BSc Psychology
Department of Psychology

Growth vs. Fixed Mindset:
The Relationship Between Students’ Mindset, Resilience and Psychological Well-Being

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Foreword

Submitted in partial fulfillment of the requirements of the BSc Psychology degree, Reykjavik University, this thesis is presented in the style of an article for submission to a peer-reviewed journal. This thesis was completed in the Spring of 2021 and may, therefore, have been significantly impacted by the COVID-19 pandemic. The thesis and its findings should be viewed in light of that.
Abstract
The purpose of this study was to examine students’ mindset, along with their psychological well-being and resilience. Prior research has revealed that young individuals, who had a more growth-oriented mindset, showed less prominent mental health issues than their peers as well as higher resilience. This study hypothesized that participants with a more growth-oriented mindset would score higher on the psychological well-being scale, as well as the resilience scale. To test these hypotheses, a questionnaire was submitted to students attending a university in Iceland. Participants were 130 in total - 38 men and 92 women - and 88.5% of them were between the ages of 18 – 34. Findings suggest that a moderate negative correlation was present between the students’ mindset, psychological well-being and resilience. Participants with a growth-oriented mindset scored, on average, higher on the psychological well-being scale, as well as the resilience scale. This confirms previous research regarding mindset, psychological well-being and resilience. In conclusion, both of the hypotheses could be confirmed. However, some limitations were present in this study and further research on mindset is required.

Key words: growth mindset, fixed mindset, psychological well-being, resilience, mindset

Útldráttur

Lykilhugtök: vaxtar hugarfar, festu hugarfar, þráutseigja, andleg vellíðan, andleg heilsa
Growth vs. Fixed Mindset: The Relationship Between Students’ Mindset, Resilience and Psychological Well-Being

Numerous studies demonstrate that people fare better if they believe that their abilities, e.g. academic, artistic and social, can be developed (Claro et al., 2016; Dweck, 2006; Yeager & Dweck, 2012). In 2006, Carol Dweck, an American psychologist, published the book Mindset: The Psychology of Success where she introduced the theory of mindsets and how they might influence success in various situations. The “growth mindset” views abilities, skills, or talents as constantly being agreeable to improvement through effort and learning (Clark & Sousa, 2018; Murphy & Dweck, 2010). According to Dweck (2006), people who have adopted a growth mindset are more likely to embrace a challenge rather than avoid it. They are more likely to persist in the face of a setback and see effort as the path to mastery. Having a growth mindset will also make them more prone to find inspiration and lessons in the success of others, as well as view failure as a learning experience.

A person has a “fixed mindset” if they believe being smart, gifted or possessing a certain skill is an innate quality (Dweck, 2006). They are more likely to perform well on familiar tasks and rarely decide to step out of their comfort zones. This mindset is more likely to negatively affect self-esteem since people see failure as a direct measure of their competence and worth (Dweck, 2006). They often believe that they are unable to improve in certain areas because they are not “gifted” with the ability to learn a certain skill (Clark & Sousa, 2018; Schneider, 2006). Therefore, they do not bother with improving that skill and, instead, focus on their current strengths.

Mindsets are developed at an early age and mainly by messages of success and failure, which often come from parents and teachers (Dweck, 2006; Haimovitz & Dweck, 2016). The vocabulary used in praise and criticism is a vital factor regarding the development of mindset, especially children’s mindset (Dweck, 2007). In a study conducted by Kamins & Dweck (1999), some children received person-focused feedback, while other received
process-focused feedback. The process-focused feedback emphasized the effort and work that was put into the assignment and if the child failed to complete the assignment, it was encouraged to try a new method. The person-focused feedback did not consider effort and only expressed disapproval when the child failed to complete the task, e.g., “I am very disappointed in you”. The results indicated that children who received criticism that evaluated who they are as a person were more likely to experience helplessness when facing future setbacks, compared to children who received criticism on their effort. Research has shown that praising a child’s innate ability (e.g., “you are really smart”) and focusing too much on talent can lead to a fixed mindset. This can have a negative influence on motivation and learning, and the child might concern themselves more about appearing smart rather than learning (Dweck, 2007; Haimovitz & Dweck, 2016, 2017; Rucker & He, 2016).

A mindset does not only influence motivation and learning, but it may also influence where a person allocates attention. According to Ehrlinger et al. (2016), people who have adopted a fixed mindset are more likely to try to validate their intelligence rather than attempt to improve it by learning. Therefore, they often allocate more attention to easier problems in an attempt to avoid negative feedback and maintain positive beliefs regarding their competence. Validating intelligence by solving easier problems might help maintain the fixed mindset, as well as lead to overconfidence among those individuals. Overconfidence can often lead to poor choices which, in some circumstances, can have serious consequences, e.g. when doctors are dealing with people’s lives (Ehrlinger et al., 2016).

Many people understand the importance of a growth mindset, but it is important to be mindful of a false growth mindset and avoid a misunderstanding of the mindset idea. Dweck (2006) identified three main errors that make for a false growth mindset. The first misunderstanding is when people interpret a favourable trait about themselves as a growth mindset. They often view that being open-minded is equivalent to a growth mindset, but according to Dweck (2006), it is important to note that there is a difference between being
open-minded and being committed to growing talent. It is not enough to be open-minded, and praise wonderful qualities if there is never any attempt to develop these qualities. The second misunderstanding is that people believe that effort is the only important factor, particularly praising effort. Praising the process can foster a growth mindset, but it includes more than just effort. The process also includes experimenting with new tactics, requesting feedback from others and, most of all, hard work. Therefore, teachers should not praise a child for their effort when the results indicate that the child is not learning or benefiting from it (Dweck, 2006). The third misunderstanding is that telling children they can do anything is equivalent to a growth mindset. It is important to assist children in developing their skills and to teach them how to find the appropriate resources to pursue their goals (Dweck, 2006). Otherwise, children might rather develop a fixed mindset, and, because of the empty reassurance, they feel worse when failing to reach their goals, which can increase their psychological distress (Dweck, 2006; Kamins & Dweck, 1999).

Psychological distress is generally described as the absence of well-being, where symptoms of depression, anxiety and stress are often prominent (Burnette et al., 2020). Research suggests that mindsets that are more growth-oriented should work as a barrier against the various effects of negative events in our life (Beck, 1987, as cited in Burnette et al., 2020). For example, students who had a mindset that was more fixed-oriented and who received criticism focused on who they are as a person, were more likely to report negative mood (Kamins & Dweck, 1999). Due to the maladaptive perceptions, which often are present in the fixed mindset, individuals may believe that the nature of their condition is permanent and, therefore, they might not seek treatment. Attempting to lose weight is a prime example. Research demonstrates that mindset can influence portion control, and individuals with a growth mindset are more likely to succeed when trying to lose weight (Rucker & He, 2016). A plausible explanation is that people who have a fixed mindset regarding weight are more likely to believe that their weight is predetermined by body type and, therefore, consume
larger portions compared to those with a growth mindset (Rucker & He, 2016). Maintaining a diet can often be more difficult for individuals with a fixed mindset, as they view failure as something static, which can have a negative influence on their mental health (Dweck, 2006; Rucker & He, 2016).

In a meta-analysis conducted by Schleider et al. (2015), results indicated that young individuals, who had adopted a fixed mindset, displayed more prominent mental health issues, like depressive symptoms and aggressive intent. Similar findings were in a meta-analysis conducted by Burnette et al. (2020), where a small negative link was found between growth mindset and psychological distress. Furthermore, a positive relation was found between mindsets that are growth-oriented and treatment value along with active coping.

Active coping is defined as active steps, such as reformulating the meaning of problems or taking steps to solve problems that can aid in decreasing the negative effect of stressors on mental health (Burnette et al., 2020). This is similar to resilience, which is considered essential for success in life and that has been positively linked to growth mindsets (Clark & Sousa, 2018; Guang Zeng et al., 2016; Schroder et al., 2017; Yeager & Dweck, 2012). Also of note is that one of the most successful treatments for psychological distress, cognitive-behavioural therapy, is based on the idea that individuals identify dysfunctional thinking and make adaptive changes in their behaviour and thoughts when encountered with stressors (Burnette et al., 2020; Chawathey & Ford, 2016). This phenomenon is similar to the growth mindset since the individual believes that their condition is manageable and not necessarily permanent.

Yeager & Dweck (2012) define resilience as any attributional, behavioural or emotional reaction to a social or academic challenge that is positive and beneficial for development. Research has shown that when students believe their level of intelligence is an innate and unchangeable quality, it can be a jeopardizing factor regarding resilience in academic settings (Dweck, 2006; Schroder et al., 2017; Yeager & Dweck, 2012). It has also
been indicated that person-focused feedback is more likely to lead to less resilience in facing subsequent setbacks (Haimovitz & Dweck, 2017). Research has indicated that students from lower income families are twice as likely to report a fixed mindset compared to their high-income peers (Claro et al., 2016). Regardless, students who reported having a growth mindset consistently outperformed their peers despite their socioeconomic background. According to former research on growth mindset and resilience (e.g. Guang Zeng et al., 2016; Schroder et al., 2017; Yeager & Dweck, 2012), a plausible explanation is that these individuals have higher levels of resilience and, therefore, have a stronger protective barrier when they encounter difficulties, whether in academics or in life. It has also been suggested that resilience is a protective factor against peer exclusion and victimization, which can lower adolescents’ aggression and stress (Yeager & Dweck, 2012). Research has suggested that through the enhancement of resilience, higher levels of growth mindsets in students generally lead to higher psychological well-being, as well as allowing students to adaptively manage with the competitive and stressful academic environment (Guang Zeng et al., 2016). Therefore, these students are more likely to engage in schoolwork, have more positive beliefs and learning goals, and less ability based and helpless attributions.

In this current study, two hypotheses seek to replicate previous findings. The first hypothesis is that participants who score higher on the Growth Mindset Inventory are more likely to score higher on Ryff’s psychological well-being scale. According to former research, a growth-oriented mindset is more likely to work as a barrier against various negative events in life, which can lead to higher psychological well-being (Beck, 1987, as cited in Burnette et al., 2020; Guang Zeng et al., 2016; Schleider et al., 2015). This may also suggest that being aware of one’s mindset might lead to additional awareness of one’s psychological well-being. The second hypothesis is that participants who score higher on the Growth Mindset Inventory are more likely to score higher on the resilience scale. Former research suggests a positive link between resilience and growth mindset, which can lead to
more positive outcomes in both academic settings and life (Clark & Sousa, 2018; Guang Zeng et al., 2016; Schroder et al., 2017; Yeager & Dweck, 2012). In Iceland there are limited studies on growth and fixed mindset. Most of the attention has been focused on teachers’ methods to encourage a growth mindset among students (Erla Rán Kjartansdóttir, 2020; Hildur Lilja Guðmundsdóttir, 2019). The difference between a fixed and growth mindset among students and how it might influence their approach to mathematics has also been examined (Hekla Haraldsdóttir, 2018). What is lacking in the literature are examinations regarding mindset, psychological well-being and resilience in Iceland. Therefore, this study contributes to the limited research on growth and fixed mindset in Iceland, especially regarding psychological well-being and resilience.

**Method**

**Participants**

Participants were university students and, in total, there were 130 partakers (N = 130). The minimum age requirement was 18 years. The majority of the participants were between the ages 18-34 or 88.5% (N = 115). Participants were 29% male and 71% female, and were all volunteers, recruited through a convenience sample. There was no compensation in any form for participating.

**Measures**

**Psychological well-being scale (PWB).** To measure the participants psychological well-being, a shorter version of Ryff’s psychological well-being scale (Ryff & Keyes, 1995) was administered. The 18-item scale measured six factors: autonomy, environmental mastery, personal growth, positive growth, purpose in life and self-acceptance. Participants were presented 18 statements (e.g., I like most parts of my personality), and they answered how much they agreed or disagreed on a 7-point Likert scale. Ten statements were reversed scored, with a higher score indicating higher psychological well-being. The concluding score
was the mean response to the items. According to Li (2014) and Ryff & Keyes (1995), the scale has both validity and reliability, whereas Burns & Machin (2009) consider the scale a suitable tool for evaluating distinct features of psychological well-being at a general level. However, research has also indicated that the construct validity of the scale may be unreliable and may depend on the length of the scale (Springer & Hauser, 2006; van Dierendonck, 2004).

**Growth and fixed mindset inventory.** The growth and fixed mindset inventory was used to measure participants mindset. The inventory was retrieved from the design learning network and consisted of 5 statements (Greenleaf, 2014). Answers were on a 7-point Likert scale, where participants were asked how strongly they agreed or disagreed with the statement presented (e.g., I work best when the task: (1) I enjoy doing work that makes me think hard – (7) I’d rather do work that is easy to do). A higher score indicated a fixed-oriented mindset, while a lower score indicated a growth-oriented mindset. Research on validity and reliability of the inventory was unclear.

**The 14-item resilience scale (RS14).** To measure resilience, participants completed the 14-item resilience scale, developed by Dr. Gail Wagnild (The Resilience Center, n.d.). The scale consisted of 14 statements, where participants answered on a 7-point Likert scale how much they agreed or disagreed with the statement (e.g., I am determined). A higher score indicated higher resilience. The concluding score was the mean response to the items. Research indicated that the RS14 was high in both validity and reliability (Aiena et al., 2015; The Resilience Center, n.d.)

**Background questions.** Following the questionnaire, participants were asked to answer four background questions regarding age, gender, school year and which department at their university they belonged to. Four options were offered for age and gender each; (1) 18-24, (2) 25-34, (3) 35-44, (4) 45+ and (1) male, (2) female, (3) prefer not to answer and (4)
other, where participants were offered to write down their gender identity. Regarding school year, there were five options offered: (1) 1st year, (2) 2nd year, (3) 3rd year, (4) 4th year+ and (5) prefer not to answer. Nine options were offered regarding which department participants belonged to at the university. Eight of those options were departments within the school, whereas the last option was for participants who preferred not to answer the question.

**Procedure**

The questionnaire was sent through an email to all students at Reykjavík University, as well as posted to a private Facebook group, where members were students from the department of psychology. Participation was voluntary and involved answering a questionary where they were asked how much they agreed or disagreed with the statements presented. The statements were related to mindset, psychological well-being and resilience, and participants were informed that they were free to skip individual questions, as well as drop out at any time. Participants were also informed that answering the questionary was equivalent to written consent for participation. Total anonymity and confidentiality were maintained regarding participation in this study, and participants were asked not to provide personally identifiable information.

**Data analysis**

The statistical software used to analyse the data was the IBM SPSS statistics, version 27. The statements on the questionary were presented on an ordinal scale and, therefore, Spearman’s correlation was used to examine any correlation between the variables. A cut-off score was determined for the growth and fixed mindset. Those scoring lower than 18 were ranked with a growth-oriented mindset, whereas those who scored 18 or higher were ranked with a fixed-oriented mindset. An independent t-test was conducted to examine the correlation between the two groups. A multiple regression was conducted, as well, to examine if the mindset variable, along with other possible variables (e.g., age, gender or
school year), had an effect on either of the dependent variables. Three participants did not complete the RS14 and were, therefore, not included in the calculations regarding resilience.

Results

This study had one independent variable: the growth mindset. According to the growth mindset inventory, those who scored lower than 18 have a more growth-oriented mindset (Greenleaf, 2014). The cut-off score determined that 46.9% (N = 61) of participants had a more growth-oriented mindset, while 53.1% (N = 69) had a fixed-oriented mindset. The scores for each gender on the dependent variables, which were measured with Ryff’s psychological well-being scale and the RS14, can be seen in Table 1.

Table 1

<table>
<thead>
<tr>
<th>Gender</th>
<th>Measure</th>
<th>Mean Score</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>PWB scale</td>
<td>5.21</td>
<td>0.57</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>RS14</td>
<td>5.48</td>
<td>0.83</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Female</td>
<td>PWB scale</td>
<td>5.35</td>
<td>0.64</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>RS14</td>
<td>5.78</td>
<td>0.63</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

Bivariate correlation. Spearman’s correlation coefficient was conducted to examine the relationship between participants mindset and the dependent variables. A moderate negative correlation was found between participants’ mindset and psychological well-being ($r_s = -0.37; p < 0.001$). Regarding resilience, a moderate negative correlation between the participants’ mindset and resilience was found as well ($r_s = -0.38; p < 0.001$).

Multiple regression. A multiple regression was conducted to examine if the independent variable, along with other variables (age, gender, school year and department), had an effect on either of the dependent variables. A significant effect was found by three out
of five variables regarding psychological well-being $F(5, 124) = 6.60, p < 0.001$ with an $R^2$ of 0.21. Regarding resilience, three out of five variables were found significant $F(5, 121) = 5.98, p < 0.001$ with an $R^2$ of 0.19. The independent variable that had the strongest effect on psychological well-being was the mindset variable (Beta = -0.36), and results suggested that having a fixed mindset decreased psychological well-being (Table 2).

### Table 2

*Results from the multiple regression analysis on psychological well-being*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>$\beta$</th>
<th>$p$</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mindset</td>
<td>-0.44</td>
<td>-0.36</td>
<td>&lt; 0.001</td>
<td>0.99</td>
</tr>
<tr>
<td>Age</td>
<td>-0.03</td>
<td>-0.03</td>
<td>0.69</td>
<td>0.88</td>
</tr>
<tr>
<td>Gender</td>
<td>0.23</td>
<td>0.17</td>
<td>0.04</td>
<td>0.95</td>
</tr>
<tr>
<td>School year</td>
<td>0.15</td>
<td>0.30</td>
<td>&lt; 0.001</td>
<td>0.90</td>
</tr>
<tr>
<td>Department</td>
<td>-0.01</td>
<td>-0.04</td>
<td>0.64</td>
<td>0.95</td>
</tr>
</tbody>
</table>

The independent variable that had the strongest effect on resilience was the mindset variable (Beta = -0.36). Similar to psychological well-being, the results indicated that, according to the unstandardized coefficient (B), resilience decreases by -0.50 if the mindset variable increases by one (Table 3). This means that having a fixed mindset decreases resilience.

### Table 3

*Results from the multiple regression analysis on resilience*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>$\beta$</th>
<th>$p$</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mindset</td>
<td>-0.50</td>
<td>-0.36</td>
<td>&lt; 0.001</td>
<td>0.99</td>
</tr>
<tr>
<td>Age</td>
<td>0.03</td>
<td>0.03</td>
<td>0.75</td>
<td>0.89</td>
</tr>
<tr>
<td>Gender</td>
<td>0.39</td>
<td>0.25</td>
<td>0.003</td>
<td>0.96</td>
</tr>
</tbody>
</table>
**Independent t-test.** An independent t-test was conducted to compare participants who were scored with a growth-oriented mindset to those who were scored with a fixed-oriented mindset. Results indicated that a significant difference was between these two groups regarding psychological well-being, $t(128) = -4.02 ; p < 0.00$, and resilience, $t(125) = -4.05 ; p < 0.001$. Participants with a growth-oriented mindset scored, on average, higher on Ryff’s psychological well-being scale, as well as the RS14 (see figure 1).

**Figure 1**

*Mean score between participants with fixed mindset and growth mindset on the PWB scale and the RS14*

![Mean score between participants with fixed mindset and growth mindset on the PWB scale and the RS14](image)

**Discussion**

The aim of this research study was to examine the relationship between students’ mindset, psychological well-being and resilience. Two hypotheses were presented with the intention to confirm previous research. The former hypothesis was that participants with a more growth-oriented mindset were more likely to have higher psychological well-being.
According to the Growth Mindset Inventory (Greenleaf, 2014), those who scored lower than 18 on the inventory were considered having a growth mindset, whereas participants who scored 18 or higher were considered having a fixed mindset. Results indicated a significant difference between the two groups, where participants with a growth mindset scored, on average, higher on Ryff’s psychological well-being scale. This confirms the current hypothesis. A moderate negative correlation was found as well between the students’ mindset and psychological well-being, which indicates that scoring higher on the Growth Mindset Inventory decreases psychological well-being. This confirms previous research suggesting that a growth mindset may work as a protective barrier against negative events in life, as well as decrease psychological distress. Hence, individuals, who were considered as having a growth mindset, often reported higher psychological well-being, compared to those with a fixed mindset (Beck, 1987; Burnette et al., 2020; Guang Zeng et al., 2016; Kamins & Dweck, 1999; Schleider et al., 2015). A multiple regression indicated that a fixed mindset decreases psychological well-being, which also confirms previous research. Findings further suggested a significant difference between mindsets among female participants and psychological wellbeing, where those with a growth mindset scored, on average, higher on Ryff’s psychological well-being scale. However, a non-significant difference was found among male participants. This suggests that a gender difference might be present regarding mindset and psychological well-being, and further research is needed to confirm. Surprisingly, age did not seem to have a significant effect on participants’ mindset regarding psychological well-being. In conclusion, the results suggest that a significant difference is between individuals with a fixed mindset compared to those with a growth mindset, and that having a growth mindset may increase students’ psychological well-being.

The latter hypothesis was in regard to resilience: participants with a more growth-oriented mindset were more likely to have higher resilience. Results were similar to the hypothesis regarding psychological well-being, where a significant difference was found
between participants with a fixed-oriented mindset and those with a growth-oriented mindset. Participants with a growth mindset scored on average higher on the RS14, compared to those with a fixed mindset. A moderate negative correlation was found, as well, between the mindset variable and participants’ resilience which indicates that scoring higher on the Growth Mindset Inventory may decrease resilience. Previous research has suggested that a growth mindset is positively linked to resilience and similar to psychological well-being, it might work as a protective barrier when encountering difficulties in life (Clark & Sousa, 2018; Guang Zeng et al., 2016; Haimovitz & Dweck, 2017; Schroder et al., 2017; Yeager & Dweck, 2012). The current results indicate that a more growth-oriented mindset would, indeed, increase resilience, which confirms previous research, as well as the current hypothesis. Similar to psychological well-being, a significant difference was found among females regarding resilience, where those who had a growth mindset scored on average higher on the RS14. This difference was not found among male participants, which suggests that a gender difference is present.

Our mindset appears to be a spectrum and, according to Dweck (2006), it is not realistic to constantly have a growth mindset. Such a belief can often lead to a false growth mindset, which is often followed by a misunderstanding of the mindset idea (Dweck, 2006). As mentioned earlier, it is not enough to praise open-mindedness and good qualities if there is never any effort put into developing these qualities. Growth mindset emphasizes experimenting with new tactics and requesting feedback, and views challenges as a mechanism for improvement. Research suggests that having a more growth-oriented mindset has a positive influence on our psychological well-being and resilience and, therefore, it might be more preferable than having a fixed mindset (Burnette et al., 2020; Kamins & Dweck, 1999; Schleider et al., 2015). However, it is critical to emphasize that everyone has both fixed and growth mindset, and it is important to accept that if we are to reach a true growth mindset (Dweck, 2006). Our mindset can often vary between circumstances, e.g., we
might have a more growth-oriented mindset in school, but a fixed-oriented at home (Dweck, 2006). Our fixed mindset appears to be similar to our comfort zone, where we are familiar with our abilities and tasks and, therefore, we often allocate our attention to easier problems (Dweck, 2006; Ehrlinger et al., 2016). Having a more fixed-oriented mindset does not mean that one cannot be successful, but facing subsequent failure can be more difficult (Dweck, 2006, 2007; Kamins & Dweck, 1999). As mentioned earlier, cognitive behavioural therapy is based on the idea that patients identify dysfunctional thinking and make adaptive changes in their behaviour and thoughts when confronted with stressors. This is similar to the growth mindset where individuals believe that, through effort, their condition is treatable which can have a positive influence on their psychological well-being (Burnette et al., 2020; Chawathey & Ford, 2016). Therefore, further research might include examining the mindset of CBT patients, before and after treatment, regarding their condition.

The main strengths of this study were that both hypotheses could be confirmed, and the results were similar to previous research regarding mindset, psychological well-being and resilience. This study also contributes to the limited research on growth and fixed mindset in Iceland, especially in regard to psychological well-being and resilience. However, limitations were present in this study and mainly regarding the scales used to measure the participants mindset and psychological well-being. With regard to the Growth Mindset Inventory, both validity and the reliability was unclear. The list consisted only of five questions with the aim to measure the participants mindset. However, a persons’ mindset is a complicated concept and can vary between time and circumstances (Dweck, 2006). Therefore, further research might consist of developing a new and longer mindset inventory with increased validity and reliability. A long-term study would also be beneficial to examine the consistency of the participants mindset. Possible research might also include a qualitative section, where participants are interviewed after getting results from an exam and their reaction to the result is documented.
In regard to Ryff’s psychological well-being scale, despite being widely used, research does not agree in terms of validity and reliability of the scale. Some research suggests that using a longer version of the scale, with 42 or 84 items, might increase the scales validity and reliability (Burns & Machin, 2009; Springer & Hauser, 2006; van Dierendonck, 2004). However, using a longer scale may increase the drop-out rate because answering the scale will become more time consuming. Further research might include using a longer version of Ryff’s psychological well-being scale in regard to measuring participants’ psychological well-being. Additional research might also include using a scale which measures depressive symptoms or psychological distress instead of psychological well-being. It is also important to note that the data came from a self-report questionary and due to the COVID-19 pandemic, conditions of where the participants answered the questionary were not known.

In conclusion both hypotheses were confirmed in the current study. However, further research is needed regarding the relationship between mindset, psychological well-being and resilience. Mindset seems to develop at an early age (Dweck, 2006, 2007; Haimovitz & Dweck, 2017) and, therefore, further research might also include a long-term study measuring children’s mindset and see how it develops over time. Researching this topic might help in understanding the importance of mindset and how it might influence a person’s life. Being aware of their mindset, as well as practicing growth mindset, might help individuals face difficult setback in life and prevent failure to negatively affect their self-esteem.
References


