

## DO UNDERGRADUATE PHYSICS STUDENTS STUDYING ABROAD NEED OPTIMISM? A CROSS-COUNTRY CASE STUDY

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### Abstract

This pioneering study endeavors to paint a vivid portrait of optimism among physics undergraduate students pursuing studies abroad, illuminating the multifaceted dimensions of their academic and personal journey. Employing a qualitative case study approach, the research delves deep into the lived experiences of five purposively sampled participants, unraveling the intricate interplay between optimism, self-confidence, and social support networks. Through semi-structured interviews, the study unveils a compelling narrative of resilience and determination, as physics students abroad exhibit unwavering optimism in navigating the challenges inherent in their academic pursuits. Notably, participants demonstrate a profound sense of self-assurance, fostering a supportive environment characterized by mutual respect and camaraderie among peers. Moreover, the study sheds light on the pivotal role of external support systems, ranging from familial encouragement to mentorship from teachers, in bolstering students' resolve and fortitude. By focusing on physics undergraduate students hailing from Indonesia and studying across diverse international landscapes, this research offers a novel lens through which to understand the transformative power of optimism in transcending geographical and cultural boundaries. As such, the findings underscore the critical importance of fostering an optimistic mindset among students embarking on international academic endeavors, advocating for tailored support mechanisms that nurture self-efficacy, self-esteem, and social connectedness. Ultimately, this study serves as a clarion call for educational institutions and support service providers to prioritize holistic strategies aimed at cultivating and sustaining optimism among physics undergraduates pursuing studies abroad, thereby empowering them to thrive in the face of adversity and realize their full academic potential.

**Keywords:** Optimism, Study Abroad, Physics Undergraduate Students



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## INTRODUCTION

Migrating to continue their education at a higher level is something that is commonly done by prospective students in Indonesia. Things that encourage someone to migrate to pursue education because they want to increase knowledge, seek new experiences, develop skills, broaden their horizons, and because of limited access to education in their area of origin (Weber & Van Mol, 2023). When a student migrates and lives away from his family and hometown, especially abroad, he faces many differences, such as differences in culture, language, and customs. All of this forces individuals to adapt to new environments, and adjustment becomes a necessity (Busse & Scharenberg, 2022). The process of adapting to a new environment can cause pressure and stress for migrant students. Gradually, this pressure can result in feelings of loneliness as they have to stay away from their parents, siblings, and friends. In addition, there are also concerns that differences in economic strata could cause students to feel isolated from their new friends (Budiharjo, 2017; Minza & Herlusia, 2022; Azis et al., 2024).

From interviews conducted by researchers, adjustment is the biggest difficulty for students when studying abroad. Of the three sources, two of them, namely AH and MP, had difficulty adapting and socializing to their new environment the desire to quit and return to Indonesia, while RD himself feels pushed away by friends around him, finds it difficult to make friends because of the language barrier and is not enthusiastic about studying (Interview Results, September 9, 2023). The case experienced by the resource person was also experienced by several other Indonesian students who even had to go home and not continue their studies. In 2022 there will be 145 Indonesian students who will finally return to Indonesia after not completing their studies, some have passed the specified study period because it is difficult to adapt and socialize. From the data obtained, the same problems as the resource person were the main reason why students failed to complete their studies. If a person cannot cope with changes and demands and has difficulty adapting, then this can result in a situation where the individual will feel pressure and anxiety which has the potential to cause stress (Atmoko et al., 2024).

The stress felt by students who live far from their hometown is often caused by difficulties in adapting to a new environment, changes in learning methods, differences in culture and customs, and distance from their family and environment of origin (Wang & Yang, 2023). In dealing with the factors that cause stress, individuals use various strategies known as coping. The coping methods used are influenced by several factors such as the type of problem faced, gender, level of education, religious level or religiosity, personality, self-assessment, and social support. Factors that influence individuals to cope are creating a positive outlook such as seeking solutions to problems to get the best results without fear of failure, and this positive outlook contains the same meaning as optimism (Weny et al., 2022).

Optimism is a positive attitude in seeing things, thinking positively, and giving meaning to one's life in a simple way. Optimistic individuals often create positive expectations for what will happen and anticipate positive outcomes (Oriol et al., 2020). Optimism is one factor that has been described as a general expectation of positive outcomes when evaluating the future (Buckingham & Richardson, 2021). In an optimistic way of thinking, individuals can always see the positive side of everything that happens to them (Sun & Firestone, 2020; Urzúa et al., 2023). Optimism means understanding from a good and interesting perspective, believing in everything, and always having good expectations for everything. Optimistic people are more likely to believe that they achieve good results in life and are interested in actively managing their health (McBeth et al., 2023).

Optimism is an individual's belief in the possibility of achieving positive results in the future. Optimism is a form of positive thinking about the future and a positive, meaningful, and comprehensive view of everything in life (Chen et al., 2021). Regarding the meaning of optimism, Segerstrom et al., (2017) defines positive thinking as a mindset that involves an optimistic attitude and a realistic view of a situation or problem. This includes trying to find the best solution even in the worst circumstances. People who adhere to a positive mindset believe that every challenge has a way out, and they don't give up easily when facing obstacles (Scheier & Carver, 2018; Shepperd et al., 2015; Uribe et al., 2022).

This thinking is also related to the psychological theory of motivation known as the expectancy-value theory. In this theory, two main components influence a person's motivation. First, goals, refer to things that individuals consider ideal or undesirable. Individuals will attempt to adapt their behavior to achieve desired goals and avoid undesirable things. The second is hope, which includes individuals' beliefs and doubts about their ability to achieve these goals. So optimistic people will tend to have positive expectations about future achievements and work hard to achieve them, where individuals can solve the problems they face with positive thinking (Setriawati, 2021).

Cebolla-Boado & Soysal (2018) confirm that teenagers who want to move away on their own when they grow up are already more optimistic even before their intention to move is realized. This research explains that optimism in teenagers who migrate is very necessary to be able to survive in their new environment. In line with the research results of Nuhoğlu Soysal & Cebolla-Boado (2020) Research conducted by Chinese and European students who went overseas found that European students who went overseas were less optimistic than Chinese students, this was because European students had difficulty socializing and adapting to a new environment and very different European culture. Furthermore, research conducted by Busse & Scharenberg (2022) Research on German students who have migrated to see optimism when studying, where the factors that cause German students to not be enthusiastic when studying abroad are culture, religion, race, and even social inequality felt by German students when studying in other countries, but in this research it is also explained that German students can get through it all, even though some students couldn't afford it and returned to their country. Optimism is not only needed among overseas students but is also needed among migrant workers so research results show that workers with an optimistic attitude can overcome problems, one of which is the economy which is in the low category and is more resilient or our resilience in facing problems in the surrounding environment (Sabouripour & Roslan, 2015; Tjaden & Hunkler, 2017).

Study Wong et al., (2012) researching the quality of life that discusses optimism in Hong Kong and Chinese students, the results show that Hong Kong and Chinese students have a highly optimistic attitude when going to study abroad. So the role of optimism is needed to become an advanced weapon when overcoming problems when migrating (Möser, 2022; Zhou, 2022). Study Gil-Hernández & Gracia (2018) research conducted by comparing the optimism of African students with Latin American students who had migrated to study in other countries, in this research it was explained that minority students were more optimistic than Spanish students, but had many language problems, which made minority students less enthusiastic about studying. The latest research conducted by Dollmann et al., (2023) Regarding optimism among overseas students from Sweden, in this research, research results showed that students who migrated were more optimistic in pursuing education and even successful in work, this is because migrant students were able to overcome all the obstacles they faced and thought they could solve existing problems.

Various studies have been carried out and also the phenomenon of optimism in migrant students has been carried out by previous researchers. However, the author has not found research on optimism among migrant Indonesian students studying abroad, considering the country of Indonesia In 2021, as many as 29,872 individuals in Indonesia have successfully received international scholarships through LPDP. On the other hand, 3,175 vocational students have registered for the IISMA program (Dinata, 2022). So, it is important for Indonesian students studying abroad to have an optimistic attitude in solving problems that occur when they migrate. Therefore, the author was encouraged to research optimism in physics students studying abroad.

## **METHODOLOGY**

The research method used in this research is a mix method research which consists of quantitative and qualitative research. This type of research combines qualitative research and quantitative research which is often called mixed method (Johnson et al., 2007; Yusuf, 2016). By applying a mixed methodology, one can explore both quantitative and qualitative dimensions, which involve in-depth investigation and constructive synthesis of data and analysis (Cortini et al., 2019). In terms of methodology, this mixed method develops a simple research design into a complex research framework with three paradigms including dialect attitude, critical realism, and pragmatism (Schoonenboom, 2019; Kansteiner & König, 2020). Quantitative methods are often called traditional, positivistic, scientific and discovery methods. Furthermore, qualitative methods are often referred to as new, postpositivistic, artistic and interpretive research methods (Supriyati, 2015; Kasmawati, 2021).

This study uses a qualitative approach with a case study design to explore a case in depth and then explore it in more detail through information sources that are rich in context (Creswell, 2017). As explained by Garcia-Montoya & Mahoney (2023), case studies are used to provide a comprehensive explanation regarding aspects of the lives of individuals, groups, or organizations that are the focus of research. The choice of this design was not done haphazardly, but because the theme and participants of this research were considered unique. The results of this research may also be difficult to generalize because they only apply to student participants with certain criteria.

The research was conducted offline and online considering the location of participants who were abroad. researchers conducted offline interviews because participants were in Indonesia, while online through *Zoom Meeting* was carried out because participants were abroad in this case in Germany, Turkey, and America. This is in line with the intention of Moleong (2018) In choosing a research location, researchers can consider the essence and formulation of the problem to ensure the similarity of facts found in the field and to facilitate the research process. Participants in this research were taken using a purposive sampling technique as many as 5 people, according to Thompson et al., (2023) This process involves selecting samples that meet predetermined criteria by the research objectives. In this research, researchers have set certain criteria for research subjects, namely: 18-25 years old, students who have migrated abroad to study with physics major students, and students who come from Indonesia and are willing to explain the research objectives.

Firstly the research will select countries that represent a range of cultural and educational contexts to engage students. Then, through selecting a sample that represents a diversity of backgrounds and experiences, data will be collected through in-depth interviews. Data analysis will involve identifying patterns and themes that emerge from participants' narratives, focusing on their perceptions of optimism and the study abroad experience. The results of the analysis will be interpreted in the context of a conceptual framework that includes aspects such as permanence, pervasiveness, and personalization. Conclusions will be drawn from the findings to draw implications for our understanding of the need for optimism for physics students studying abroad.

Data collection techniques through semi-structured interviews with participants. Interview grid in this study refer to Seligman (2006) optimism theory. Then the data validity test was carried out by conducting member checks with participants, for the interview grid can be seen in Table 1.

Table 1. Interview Grid

Aspect of Optimism	Indicator	Question
Permanence	Believe that the good is permanent	Do you believe that your learning success is the starting point of your future success?
	Believe that the bad is temporary	Do you believe bad luck can still be changed with effort and prayer?
Pervasiveness	Giving universal explanations when getting good news	Did you pass the exam because you spent a lot of time and energy trying?
	Giving specific explanations when getting bad news	Are you sure you can get into a reputable university, even if you don't excel?
Personalization	Believing bad events happen because of external factors	Do you feel like you can't be smart because your parents aren't highly educated?
	Believing that good things are due to internal factors	Do you believe in yourself to be able to solve problems well?

In analyzing the qualitative data in this study, the researcher will adopt a thematic approach to identify patterns and key themes that emerge from the participants' narratives related to optimism and the study abroad experience.

1. Data Transcription: Interviews with physics students who are studying abroad will be recorded and then transcribed in detail to enable further analysis.
2. Data Coding: The researcher will carefully read through the transcriptions and code sections of text relating to optimism, learning experiences, challenges faced, and thoughts about the future. Each relevant piece of text will be coded according to its context.
3. Category Development: Based on the codes, the researcher will identify categories or themes that naturally emerge from the data. For example, themes such as perceptions of future success, confidence in current abilities, and personal responsibility in the face of mistakes may emerge.
4. Thematic Analysis: The main themes that emerge from the categories will be identified and further analyzed. The researcher will look for patterns that emerge from the participants' narratives, such as

how their optimism affects the way they cope with challenges or navigate the study abroad experience.

Verification and Interpretation: Findings from the thematic analysis will be verified to ensure consistency and validity. Then, the researcher will interpret these findings in the context of the research questions and the established conceptual framework, seeking deeper meanings.

## RESULTS AND DISCUSSIONS

Data description describes the participant's information such as gender, age, country of study, major, and university, further can be seen in Table 2.

Table 2. Description of Participant Data

Initials	Gender	Age	Country of Study	Major	University
AH	Male	23 years	Syria	Physics	Damascus University
MP	Female	20 years	Ohio	Physics	Ohio State University
RD	Male	24 years	Morocco	Physics	Abdul Malik Al-Saadi University
HH	Male	23 years	German	Physics	Free University of Berlin
PK	Female	24 years	Türkiye	Physics	Istanbul University

From the table above, participant AH is 23 years old, migrated to Syria, and is studying at Damascus University majoring in Physics. For the MP participant, he was 20 years old, migrated to Ohio, and studied at Ohio State University majoring in Physics. The 24-year-old RD participant migrated to Morocco and studied at Abdul Malik Al-Saadi University majoring in Physics. Participant HH was 23 years old, migrated to Germany, and studied at the Free University of Berlin majoring in Physics. Next, the PK participant was 24 years old, migrated to Turkey, and studied at Istanbul University majoring in Physics.

### Problems When Migratory

After interviewing the first participant with the initials AH, it was found that the problems that occurred when migrating was that it was difficult to find friends because of the new environment and difficult to communicate with the environment due to language limitations.

*“...like the new environment was a bit difficult at the beginning to make friends but it was not a big problem, and the language was also very difficult at the beginning...”* (Participant AH, 2023).

Furthermore, the second participant with the initials MP found problems that occurred when he migrated, namely racism in the surrounding environment because Asian Americans hated it. After all, they arrived during the COVID-19 pandemic. It's hard to make friends because you're an individual, and you feel isolated when you first start college.

*“...we are Indonesians and Asians and when we entered, it was right after the pandemic, so America had a lot of Asian hate, so the racism was high at that time, and it was difficult to make friends because they were individual...”* (Participant MP, 2023).

Furthermore, a third participant with the initials RD found problems that occurred when he migrated. RD participants found it difficult to adapt to a new environment and the Arabic language which was different from the one they studied in the past made communication difficult and making friends was difficult because the concept of making friends only wanted to make friends according to their ethnicity or country.

*“...it's hard, it's hard to adapt because of the new environment, and the language too, the Arabic language is different from what we learned... most of them are friends with their own country so it's a bit difficult...”* (Participant RD, 2023).

Furthermore fourth participant with the initials HH found problems that occurred when migrating, namely that participant HH felt that when migrating, it was difficult to make friends in a new



environment because of the individual characteristics of people so rarely anyone wanted to help unless they knew each other.

*“..if it's not good here, not everyone is welcoming to outsiders, it's like they don't like it and then here it's individual, only a few people want to help...”* (Participant HH, 2023).

Furthermore, the fifth participant with the initials PK found that the problem that occurred when migrating was that Subje PK felt that the language was difficult so it was also difficult to make friends and communicate because in Turkey people rarely use English, they prefer to use their own country's language.

*“...there are difficulties, like at the beginning, it was difficult for friends because they were not fluent in Turkish, especially since English is rarely used here...”* (PK Participant, 2023).

### *Description of the Attitude of Optimism in Migrant Students*

From interviews conducted by the first participant with the initials AH, a picture of optimism in students who migrate abroad to study was obtained by exploring information through three aspects of optimism based on explanation (Seligman, 2006). In the aspect of permanence, participant AH believes that the success he achieved when he migrated is a provision for him to become a useful person, patient when there is a problem and looking for a solution to solve it because the problem will pass, and believes that the bad things that happen can be changed if a way is found. out. In the aspect of pervasiveness, participant AH believes that the abilities he has can make him successful in the future, even though it is difficult to get a scholarship abroad, he is confident that with the abilities he has, he will be able to complete it, when he fails he keeps trying again until he finally gets it, and does not believe in the people who enter. Overseas education only relies on achievement, but it is your abilities that are important, such as language. In aspect personalization, participant AH believes that being smart doesn't only come from educated parents, but from yourself, the most important thing is when you are lazy it's because you're tired of studying, confident that you can solve the problem of going abroad by trying and finally get through it, and believe that success is not only because of yourself but also because of his parents, lecturers, and also friends around him.

*“...I believe ...by making plans for the future because I am sure that after returning from Syria, I can be useful for Indonesia, such as teaching later...I'm sure, I'm sure I can be useful to Indonesia when I return to Indonesia, especially as a teacher...For me, not everyone, maybe there are but not everyone, because my parents only graduated from high school but I was able to study abroad....For me, not really, I also believe in the prayers of my parents, teachers, and friends..”* (Participant AH, 2023).

Next is the interview with the second participant with the initials MP. In the aspect of permanence, MP participants believe that success when migrating is capital for success in the future, always looking for ways to solve it, even if they are down, they can get through it when they fail, think about what is wrong with themselves and then look for a way out so they don't drag on the problem, and for him, bad luck can be changed, unless the fate that has bound him can't be changed. In the pervasiveness aspect, MP participants believe that their current abilities can have an impact in the future, taking many ways to be able to study abroad, one of which is by doing tutoring, making 3 attempts to get into a foreign university, and it is also impossible to get into a university. abroad only relies on external achievements, so you must also have your abilities, such as language, to answer test questions. In the aspect of personalization, MP participants don't believe that people are smart because their parents are highly educated, but if they are highly educated, they believe that when they are lazy it is because they are the most important, although there are friends as well, when there is a problem they prefer to rest and think about how to solve it, and the success they achieve is definitely because yourself with the support of your parents.

*“...until now I believe yes, because if we are not sure what we will become, so I believe ...to be able to succeed in the future this is only a small step, so because I have not finished and there is still a lot of learning out there that I have not done, so a small step to success is yes but if the ability I have*

*now to achieve success is still far away...I think it's not smart, but insightful because if you are smart, you don't have to have highly educated parents...*” (Participant MP, 2023).

Next is the interview with the third participant with the initials RD. In the aspect of permanence, RD participants believe that the success achieved is the starting point for success because it will continue when there is a problem, they force themselves to solve it so that it is resolved quickly when they fail they always correct themselves and ask their lecturers, friends, they are sure that it is bad luck. can be lost by looking for a way out. In the aspect of pervasiveness, RD participants believe that the abilities they currently have can lead to success in the future, even though they are still small, trying to get into a foreign university even without a scholarship, by studying diligently they can finally pass, believing that achievement is not important for getting into a foreign university. The most important thing in the country is one's abilities, and always trying, even though one time he failed to enter college, he never stopped trying. In the aspect of personalization RD participants don't believe that people are smart because their parents are highly educated, they are lazy because they are just tired and not in the mood to study, they are confident when they have problems overseas and enjoy it, the success they achieve is not entirely because of themselves but comes from other people

*“..because I believe that success will continue when you want to learn and learn...now it is still lacking, because I still have little knowledge, and I just went to college too, but in the next few years insha allah my knowledge can be a helper for me... because being smart, you have to learn anyway, although there is an influence but not everything is like that...”* (Participant RD, 2023).

Next interview with the fourth participant with the initials HH. In the aspect of permanence, participant HH believes that success in learning while abroad is the starting point for success in the future, when there is a problem, follow the flow and look for a way out to overcome it, even though they are often stressed, when they fail in learning, they continue to look for ways to solve it and force themselves and are sure of bad luck. It can be changed because after bad things come good. In the aspect of pervasiveness, participant HH believes that the skills he has now can make him successful in the future, such as the language skills he can be used in the future in teaching, to be able to get into college, he studied hard, especially in the language section, if he wants to get into college. Achievement is not important, the most important thing is our abilities, and even though we immediately graduate from the university we are aiming for, when we fail we will keep trying. In the aspect of personalization, HH participants do not agree that people are smart because their parents are highly educated, when they are lazy it is because they are the ones who are too lazy to study, they are confident in solving problems that occur when they migrate, and their success is not entirely due to themselves but also to their parents, friends and teachers.

*“...in my opinion, yes, man, because for me good things will continue, so if for example ...I think so, because for me the good things will continue, so if for example, I succeed here I am sure I will succeed in the future, what's more, I graduated from abroad, it's prestigious in Indonesia... I speak German well, and I can use it for work, like a private German teacher, so I think so... I disagree, because I come from a family whose parents graduated from junior high school, so not all of them are like that.”* (Participant HH, 2023).

Next was an interview with the fifth participant with the initials PK. In the aspect of permanence, PK participants believe that success in migrating is success in the future because it is a small step to achieving success. In facing problems, they prefer to stay first and then look for a way out to solve them. When they fail, they cry first and then ask for input from friends and lecturers. , and believes that the fate of workers can be changed if you want to change yourself. In the aspect of pervasiveness, PK participants are not sure that their current abilities can have an impact in the future, although there is at most only a small impact, graduating from a foreign university with a scholarship by studying and getting tutoring to graduate, they are confident that with their achievements they will be able to enter a foreign university, even if it is only additional but very helped, and tried to get into college many times never beating me up when I failed. In the aspect of personalization PK participants'm not sure that intelligence is because parents are highly educated, but being smart is because of studying, when you're lazy, it's because your friends invite you to play, but not entirely

because of your friends, but because you can do it too, and it's mostly yourself who makes you lazy, and success What you get is not entirely due to yourself but rather the role of other people.

*“..for me yes, because whatever we do is a process to get to the future... the current ability is not in my opinion, I still have very little ability hahaha. So I have to learn a lot more so that I can achieve that... I don't think so, because I come from a family where all the parents have a bachelor's degree, but to be smart, we learn...”* (PK Participant, 2023).

### *Optimism Factors in Migrant Students*

The factor that influences optimism is self-efficacy in participant AH. Being confident in yourself that you can do something and never giving up if you encounter a problem. Self-esteem in Participant AH can be seen when discussing without being selfish with his ideas, but listening to ideas from others and arguing without prioritizing his ego, and when his friends push him away, he looks for the cause of the problem, if he is wrong he apologizes. Social support for participant AH. Support is always provided by his parents by contacting him every day and support from the surrounding environment such as friends always helps him when he is in trouble.

*“...how can you come from Indonesia and give up in the middle of the road... we are right, so we just show the existing data, sometimes the Syrians don't want to lose so I just provide data so that it cannot be refuted... Often, especially my mum every day asking for updates and others from WhatsApp ...”* (Participant AH, 2023).

Furthermore the second participant with the initials MP. In terms of self-efficacy, MP participants prefer to give up first and then get up again to solve it by asking questions and learning from both friends and teachers. In the self-esteem of MP participants, when arguing, they are more confident in arguing, when they are pushed away by friends, they try to apologize if they are wrong and they try to always maintain relationships with friends. In terms of social support, MP participants received support from their parents for at least 1 month, they called their mother 2-3 times, and they got a little support from friends because in Ohio students are more individual.

*“... I was in class when I got a low score on the exam, I realized it was my fault, I gave up, but after that, I reflected first as a break, after that, I just got up ... yes I am confident, so I prepare data to defend my arguments, so when I am refuted I can argue ... not too often, because each of us has a schedule too, especially the difference in different hours ...”* (Participant MP, 2023).

Furthermore third participant with the initials RD. In terms of self-efficacy, RD participants never give up when there is a problem, look for solutions, and enjoy solving problems that occur or fail. In terms of self-esteem, RD participants gave in when the argument was refuted, although they did not drop each other. When a friend pushes you away, it's because of yourself, introspect and apologize. In terms of social support, RD participants received support from their parents, such as being called 1-2 times a month, and getting help from friends in their environment.

*“...to give up, no, I just enjoy it, find a solution, if I get it then I solve it... I often just give in, we can get into a fight if we fight when we are right... only 1-2 times a month, because I'm busy also studying, so I just tell you when I can call...”* (Participant RD, 2023).

Next is the fourth participant with the initials HH. In self-efficacy, never give up when you encounter a problem and believe you can solve it easily. If you fail, look for another way. The important thing is not to give up. Regarding participant HH self-esteem, when arguing, he did not want to lose to his friends and when he was shunned by his friends, he chose to apologize and treat his friends. In terms of social support, participant HH received support from his family by calling him every day, his parents and the surrounding environment, namely friends, also cared about him and liked to help.

*“...I just hit the problems in front of my face, failing to find another way... I don't want to lose hahaha, but when I'm in a debate I fight it so I don't lose the debate... Every day, I have to call because my parents are worried about their children far away.”* (Participant HH, 2023).



Furthermore fifth participant with the initials PK. In terms of self-efficacy, PK participants do not give up easily and complete it one by one but will finish it. Regarding the self-esteem of PK participants, when discussing, they prefer to just follow along and give in more during the debate, when they are pushed away by their friends, they look for what they did wrong and then apologize if they are wrong. In terms of social support, PK participants receive support from their parents by calling them at least 3 times a week, and their surrounding environment, such as friends, are willing to help and do not hesitate to give their possessions.

*“... from everything that I'm going through right now, I finish one by one by never giving up... I'm a passive person, so if it's a discussion, I just follow along, so if it's a debate, I usually just give in... 3 times a week, because the girl is also a girl, so the parents are worried too...”* (Participant PK, 2023).

Optimism is the belief that negative events have a temporary effect, do not affect all aspects of life, and do not entirely come from personal mistakes, but may be influenced by situations, conditions, or other parties (Tetzner & Becker, 2018). An individual's belief in the possibility of achieving positive results in the future is an optimistic attitude that grows in the individual. Optimism is a positive way of thinking regarding the future, involving an optimistic, meaningful, and comprehensive perspective on all aspects of one's life (Rini et al., 2023; Rohayati et al., 2023). People who have an optimistic attitude in living life can be seen from their strength in facing challenges, determination to make improvements to achieve a better future, ability to find solutions and overcome obstacles, positive thinking, resilience in facing obstacles, and the ability to accept themselves and show concern for those around them (Millstein et al., 2019; Putra, Ramadhanti, & Rizky, 2023).

The results of data analysis from interviews with five participants showed that this study succeeded in identifying a picture of optimism owned by Indonesian students who decided to continue their studies abroad based on all aspects of optimism. In the aspect of permanence, the five participants have confidence that success while migrating can make them successful in the future. In the pervasiveness aspect, the four participants also believe that their current abilities can bring success in the future, but in contrast to PK, he does not believe that his current abilities can make him successful in the future because he is still not qualified. In the personalization aspect, the five participants believe that all mistakes that occur are due to themselves. This is indicated when participants are lazy to learn it is because they are lazy to learn. The difference in optimism of the five participants was evident when he faced problems that occurred while migrating abroad. This happens because of the different environments in each country and the different characteristics of the people in the country where they migrate. participants who migrate to Middle Eastern countries face difficulties making friends, for participants who migrate to European countries language difficulties are a problem, and for participants who migrate to America face racist problems and difficulty making friends they face, from this problem, makes the five participants have different attitudes of optimism, from the five participants interviewed, participants who migrate to America have an attitude of optimism compared to the four participants who face these problems patiently through it.

In addition, this study also reviews factors that can affect their level of optimism, including self-efficacy, self-esteem, and social support. Characterized by how participants can solve the problems they face with self-confidence, respect each other and not put each other down between classmates, and get support from people around both from parents, friends, and teachers who make participants able to complete their studies until completion. Seligman (2006) A person with a strong belief in his abilities and potential generally has a good level of optimism. Self-efficacy refers to an individual's belief in his ability to manage and integrate abilities, being able to focus impulses, rational thinking, and a series of behaviors towards intentions. This also includes readiness to face challenges and obstacles (Céspedes et al., 2021; Morrison-Smith & Ruiz, 2020; Suud et al., 2022). With great self-confidence in handling problems. what happens when they migrate, students will naturally have a high level of optimism because they believe that they can solve the problems that occur when they migrate (McElvany et al., 2018; Putra et al, 2023; Aningrum, Aliasas, & Kim, 2024).

Seligman (2006) People who have a high level of self-esteem tend to always try to maintain a positive view of themselves and always look for positive qualities within themselves to overcome the failures or difficulties they face. This encourages them to fight hard and rise from difficult situations. People with a good sense of self-esteem will be motivated to maintain a positive image of themselves and determine positive aspects of themselves to overcome failure. They will work harder and try better

in their next endeavor. Self-esteem is a personal assessment that each individual gives to themselves, including positive to negative views (Muarifah et al., 2019; Nwune, Oguezie, & Odum, 2023; Apeadido, Opoku-Mensah, & Mensah, 2024). Students with positive and strong self-esteem will have an impact on the emergence of optimism. Individuals with high and positive self-esteem can unlock their full potential, enabling them to overcome any challenges faced during the migration process (Jamil et al., 2023; Ramadhanti et al., 2023).

Seligman (2006) states that the existence of social support prevents someone from feeling isolated and provides assurance that help will always be there. Social support includes positive responses, providing strong, real help, as well as advice and encouragement that motivates the individual. This is a factor that provides emotional benefits for those who receive compassionate social support. The availability of adequate support can strengthen individuals' optimism because they believe that help is available when needed. When someone receives strong social support, including practical support or real action, this can influence students to maintain an optimistic attitude, even though they face problems related to material things (Chu et al., 2022; Jusmaniar et al., 2024).

The results of this research are then in line with the research conducted Cebolla-Boado & Soysal (2018) confirms that teenagers who want to move away on their own when they grow up are already more optimistic even before their intention to move is realized. This research explains that optimism in teenagers who migrate is very necessary to be able to survive in their new environment. In line with the research results Nuhoglu Soysal & Cebolla-Boado (2020) Research conducted by Chinese and European students who went overseas found that European students who went overseas were less optimistic than Chinese students, this was because European students had difficulty socializing and adapting to a new environment and very different European culture. Furthermore, research conducted by Busse & Scharenberg (2022) Research on German students who have migrated to see optimism when studying, that the factors that cause German students to not be enthusiastic when studying abroad are culture, religion, race, and even social inequality felt by German students when studying in other countries, but in this research it is also explained that German students can get through it all, even though some students couldn't afford it and returned to their country. Optimism is not only needed among overseas students but is also needed among migrant workers so research results show that workers with an optimistic attitude can overcome problems, one of which is the economy which is in the low category and is more resilient or our resilience in facing problems in the surrounding environment (Alabshar et al., 2023; Sabouripour & Roslan, 2015; Tjaden & Hunkler, 2017). The latest research conducted by Dollmann et al (2023) Regarding optimism among overseas students from Sweden, in this research, research results showed that students who migrated were more optimistic in pursuing education and even successful in work, this is because migrant students were able to overcome all the obstacles they faced and thought they could solve existing problems.

Optimism plays an important role when someone decides to go abroad, especially to study abroad. By having an optimistic attitude, individuals tend to be better able to face challenges and difficulties that may arise during migrating. Optimism can also be a source of motivation and positive energy that allows a person to remain enthusiastic in pursuing their educational or career goals in a foreign country. In addition, optimism can also influence perceptions of the experience of migrating as a whole, making it more satisfying and meaningful. Thus, it is important to develop and maintain an optimistic attitude when going abroad, especially when facing a new environment, new individual characteristics, and a foreign language that is rarely used.

The novelty of this study lies in its focus on physics undergraduate students from Indonesia studying in various countries, this study provides a more holistic understanding of the importance of optimism in facing academic and personal challenges during international studies. The implication of this study is the importance of supporting physics undergraduate students studying abroad in developing an optimistic attitude. Educational institutions and support service providers should pay attention to factors such as self-efficacy, self-esteem, and social support in helping students maintain their optimistic attitude. The limitations of the study are that it only includes physics students from one or a few specific countries, so generalisations to the global population of physics students may not be entirely relevant, there are many external factors that can affect the level of optimism of physics students studying abroad, such as cultural, social and academic environmental factors and context of physics education in different countries can vary considerably. This needs to be considered in analysing how the study abroad experience affects students' level of optimism.

## CONCLUSION

This study describes the optimism of overseas students studying abroad, focusing on three aspects of optimism, namely permanence. All five participants in this study showed their belief that success while abroad will shape their success in the future. In the aspect of pervasiveness, four participants believed that their current abilities could lead to success in the future, although there were differences with one participant who did not believe that their current abilities were sufficient to achieve success in the future. In the context of personalization, all five participants believe that every mistake that occurs is caused by themselves, as in the example of a participant who is too lazy to study and admits that his indiscipline in learning comes from himself. There are differences in optimism because the problems that occur are different in each country. Students who migrated to America were more optimistic than the four participants who migrated to Europe and the Middle East. Factors that influence the level of optimism involve self-efficacy, self-esteem, and social support. Therefore, an optimistic attitude is considered a key factor for overseas students studying abroad. This attitude helps them face challenges, maximize their learning experience, and build a positive foundation for personal and academic growth during their study abroad period. Future research can broaden the scope by adding participants or including more recent cases to increase the understanding of migrant students' optimism.

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## AUTHOR CONTRIBUTIONS

Conceptualisation, Rahman Pranovri Putra; Methodology, Auliya Ramadhanti; Investigation, Rahman Pranovri Putra and Auliya Ramadhanti; Data Curation, Rahman Pranovri Putra; Writing - Initial Draft Preparation, Rahman Pranovri Putra; Writing - Review & Editing, Hanna Jessica Al Azizah; Visualisation, Prakash Puhka; Supervision, Farida Agus Setiawati.

## CONFLICTS OF INTEREST

The authors declare no conflict of interest.

## REFERENCES

- Alabshar, N., Giyarsih, S. R., & Pitoyo, A. J. (2023). The Impact of Migration on Optimism and Subjective Well-Being: Evidence from the Indonesian Family Life Survey. *Journal of Population and Social Studies*, 32, 262–277. <https://doi.org/10.25133/JPSSv322024.016>
- Aningrum, F., Aliazas, V. M., & Kim, S. (2024). Optimizing Elementary School Education through the Implementation of Karawitan-Based Learning Grounded in Local Wisdom. *Journal of Basic Education Research*, 5(1), 40-47. <https://doi.org/10.37251/jber.v5i1.917>
- Apeadido, S., Opoku-Mensah, D., & Mensah, G. O. (2024). Enhancing Science Process Skills and Academic Performance in Biology: The Impact of Practical Work. *Integrated Science Education Journal*, 5(1), 34-41. <https://doi.org/10.37251/isej.v5i1.854>
- Atmoko, S. S., Kumala, D. E., Gatsinzi, P., & Usman, U. S. (2024). Increasing Activity and Science Learning Outcomes Vibrations, Waves and Sound Matter Through STAD Model. *Schrödinger: Journal of Physics Education*, 5(1), 16-23. <https://doi.org/10.37251/sjpe.v5i1.880>
- Azis, A., Utami, S., Cronin, L., & Sanie, A. H. A. (2024). The Influence of the School Environment on the Formation of Children's Character. *Journal of Basic Education Research*, 5(1), 16-21. <https://doi.org/10.37251/jber.v5i1.850>
- Buckingham, A., & Richardson, E. J. (2021). The relationship between psychological resilience and pain threshold and tolerance: optimism and grit as moderators. *Journal of Clinical Psychology in Medical Settings*, 28(3), 518–528. <https://doi.org/10.1007/s10880-020-09731-7>
- Budiharjo, T. (2017). *Culture Shock Mahasiswa Indonesia (Studi Kasus Kualitatif Culture Shock di Kalangan Mahasiswa Indonesia Asal Kota Medan di Luar Negeri)* [Disertasi, Universitas Sumatera Utara]. <https://repositori.usu.ac.id/handle/123456789/17083>
- Busse, R., & Scharenberg, K. (2022). How immigrant optimism shapes educational transitions over the educational life course—Empirical evidence from Germany. *Frontiers in Education*, 7. <https://doi.org/10.3389/educ.2022.894249>

- Cebolla-Boado, H., & Soysal, Y. N. (2018). Educational optimism in China: migrant selectivity or migration experience? *Journal of Ethnic and Migration Studies*, 44(13), 2107–2126. <https://doi.org/10.1080/1369183X.2017.1417825>
- Céspedes, C., Rubio, A., Viñas, F., Cerrato, S. M., Lara-Órdenes, E., & Ríos, J. (2021). Relationship Between Self-Concept, Self-Efficacy, and Subjective Well-Being of Native and Migrant Adolescents. *Frontiers in Psychology*, 11(January), 1–11. <https://doi.org/10.3389/fpsyg.2020.620782>
- Chen, Y., Su, J., Zhang, Y., & Yan, W. (2021). Optimism, Social Identity, Mental Health: Findings Form Tibetan College Students in China. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.747515>
- Chu, Y., Zhang, Y., Wang, S., & Dai, H. (2022). Resilience mediates the influence of hope, optimism, social support, and stress on anxiety severity among Chinese patients with cervical spondylosis. *Frontiers in Psychiatry*, 13(997541), 1–12. <https://doi.org/10.3389/fpsyg.2022.997541>
- Creswell, J. W. (2017). *Pendekatan metode kualitatif, kuantitatif dan campuran*. Yogyakarta: Pustaka Pelajar.
- Dinata, A. (2022). *Indonesia Peringkat 22 Dunia, Negara dengan Siswa Terbanyak di Luar Negeri*. Diambil Kembali Dari Gatra.Com: <https://www.gatra.com/news-548630-pendidikan-indonesia-peringkat-22-dunia-negara-dengan-siswa-terbanyak-di-luar-negeri.html>
- Dollmann, J., Jonsson, J. O., Mood, C., & Rudolphi, F. (2023). Is ‘immigrant optimism’ in educational choice a problem? Ethnic gaps in Swedish upper secondary school completion. *European Sociological Review*, 39(3), 384–399. <https://doi.org/10.1093/esr/jcad023>
- García-Montoya, L., & Mahoney, J. (2023). Critical Event Analysis in Case Study Research. *Sociological Methods & Research*, 52(1), 480–524. <https://doi.org/10.1177/0049124120926201>
- Gil-Hernández, C. J., & Gracia, P. (2018). Adolescents’ educational aspirations and ethnic background: The case of students of African and Latin American migrant origins in Spain. *Demographic Research*, 38(1), 577–618. <https://doi.org/10.4054/DemRes.2018.38.23>
- Jamil, A. Z., Rao, M. R. Q., Iqbal, K., Aziz, N., & Bahoo, M. L. A. (2023). Association of perception of educational environment and self-esteem in students at medical college. *The Professional Medical Journal*, 30(03), 392–397. <https://doi.org/10.29309/tpmj/2023.30.03.6927>
- Jusmaniar, J., Riani, I., Anderson, E. C., Lee, M. C., & Oktavia, S. W. (2024). Gasing Game: Ethnoscience Exploration of Circular Motion in Physics Learning on the Coast of East Sumatra to Build the Character of Perseverance. *Schrödinger: Journal of Physics Education*, 5(1), 1-9. <https://doi.org/10.37251/sjpe.v5i1.902>
- McBeth, M., Blakeman, J., Kearsley, L., Tyler, A., & Villanueva, E. (2023). Teaching Generation Z Students About Politics: Optimism or Pessimism? *International Journal for the Scholarship of Teaching and Learning*, 17(1), 1–9. <https://doi.org/10.20429/ijstl.2023.17105>
- McElvany, N., Ferdinand, H. D., Gebauer, M. M., Bos, W., Huelmann, T., Köller, O., & Schöber, C. (2018). Attainment-aspiration gap in students with a migration background: The role of self-efficacy. *Learning and Individual Differences*, 65(May), 159–166. <https://doi.org/10.1016/j.lindif.2018.05.002>
- Millstein, R. A., Chung, W.-J., Hoepfner, B. B., Boehm, J. K., Legler, S. R., Mastromauro, C. A., & Huffman, J. C. (2019). Development of the state optimism measure. *General Hospital Psychiatry*, 58(10), 83–93. <https://doi.org/10.1016/j.genhosppsych.2019.04.002>
- Minza, W. M., & Herlusia, S. I. (2022). Affect and trust in educational migration of young people from provincial towns in Indonesia. *Ethnography and Education*, 17(3), 206–223. <https://doi.org/10.1080/17457823.2022.2071590>
- Moleong, L. (2018). *Metodologi Penelitian Kualitatif*. Bandung: PT Remaja Rosdakarya.
- Morrison-Smith, S., & Ruiz, J. (2020). Challenges and barriers in virtual teams: a literature review. *SN Applied Sciences*, 2(6), 1096. <https://doi.org/10.1007/s42452-020-2801-5>
- Möser, S. (2022). Naïve or Persistent Optimism? The Changing Vocational Aspirations of Children of Immigrants at the Transition from School to Work. *Swiss Journal of Sociology*, 48(2), 255–284. <https://doi.org/10.2478/sjs-2022-0015>
- Muarifah, A., Fauziah, M., Saputra, W. N. E., & Da Costa, A. (2019). Pengaruh regulasi emosi terhadap harga diri siswa sekolah menengah atas di yogyakarta. *Jurnal Kajian Bimbingan Dan Konseling*, 4(3), 94. <https://doi.org/10.17977/um001v4i32019p094>



- Nuhoglu Soysal, Y., & Cebolla-Boado, H. (2020). Observing the Unobservable: Migrant Selectivity and Agentive Individuality Among Higher Education Students in China and Europe. *Frontiers in Sociology*, 5. <https://doi.org/10.3389/fsoc.2020.00009>
- Nwune, E. C., Oguezue, N. K., & Odum, B. I. (2023). Secondary School Students' Perception of Science Laboratory Accident Status and Preventive Measures in Awka Education Zone. *Integrated Science Education Journal*, 4(3), 104-110. <https://doi.org/10.37251/isej.v4i3.550>
- Oriol, X., Miranda, R., Bazán, C., & Benavente, E. (2020). Distinct routes to understand the relationship between dispositional optimism and life satisfaction: Self-control and grit, positive affect, gratitude, and meaning in life. *Frontiers in Psychology*, 11(907), 1–13. <https://doi.org/10.3389/fpsyg.2020.00907>
- Putra, R. P., Ramadhanti, A., & Darmawan, H. (2023). Male Or Female, Who Is The Highest? Life Optimism In Cardiovascular Disease Patients. *Jurnal Ilmiah Ilmu Terapan Universitas Jambi*, 7(1), 11–21. <https://doi.org/10.22437/jiituj.v7i1.26618>
- Putra, R. P., Ramadhanti, A., & Rizky, D. A. (2023). Gender differences in levels of toxic positivity in adolescents: a quantitative study. *Jurnal Ilmiah Ilmu Terapan Universitas Jambi*, 7(2), 83–91. <https://doi.org/10.22437/jiituj.v7i2.26624>
- Ramadhanti, A., Putra, R. P., & Rizky, D. A. (2023). Does Parenting Style Affect Adolescent Empathy? A Study On High School Students. *Jurnal Ilmiah Ilmu Terapan Universitas Jambi*, 7(1), 38–47. <https://doi.org/10.22437/jiituj.v7i1.26627>
- Rini, E. F. S., Aldila, F. T., & Wirayudha, R. P. (2023). A study of student learning discipline in senior high school. *Jurnal Ilmiah Ilmu Terapan Universitas Jambi*, 7(1), 33–37. <https://doi.org/10.22437/jiituj.v7i1.26698>
- Rohayati, N., Dimala, C. P., & Aisha, D. (2023). Peran Dukungan Sosial dan Optimisme Terhadap School Well-Being Pada Remaja. *Psychophedia Jurnal Psikologi Universitas Buana Perjuangan Karawang*, 8(1), 65–76. <https://doi.org/https://doi.org/10.36805/psychopedia.v8i1.5545>
- Sabouripour, F., & Roslan, S. B. (2015). Resilience, optimism and social support among international students. *Asian Social Science*, 11(15), 159–170. <https://doi.org/10.5539/ass.v11n15p159>
- Scheier, M. F., & Carver, C. S. (2018). Dispositional optimism and physical health: A long look back, a quick look forward. *American Psychologist*, 73(9), 1082–1094. <https://doi.org/10.1037/amp0000384>
- Segerstrom, S. C., Carver, C. S., & Scheier, M. (2017). Optimism. In *M. D. Robinson, & M. Eid, The Happy Mind: Cognitive Contributions to Well-Being* (pp. 1–19). Springer International Publishing. [https://doi.org/10.1007/978-3-319-58763-9\\_1](https://doi.org/10.1007/978-3-319-58763-9_1)
- Seligman, M. E. P. (2006). *Learned optimism*. New York: Vintage Books.
- Setriawati, N. (2021). A Picture Of Optimism In The Final Students Who Compiled The Thesis During The Covid-19 Pandemic. *Jurnal Pendidikan Tambusai*, 5(3), 114494–114499. <https://doi.org/https://doi.org/10.31004/jptam.v5i3.2760>
- Shepperd, J. A., Waters, E. A., Weinstein, N. D., & Klein, W. M. P. (2015). A Primer on Unrealistic Optimism. *Current Directions in Psychological Science*, 24(3), 232–237. <https://doi.org/10.1177/0963721414568341>
- Sun, Z., & Firestone, C. (2020). Optimism and pessimism in the predictive brain. *Trends in Cognitive Sciences*, 24(9), 683–685. <https://doi.org/10.1016/j.tics.2020.06.001>
- Suud, F. M., Sudirman, S. A., Kibtiyah, M., & Putra, R. P. (2022). Local Wisdom as the Fundamental for Honest Behavior of Students in Aceh: A Social Psychology Study. *Journal of Pharmaceutical Negative Results*, 13(4), 863–869. <https://doi.org/10.47750/pnr.2022.13.04.118>
- Tetzner, J., & Becker, M. (2018). Think Positive? Examining the Impact of Optimism on Academic Achievement in Early Adolescents. *Journal of Personality*, 86(2), 283–295. <https://doi.org/10.1111/jopy.12312>
- Thompson, C. J., Mick, D. G., van Osselaer, S. M. J., & Huber, J. (2023). Commentaries on “the case for qualitative research.” *Journal of Consumer Psychology*, 33(1), 273–282. <https://doi.org/10.1002/jcpy.1299>
- Tjaden, J. D., & Hunkler, C. (2017). The optimism trap: Migrants' educational choices in stratified education systems. *Social Science Research*, 67, 213–228. <https://doi.org/10.1016/j.ssresearch.2017.04.004>
-



- Uribe, F. A. R., Neira Espejo, C. A., & Pedroso, J. da S. (2022). The role of optimism in adolescent mental health: a systematic review. *Journal of Happiness Studies*, 23(2), 815–845. <https://doi.org/10.1007/s10902-021-00425-x>
- Urzúa, A., Baeza-Rivera, M. J., Caqueo-Urizar, A., & Henríquez, D. (2023). Optimism and Intolerance to Uncertainty May Mediate the Negative Effect of Discrimination on Mental Health in Migrant Population. *Healthcare (Switzerland)*, 11(4), 1–11. <https://doi.org/10.3390/healthcare11040503>
- Wang, H., & Yang, J. (2023). A Study on the Countermeasures to Improve the Physical and Mental Health of High-Altitude Migrant College Students by Integrating Artificial Intelligence and Martial Arts Morning Practice. *Applied Artificial Intelligence*, 37(1), 2219564. <https://doi.org/10.1080/08839514.2023.2219564>
- Weber, T., & Van Mol, C. (2023). The student migration transition: an empirical investigation into the nexus between development and international student migration. *Comparative Migration Studies*, 11(1). <https://doi.org/10.1186/s40878-023-00329-0>
- Weny, P. S., Dinah, M., Lerik, C., & Keraf, M. K. P. A. (2022). Optimism with coping stress in nomads college students. *Journal of Health and Behavioral Science*, 4(2), 332–340. <https://doi.org/https://doi.org/10.35508/jhbs.v4i2.5405>
- Wong, W. K. F., Chou, K. L., & Chow, N. W. S. (2012). Correlates of Quality of Life in New Migrants to Hong Kong from Mainland China. *Social Indicators Research*, 107(2), 373–391. <https://doi.org/10.1007/s11205-011-9853-2>
- Zhou, W. (2022). Measures to Educate College Students on Happiness in the Perspective of Positive Psychology. *Journal of Research in Vocational Education*, 4(9), 47–53. [https://doi.org/10.53469/jrve.2022.04\(09\).09](https://doi.org/10.53469/jrve.2022.04(09).09)