluntary participation is important to ensure as well.

One thing that has been consistent throughout this thesis, is the limited research to compare with the presented findings. The present study uses different instruments than what other studies have used and investigates relationships that have not been investigated before. This can be both a limitation and a strength, and an advantage for further research. This

limitation makes it more difficult to compare, whereas the Big Five and the Dualistic Model are the dominant instruments in the research field for investigating personality and passion. Despite the challenges, it is important to replicate other findings with different instruments. By using the instruments ZKA-PQ/SF, Humor scale and Passion scale, the thesis contributes to new perspectives and knowledge when investigating the concept of Passion.

### **Further research**

The aim of the present research was to examine individual differences in relation to passion for success, by investigating how personality and sense of humor can predict passion. The findings of this thesis complement those of earlier studies, by Balon, et al., (2013) and Dalpé, et al., (2019), whereas personality can be connected to passion. Additionally, the findings reported here shed new light on the role of humor in relation to passion, illustrated by the importers of Self-Enhancing humor. These findings may contribute to further research but require replication. It would be beneficial if the results were replicated across different cultures. Further research should investigate more specifically how the relationship between personality and humor affect passion development, where several questions remain unanswered about this relation.

When investigating personality and humor as a predictor for passion, the environment has only an indirect effect on passion. The environment has an effect on how personality (Loehlin, et al., 1998), and humor (Spurkeland, 2020), develop and how they react to contextual factors. Further, it is recommended to investigate the direct relationship between environmental factors and passion. These factors can include social, economic, and cultural conditions that may, among other things, limit or enhance basic psychological need. According to theories about passion, something is more likely to become a passion if individual's basic psychological needs are satisfied (Lafrenière, Vallerand, & Sedikid, 2013;

Vallerand, 2003). By investigating different concepts and conditions, knowledge on what predicts passion can flourish.

### **Conclusion**

Passion can be an important factor for skill development, but what determines passion for achievement is less investigated. It is found that psychological needs that are satisfied might contribute to passion development. Differences in individual abilities and needs can on the other hand highlight the importance of investigating individual differences toward passion. As there is little research on this topic, personality was investigated to help shed light on whether some are more disposed to be passionate. In addition, sense of humor was investigated as well, as humor can potentially strengthen both social bonds and the self, something that may contribute to enhancing the feeling of passion. Therefore, the research question was set out to investigate how personality and sense of humor can predict passion for success. The first hypothesis was that individuals who are social and active are more passionate. This hypothesis was partially met, as the traits Activity and Sensation Seeking from ZKA-PQ/SF could positively predict passion, and Extraversion could not predict. The second hypothesis hypothesized that individuals who use positive humor styles to enhance social relationships and the self, are more passionate. The second one was only partly met as well, whereas Self-Enhancing humor was the only humor style that could predict passion. The results indicate that passion is not dependent on social and external factors, but more dependent on internal factors. Additionally, the results suggest that individuals who are active, want to engage in new activities and have a positive and proactive mindset, typically are more passionate. Overall, this study highlights the importance of investigating individual differences in passion and provides a promising starting point for further exploration.

## References

- Aiken, K. D., Bee, C., & Walker, N. (2018). From passion to obsession: Development and validation of a scale to measure compulsive sport consumption. *Journal of Business Research*, *87*, 69–79. <https://doi.org/10.1016/j.jbusres.2018.02.019>
- Aluja, A., Lucas, I., Blanch, A., García, O., & García, L. F. (2018). The Zuckerman-Kuhlman-Aluja Personality Questionnaire shortened form (ZKA-PQ/SF). *Personality and Individual Differences*, *134*, 174–181. <https://doi.org/10.1016/j.paid.2018.06.015>
- Aluja, A., Kuhlman, M., & Zuckerman, M. (2010). Development of the Zuckerman–Kuhlman–Aluja Personality Questionnaire (ZKA–PQ): A Factor/Facet Version of the Zuckerman–Kuhlman Personality Questionnaire (ZKPQ). *Journal of Personality Assessment*, *92*(5), 416–431. <https://doi.org/10.1080/00223891.2010.497406>
- Andrade, C. (2020). Sample size and its importance in research. *Indian J Psychol Med*, *42*, 102-103. [https://doi.org/10.4103/IJPSYM.IJPSYM\\_504\\_19](https://doi.org/10.4103/IJPSYM.IJPSYM_504_19)
- Balon, S., Lecoq, J., & Rimé, B. (2013). Passion and personality: Are passionate behaviour a function of personality. *European Review of Applied Psychology*, *63*(1), 59–65. <https://doi.org/10.1016/j.erap.2012.06.001>
- Burnay, J., Billieux, J., Blairy, S., & Larøi, F. (2015). Which psychological factors influence Internet addiction? Evidence through an integrative model. *Computers in Human Behavior*, *43*, 28-34. <https://doi.org/10.1016/j.chb.2014.10.039>
- Čekrljija, Đ., Mrđa, P., Vujaković, L., & Aluja, A. (2022). Relationship between humor styles and alternative five factors of personality. *Personality and Individual Differences*, *194*, 111625. <https://doi.org/10.1016/j.paid.2022.111625>
- Curran, T., Hill, A.P., Appleton, P.R. *et al.* (2015). The psychology of passion: A meta-analytical review of a decade of research on intrapersonal outcomes. *Motiv Emot*, *39*, 631–655. <https://doi.org/10.1007/s11031-015-9503-0>



- Dalpé, J., Demers, M., Verner-Filion, J., & J. Vallerand, R. J. (2019) From personality to passion: The role of the Big Five factors. *Personality and Individual Differences, 138*, 280-285. <https://doi.org/10.1016/j.paid.2018.10.021>
- Deci, E. L., & Ryan, R. M. (2017). *Self-Determination Theory. Basic Psychological Needs in Motivation, Development, and Wellness*. The Guilford press.
- Diseth, Å. (2020). *Motivasjonspsykologi. Hvordan behov, tanker og emosjoner fremmer prestasjoner og mestring* (2nd ed.). Gyldendal.
- Duckworth, A. L., Kirby, T. A., Tsukayama, E., Berstein, H., & Anders Ericsson, K. (2011). Deliberate practice spells success: Why grittier competitors triumph at the national spelling bee. *Social Psychological and Personality Science, 2*. <https://doi.org/10.1177/1948550610385872>
- Falanga, R., De Caroli, M. E., & Sagone, E. (2014). Humor styles, self-efficacy and prosocial tendencies in middle adolescents. *Procedia - Social and Behavioral Sciences, 127*, 214 – 218. <https://doi.org/10.1016/j.sbspro.2014.03.243>
- Fritz, H. L. (2020). Why are humor styles associated with well-being, and does social T competence matter? Examining relations to psychological and physical well-being, reappraisal, and social support. *Personality and Individual Differences, 154*, 109641. <https://doi.org/10.1016/j.paid.2019.109641>
- García, L. F., Escorial, S., García, O., Blanch, A., & Aluja, A. (2012). Structural Analysis of the Facets and Domains of the Zuckerman–Kuhlman–Aluja Personality Questionnaire (ZKA–PQ) and the NEO PI–R *Journal of Personality Assessment, 94*(2), 156-163. <https://doi.org/10.1080/00223891.2011.645935>
- Gonyea, R. M. (2005). Self-reported data in institutional research: Review and recommendations. *New Directions for Institutional Research, 127*, 73-89. <https://doi.org/10.1002/ir.156>

- Jachimowicz, J. M., Wihler, A., Bailey, E. R., & Galinsky, A. D. (2018). Why grit requires perseverance and passion to positively predict performance. *PNAS Proceedings of the National Academy of Sciences of the United States of America*, *115*(40), 9980–9985. <https://doi.org/10.1073/pnas.1803561115>
- Kennair, L. E. O. & Hagen, R. (Eds.). (2015). *Personlighetspsykologi*. Fagbokforlaget
- Lafrenière, M.-A.K., Vallerand, R. J., & Sedikid, C. (2013). On the Relation between Self-enhancement and Life Satisfaction: The Moderating Role of Passion. *Self and Identity*, *12*(6), 597-609. <https://doi.org/10.1080/15298868.2012.713558>
- Lalande, D., Vallerand, R.J., Lafrenière, M.-A.K., Verner-Filion, J., Laurent, F.-A., Forest, J., & Paquet, Y. (2017). Obsessive Passion: A Compensatory Response to Unsatisfied Needs. *Journal of Personality*, *85*(2), 163-178. <https://doi.org/10.1111/jopy.12229>
- Langvik, E. & Martinsen, Ø. L. (2015). En trekkteoretisk tilnærming til personlighet. In L. E. O. Kennair & R. Hagen (Eds.), *Personlighetspsykologi* (pp. 101-120). Fagbokforlaget
- Larsen, R., & Buss, D. M. (2017). *Personality Psychology: Domains of Knowledge About Human Nature*. (6th ed.). McGraw-Hill.
- Loehlin, J. C., McCrae, R. R., Costa Jr, P. T., & John, R. R. (1998). Heritabilities of Common and Measure-Specific Components of the Big Five Personality Factors. *Journal of Research in Personality*, *32*, 431–453. <https://doi.org/10.1006/jrpe.1998.2225>
- Martin, R. A., Puhlik-Doris, P., Larsen, G., Gray, J., & Weir., K. (2003). Individual differences in uses of humor and their relation to psychological well-being: Development of the Humor Styles Questionnaire. *Journal of Research in Personality*, *37*(1), 48–75. [https://doi.org/10.1016/S0092-6566\(02\)00534-2](https://doi.org/10.1016/S0092-6566(02)00534-2)
- Mendiburo-Seguel, A., Páez, P., & Martínez-Sánchez, F. (2015). Humor styles and personality: A meta-analysis of the relation between humor styles and the Big Five

- personality traits. *Scandinavian Journal of Psychology*, 56(3), 335-340.  
<https://doi.org/10.1111/sjop.12209>
- Moeller, J., Keiner, M., & Grassinger, R. (2015). Two sides of the same coin: Do the dual 'types' of passion describe distinct subgroups of individuals? *Journal for Person-Oriented Research*, 1(3), 131-150. <https://doi.org/10.17505/jpor.2015.15>
- Moreira, P. A. S., Inman, R. A., & Cloninger, C. R. (2022). Humor and Personality: Temperament and Character Have Different Roles. *Social Psychological and Personality Science*, 13(8), 1246-1258. <https://doi.org/10.1177/19485506211066369>
- Packer, M. J. (2017). *Child development, understanding a cultural perspective*. SAGE.
- Reizer, A., Munk, Y., & Frankfurter, L. K. (2022) Laughing all the way to the lockdown: On humor, optimism, and well-being during COVID-19. *Personality and Individual Differences*, 184, 111164. <https://doi.org/10.1016/j.paid.2021.111164>
- Schermer, J.A., et al. (2021). Predicting Self-Esteem Using Humor Styles: A Cross-Cultural Study. In: E. Vanderheiden & C.-H. Mayer (Eds.), *The Palgrave Handbook of Humour Research*. Palgrave Macmillan, Cham. [https://doi.org/10.1007/978-3-030-78280-1\\_2](https://doi.org/10.1007/978-3-030-78280-1_2)
- Schneider, M., Voracek, M. & Tran, U. S. (2018). "A joke a day keeps the doctor away?" Meta-analytical evidence of differential associations of habitual humor styles with mental health. *Scandinavian Journal of Psychology*, 59, 289-300.
- Sigmundsson, H., Haga, M., & Hermundsdottir, F. (2020). The passion scale: Aspects of reliability and validity of a new 8-item scale assessing passion. *Scandinavian Journal of Psychology*, 56, 100745. <https://doi.org/10.1016/j.newideapsych.2019.06.001>
- Sigmundsson, H. & Haga, M. (2020). Hvem blir ekspert? In H. Sigmundsson (Ed.), *Ekspertise. Utvikling av kunnskap og ferdigheter* (pp. 13-23). Fagforlaget.
- Sigmundsson, H. (Ed.). (2020). *Ekspertise. Utvikling av kunnskap og ferdigheter*. Fagforlaget.

Skaalvik, E. M., & Skaalvik, S. (2005). *Skolen som læringsarena. Selvoppfatning, motivasjon og læring* (2nd ed.). Universitetsforlaget.

Spurkeland, J. (2020). *Relasjonskompetanse. Resultater gjennom samhandling*. (3rd ed.).

Univeritetsforlaget.

Vallerand, R. J., Blanchard, C., Mageau, G. A., Koestner, R., Ratelle, C., Léonard, M., Gagné,

M., & Marsolais, J. (2003). Les passions de l'âme: On obsessive and harmonious passion. *Journal of Personality and Social Psychology*, 85(4), 756–767.

<https://doi.org/10.1037/0022-3514.85.4.756>

Waalder, R., Halvari, H., Skjesol, K., & Ulstad, S. O. (2022). Students' personal desire for excitement and teachers' autonomy support in outdoor activity: Links to passion, intrinsic motivation, and effort. *Journal for Research in Arts and Sports Education*, 6(2), 61-80. <https://doi.org/10.23865/jased.v6.2958>



 **NTNU**

Norwegian University of  
Science and Technology