

## **Perceptions of physical activity in adolescents with low physical activity levels**

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### **Abstract**

Insufficient engagement in physical activity is one of the most common and persistent contributors to poor health worldwide. This research was conducted to investigate physical activity perceptions in adolescents with low physical activity. This research predominantly qualitative methodologies to elaborate on perceptions of physical activity, individual preferences, and factors that hinder the experiences of adolescents with low physical activity levels. The International Physical Activity Questionnaire-Short Form (IPAQ-SF) was administered randomly to adolescents aged 18-21 to identify adolescents with low physical activity levels who had less than 1 hour per day or did not meet moderate to vigorous physical activity levels. Semi-structured interviews were conducted with adolescents with low physical activity levels based on IPAQ norm calculations. Interviews were analyzed using thematic analysis. The main themes identified, namely misperceptions about physical activity, perceived ambiguity of social support, and perception of risk to understand the perception of physical activity in adolescents with low physical activity levels.

**Keywords:** physical activity; adolescent; IPAQ-SF

### **Abstrak**

Kurangnya keterlibatan dalam aktivitas fisik adalah salah satu kontributor yang paling umum dan terus-menerus terhadap kesehatan yang buruk di seluruh dunia. Penelitian ini dilakukan untuk menyelidiki persepsi aktivitas fisik pada remaja dengan aktivitas fisik yang rendah. Penelitian ini sebagian besar menggunakan metodologi kualitatif untuk mengelaborasi persepsi tentang aktivitas fisik dan faktor-faktor yang menghambat dari pengalaman remaja dengan tingkat aktivitas fisik yang rendah. International Physical Activity Questionnaire-Short Form (IPAQ-SF) diberikan secara acak kepada remaja berusia 18-21 tahun untuk mengidentifikasi remaja dengan tingkat aktivitas fisik rendah yang memiliki kurang dari 1 jam per hari atau yang tidak memenuhi tingkat aktivitas fisik sedang hingga berat. Wawancara semi-terstruktur dilakukan kepada remaja dengan tingkat aktivitas fisik rendah berdasarkan perhitungan norma IPAQ. Wawancara dianalisis menggunakan analisis tematik. Tema utama yang diidentifikasi, yaitu kesalahan persepsi tentang aktivitas fisik, persepsi ambiguitas dukungan sosial, dan persepsi terhadap risiko untuk memahami persepsi aktivitas fisik pada remaja dengan tingkat aktivitas fisik yang rendah.

**Kata kunci:** aktivitas fisik; remaja; IPAQ-SF

Adolescence is the transition period from childhood to adulthood, which begins around the age of 10-12 years and ends at the age of 18-21 years (King, 2011). When adolescents reach puberty, they begin to notice physical changes (King, 2011). These changes make adolescents' perceptions of their physical bodies change, so they begin to pay more attention to having an ideal body. For adolescent girls in particular, the pressure to conform to social stereotypes is a key

motivator for physical activity (Allender et al., 2006). The most commonly identified barriers for adolescent girls are a lack of support from peers, family, and teachers, and a lack of time for physical activity (Duffey et al., 2021).

Physical activity is any movement of the body that results in the expenditure of required skeletal muscle energy, e.g. walking, cycling, sports, active recreation, and play, and can be performed at all skill levels and for the enjoyment of all people (World Health Organization, 2022). Conventionally, sports and forms of physical activity such as aerobic exercise, running, or gymnastics have been the focus of efforts to increase population activity (Allender et al., 2006). Physically active adolescents have healthy development in adolescence, subsequently improving physical health, positively influencing mood, confidence, and concentration, and reducing anxiety, stress, and anger (Kumar et al., 2015). However, there are still many adolescents who are less active in doing physical activities. Logan et al. identified inactive adolescents as not engaging in physical education activities, structured sports, and extracurricular physical activities (Logan et al., 2016).

The World Health Organization (2010) noted that physical inactivity was identified as the 4th leading risk factor for death in the world (6% mortality rate). Seeking to reduce this risk, the World Health Organization recommends for 18-64-year-olds, at least 150 minutes of moderate-intensity aerobic physical activity or 75 minutes of vigorous intensity a week, or an equivalent combination of both; aerobic activity for at least 10 minutes; or for additional health benefits, moderate-intensity aerobic physical activity for up to 300 minutes or vigorous intensity for 150 minutes per week, or an equivalent combination of both; and muscle-strengthening activity for 2 or more days a week (World Health Organization, 2010).

Current levels of physical inactivity have increased in many countries with major implications for the increased prevalence of non-communicable diseases and general population health worldwide. According to the World Health Organization, the prevalence of physical activity in Indonesia is relatively low (World Health Organization, 2022). Previous research conducted by Guthold et al. on physical activity among adolescents showed that physical activity levels among Indonesian adolescents are relatively low compared to adolescents in other Southeast Asian countries (Guthold et al., 2020). There is growing concern about levels of physical activity, or inactivity, among young people in particular (Coleman et al., 2008). The World Health Organization constantly promotes physical activity through campaigns and the benefits of physical activity interventions for the prevention of non-communicable diseases.

This study focuses on investigating the perception of physical activity in adolescents with low physical activity levels. To understand the perception of physical activity in adolescents with low physical activity, we used the perspective of the theory proposed by Ajzen, namely The Theory of Planned Behavior (Ajzen, 1985, 1991). The Theory of Planned Behavior (TPB) is often used to explain and predict behavior. However, it can also be used to understand attitudes, subjective norms, and perceived behavioral control in motivating physical activity among low-activity individuals (Ajzen, 1991). Using the TPB, the researcher aims to understand the perception of physical activity in adolescents with low physical activity levels.

Based on the TPB theory proposed by Ajzen (1985), human actions are controlled by intentions, but not all intentions are realized in the form of behavior. Intentions will become

behavior if the behavior is rated positively and when they believe that people who are important to them think that the behavior should be done (Ajzen, 1985). Social influence is evaluated through social support (family and peers) and the presence of encouraging friends and social expectations influence motivation. Understanding perceptions of physical activity in sedentary adolescents includes an assessment of perceived behavioral control, where individuals measure self-efficacy and evaluate their ability to overcome barriers related to physical activity. These cognitive aspects explain how individuals perceive and respond to attitudes, social influences, and perceived behavioral control, which collectively contribute to motivation to engage in physical activity.

Despite numerous studies investigating the benefits of physical activity interventions (Baso et al., 2018; Charlton et al., 2014; Crooke et al., 2020; Geidl et al., 2020; Neumark-Sztainer et al., 2018), inactivity in adolescents continues to rise. Van Sluijs et al. stated that physical activity promotion efforts in schools and universities have been largely unsuccessful in changing physical activity behavior (van Sluijs et al., 2021). This means that health promotion has not been successful in increasing the physical activity levels recommended by the World Health Organization (World Health Organization, 2010). Therefore, investigating inactivity is also an important question (Hirvensalo & Lintunen, 2011) to determine the success of health promotion.

The ineffectiveness of these interventions suggests that research is needed that focuses on what people actually experience and perceive when they are active so as to help identify evidence-based strategies and interventions that can be implemented. (1) This study explored how self-perception plays an important role in adolescents' physical activity choices. (2) The insights gained from the results of this study can serve as materials or ideas for developing effective health promotion programs and interventions to increase physical activity among adolescents, especially those with low physical activity levels.

## **METHODS**

This study was designed qualitatively. To determine the perceptions of physical activity in adolescents with low physical activity levels, the researcher collected data through in-depth interviews using semi-structured interviews. Semi-structured interviews were used and focused on uncovering inactive adolescent girls' experiences and perceptions of physical activity, its relevance, their daily activities, preferences, and their views on support from others. Interviews were conducted 2-3 times either in person or via Zoom and lasted for approximately 30 minutes to 1 hour. All recorded interviews were transcribed into textual data and the data were analyzed using thematic analysis. The qualitative data allowed us to examine the reasons behind their behavioral choices, and therefore to better understand their motives in making decisions regarding physical activity.

Prior to interviewing participants, we distributed the International Physical Activity Questionnaire-Short Form (Craig et al., 2003) to identify participants as a small quantitative component in the overall qualitative research design. The rationale behind using IPAQ-SF is that the IPAQ-SF assessment tool has two forms of outcomes reported in the form of categories (low, moderate, or high activity levels, or as a continuous variable) measured in MET minutes a week to quantify an individual's physical activity level. MET minutes represent the amount of energy expended when individuals engage in physical activity. To calculate the IPAQ continuous

variable score, the MET value for walking is 3.3 METs, moderate physical activity is 4 METs, and vigorous physical activity is 8 METs.

The minute METs represent the amount of energy expended when individuals engage in physical activity. To calculate the continuous variable score of the IPAQ, the MET value for walking is 3.3 METs, moderate physical activity is 4 METs, and vigorous physical activity is 8 METs. In the physical activity category, individuals who score a high activity level indicate that individuals engage in physical activity equivalent to at least 1 hour per day or more, with at least moderate intensity. This high score can be obtained if individuals perform high-intensity activity on at least 3 days with 1500 MET minutes in a week or more than 7 days or more with a total of at least 3000 MET minutes in a week.

Individuals with moderate activity levels mean that they engage in activity equivalent to half an hour of moderate-intensity physical activity most days. This moderate score can be obtained if individuals perform high-intensity activities and/or walk at least 30 minutes per day for 3 or more days, perform moderate-intensity activities and/or walk at least 30 minutes per day for 5 or more days, or perform a combination of activities that total physical activity of at least 600 MET minutes a week for 5 or more days. Meanwhile, individuals who have low activity levels do not meet the criteria for moderate or high physical activity levels. Individuals who have low physical activity levels will be selected as participants in this study.

Based on the results of the questionnaire distribution, both male and female adolescents participated, but the 7 participants who met the criteria as adolescents with low physical activity levels were all female. Of the 7 participants who met the criteria, only 6 participants were willing to be interviewed. All 6 participants were interviewed but 1 participant was eliminated due to illness that would affect the quality or validity of the study so the researcher chose adolescents who did not have illness. The following table 1 contains the participants' physical activity levels based on IPAQ-SF.

**Table 1. Participants' Physical Activity Levels (IPAQ)**

<b>Pseudonym</b>	<b>High Activity Level</b>	<b>Medium Activity Level</b>	<b>Low Activity Level</b>
Kaila	0	0	0
Maria	0	240	462
Bela	240	960	693
Gita	0	240	0
Robin	0	3.360	2.772
Sela	2.160	480	1.386
Elina	0	0	0
Ana	0	600	1.386
Lesli	0	720	924
Serli	0	0	198
Lea	0	0	316,8
Winda	0	0	0
Rina	0	0	0
Paul	0	0	231

The random sampling technique was used to find research participants with several predetermined criteria, 1) adolescents aged 18-21 years, 2) have a low level of physical activity

on the measurement results using the IPAQ measuring instrument, 3) have no history of illness, and 4) are willing to become research participants. To identify participants who fit these criteria, the researcher used a quantitative approach by distributing questionnaires. Qualitative data was obtained from semi-structured interviews which were then transcribed into textual data to be analyzed using thematic analysis. Thematic analysis requires researchers to identify themes that can describe in depth what is happening in textual data such as interview data which is how researchers collect data. The thematic analysis used by the researcher is based on the thematic analysis developed by Braun and Clarke (2006).

To conduct thematic analysis, the researcher needs to have an in-depth knowledge of the data collected by themselves, then transcribe the interviews, and read them repeatedly. Repeatedly reading the participant data is useful to help the researcher become familiar with the data so as to build initial codes for the second stage. The process of analysis begins when the researcher begins to pay attention, looking for patterns of meaning and issues that may be of interest in the data or perhaps during data collection. The random sampling technique was used to find research participants with several predetermined criteria, 1) adolescents aged 18-21 years, 2) have a low level of physical activity on the measurement results using the IPAQ measuring instrument, 3) have no history of illness, and 4) are willing to become research participants. To identify participants who fit these criteria, the researcher used a quantitative approach by distributing questionnaires. Qualitative data was obtained from semi-structured interviews which were then transcribed into textual data to be analyzed using thematic analysis.

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The themes that have been built will then be given appropriate definitions and labels before entering the final stage of analysis, namely reporting the results of the analysis in the form of a report. The stages of thematic analysis are iterative so it is possible that researchers will carry out this process at each stage of data analysis. To ensure the results of data analysis carried out using thematic analysis, researchers try to ensure the credibility of research findings in a systematic way. The researcher conducted data collection systematically, selected representative research participants, analyzed data repeatedly, and ensured validity such as data triangulation and discussions with fellow researchers.

Interviews were conducted both directly and indirectly using Zoom media. During this data collection process, researchers tried to continue to build good relationships with participants. For some participants who were still hesitant to open up, the researcher would start with a light conversation and use the language used by each participant (according to the accent and language used in their respective home regions) to make the interview atmosphere more relaxed. All participants were university students from various universities in Central Java. Participants came from several provinces in Indonesia, such as North Maluku, Kalimantan, and Central Java. All

participants' names in this study are pseudonyms to maintain the confidentiality of their identities. After the initial codes were obtained, the researcher looked for themes that emerged based on the initial coding. Then, the researcher will revisit the emerging themes to ensure they can describe the data.

## RESULT

This section presents three themes identified as research findings to understand the perceptions of physical activity in adolescent girls with low physical activity levels. The findings show that adolescent girls have misperceptions about physical activity, perceived ambiguity of social support received, and perceived risks in physical activity that influence their inactivity. The following three themes and sub-themes are presented in Table 2.

**Table 2. Low physical activity level adolescents's perception of physical activity**

Themes	Sub-themes
Misperceptions about physical activity	a. Misperceptions of priorities b. Misperception of obstacles a. Misperceptions of self-ability
Perceived ambiguity of social support	b. Ambiguity of family support c. Ambiguity of friends' support
Perception of risk	d. Physical discomfort e. Experience of loss f. Safety concern

### *Misperceptions about physical activity*

This theme describes the misperception of physical activity in adolescents with low physical activity levels. These misperceptions manifested in the form of misperceptions about priorities, self-ability, and obstacles to physical activity. Misperceptions about priorities in physical activity indicate that participants have the perception that physical activity is less important than other tasks in their lives, so they tend to ignore or put physical activity at the bottom of the priority list. All of the participants in this study were female students at various universities, where coursework is certainly their top priority. The decision not to engage in physical activity was influenced by busy coursework and other personal issues.

Kaila, a final-year student, saw sports as taking time away from her studies. She shared that growing up she has a lot of things to do, think about, and doesn't feel as free as she did when she was in school. The academic responsibilities she has now mean that she has to think before doing any physical activity. Kaila said, *'Now, if I want to do any activity, I have to think after I do this sports activity, does it take up my time to go to campus?'* (21 Years) compared to when she was in junior high school. Kaila described life in junior high school as *'without any problems'*, *'without any burden of thought'* so that whatever activities she wanted to do without having to consider the consequences. Kaila rated physical activity as taking up a lot of time that she could use to complete academic tasks so she chose to use her time to do assignments, saying *'Better to do assignments than that right'*. This may reflect that participants rated physical activity as less important than academic tasks.

Four out of five participants reported that they had a desire to start or re-engage in physical activity, either in formal (gym) or non-formal (extracurricular dancing on campus, playing badminton with friends), but academic demands influenced their decision to participate. Meanwhile, one participant, a 21-year-old teenager (Elina) stated that she had no desire at all to be more active. This lack of desire to be active was related to negative perceptions of obstacles associated with physical activity, such as fatigue, which discouraged individuals from attempting or continuing physical activity. This is where misperceptions about obstacles of physical activity arise, where participants already have the view that physical activity is tiring. For example, a student from North Moluccas admitted that her biggest obstacle to becoming healthier was herself who already had a negative perception of obstacles related to physical activity, saying, '*Cuma kita pe diri yang menghambat kita untuk sehat, ngana tara usah olahraga sudah, ngana lelah nanti*' ('It's just me who prevent myself from being healthy, you don't need to exercise already, you'll get tired later') (Kaila, 21 years old).

Another misperception about physical activity is the perception of self-ability. Participants felt that they did not have the aptitude for certain types or levels of physical activity, and were, therefore, less motivated to try or participate. For example, Rina, a 20-year-old teenager, did not try out for the dance team at her university because she felt she lacked ability, saying, '*I don't want to join DOS because I feel like I'm still lacking too*'. This may indicate low confidence in her ability to compete with her peers on the dance team.

#### ***Perceived ambiguity of social support***

The social support received by adolescents affects their motivation to be more active. The participants revealed that there was unclear support from people around them (family and friends). Participants described their friends as "mageran" or people who are too lazy to move, explaining that their friends were not diligent or lacked interest in physical activity. Although there were invitations to physical activity from both participants and their friends, these invitations were described as limited to discourse or plans that were never carried out. Serli, a 20-year-old teenager, explained '*invitations that sometimes are just discourse, not implemented*'.

Perceived ambiguity in family support was also expressed by participants as a factor that prevented them from participating or maintaining participation in a physical activity of interest. For example, Rina, a 20-year-old teenager, recounted not getting permission to join the dance club from her father due to concerns about potential injury and decided not to continue her participation. She said, '*I feel like even if I want to stay, I feel like what's the point, I feel like it's just for myself because there's no one around me who supports me more. So it's like there's nothing that doesn't mean it's not supported, but it's not supported either, so it's just in the middle like well if participate only be asked, if don't participate, that's it*'. This perception arises because Rina considers her father's support to be ambiguous, causing feelings of confusion and uncertainty about the level of support she receives. This perception of her father's support is included in the sub-theme of perceived ambiguity of social support, where individuals interpret and evaluate the support they receive based on self-perception.

#### ***Perceptions of risk***

This theme describes individual perception and evaluation of the potential risks associated with engaging in various physical activity, some of which comes from individual experiences. Experiences of physical discomfort and loss were interrelated and impacted

motivation and physical activity. For example, Serli, a 20-year-old teenager, recounted that while doing physical exercise using YouTube video guidance, she experienced symptoms such as almost fainting, which worried participants about potential risks to her health. Serli said *'after the workout, it was the first time in my life that I felt like I was going to faint. So I don't want to do that anymore'*. This physical discomfort was also experienced by Lea, a 19-year-old teenager who experienced pain throughout her body because she did not warm up before swimming. Lea said, *'Well if we don't warm up, after swimming our bodies will hurt. I've experienced that. If I don't exercise first or warm up first after swimming, my body will hurt like that'*.

Another participant, Rina, a 20-year-old teenager, shared her personal experience of losing a loved one and an opportunity related to the physical activity she participated in. The experience of loss was experienced by the participant repeatedly, as seen from the same pattern of events recounted from childhood to the present. As a child, Rina participated in ballet but stopped due to the death of her mother. This experience had an emotional impact accompanied by feelings of sadness and grief experienced by the participant. The thing that made her not dare to return to the physical activity that she previously liked, namely dancing, was that this experience of loss was also experienced when she was in college, the death of her grandmother who was the closest person to her.

Not only did she lose her loved ones, but Rina felt that she lost the opportunity to be able to participate in dance activities. Rina said, *'Terus sekarang kemarin juga harus kayak gak ikut gitu loh, kasarnya gak ikut di dance itu karena ada juga yang meninggal gitu kan rasanya kayak kok banyak hal yang harus diterima dalam kehilangan gitu loh jadi gak cuma kehilangan orang tapi juga kehilangan kesempatan'* (*'And now recently I also had to not participate you know, I didn't participate in the dance because someone died, so it feels like there are many things that must be accepted in loss so not only losing people but also losing opportunities'*). This shows that participants not only experienced the loss of loved ones but also lost opportunities related to their interest in dance. This incident impacted Rina's participation, where she said several times that she was "not ready" to start again and wanted to rest.

I met Rina on campus, a month after our last interview. Rina greeted me from a distance, and we struck up a conversation. In the course of our conversation, Rina recounted in detail an unpleasant experience during middle school when she was part of a dance group. We were watching her university's dance team practicing not far from us, and I jokingly asked if she wanted to join them, to which she replied no with a laugh. During middle school, Rina's dance team was preparing for a competition. They had two practices in one day, but Rina and two of her friends skipped the second practice because they felt tired from the previous activities. It turned out that the quota of participating members was limited, and of the three people who had permission at the second practice, only one would be selected. Rina was originally placed in the center of the dance formation, but because she missed the second rehearsal, she could not perform in the competition. A similar incident also occurred when he was about to take part in the POM or Pekan Olahraga Mahasiswa (Student Sports Competition). This incident made her stop her participation in dance.

Rina also expressed feelings of guilt towards her friends and the dance team coach because she was always unable to participate despite practicing to prepare for their performance. Missing opportunities to perform repeatedly made her feel guilty followed by concerns about how others



would view her. Rina said, *'It's just that I'm afraid that if one day there is something like that again, I'll be afraid that it will be even worse. Because I don't understand, I don't understand the other opinions that were right at that time. There were indeed teams for the POM. I don't understand the personalities of those people, or how the people are to me. Sometimes I'm afraid there will be bad words because of that, but what else can I do'.*

Safety concerns are closely related to the perception of risk in physical activity. Safety concerns play a significant role in shaping participant perception when they assess the potential risks associated with engaging in physical activity. Some participants are concerned about being safe in the physical environment in which physical activity takes place. For example, Lea, a 19-year-old teenager, expressed concern about the safety of running around the neighborhood because it is close to the highway where vehicles pass by, said *'The problem is that the road is a highway so there are motorcycles so it's dangerous'.*

## DISCUSSION

This study provides insight into the perception of physical activity in adolescents with low physical activity levels, which are influenced by misperceptions and perceptions of the level of social support they receive. Many studies have found that social support from parents and friends plays an important role in influencing individuals' active participation (Charlton et al., 2014; Khan et al., 2020; Martins et al., 2021; Pluta et al., 2020; Whitehead & Biddle, 2008). For some, spending time with friends is a priority, and their physical activity participation depends on friends (Kostamo et al., 2019). In adolescents with low physical activity levels, without friends' encouragement to engage in physical activity, it is unlikely that they will be motivated to participate regularly (Martins et al., 2021).

There is a contradiction between the positive health assessment of physical activity and their perception that physical activity is not more important than other tasks in their life, that it is tiring, and that they cannot do it. Misperceptions about physical activity can be an important barrier to behavior change, where individuals do not realize the importance of increasing physical activity and physical activity promotion efforts no longer have an effect (Godino et al., 2014). The results of research conducted by Whitehead and Biddle (2008) found that the priorities of adolescent girls aged 14-16 years changed when they considered social life to be an important activity. For 18-21-year-old girls who were participants in our study, academic commitments at university became an important priority compared to physical activity. This is because physical activity is often described by adolescents with low physical activity as selfish (Segar et al., 2017). Changing priorities during adolescence may explain why adolescent girls no longer prioritize physical activity (Whitehead & Biddle, 2008).

The TPB posits that attitude toward a behavior influences behavioral intentions. In the physical activity context, misperception about priorities, self-ability, and obstacles can influence their attitude toward physical activity. Negative attitudes may stem from misperceptions, which may result in a lack of motivation and decreased intention to engage in regular physical activity. Interventions aimed at correcting misperceptions and promoting positive attitudes toward physical activity can be effective strategies to increase physical activity engagement among adolescents. The perceived ambiguity of social support from parents and friends related to the

TPB construct of subjective norms. Adolescents with low physical activity perception of social support play a crucial role in shaping their norms and beliefs about physical activity. When parents and friends provide clear and positive support for physical activity, adolescents are more likely to perceive it as a socially acceptable and normative behavior. However, the ambiguity of social support can lead to uncertainty and conflicting norms, which may hinder physical activity engagement.

To understand the perception of physical activity in adolescents with low physical activity, our understanding cannot be separated from individual experiences. Each participant's experience plays an important role in shaping adolescents' perceptions of physical activity. Experiences such as physical discomfort, experiences of loss, and safety concerns are interrelated factors that influence their perception. Experiencing physical discomfort, almost fainting, and pain throughout the body, prevented some participants from continuing to do physical activity. It is also important to discuss the emotional aspects that play a role in adolescents' responses to experiences. This is important because the process of forming meaning about the significance of an event and one's response to it is generally considered to be central to the experience of emotion in most cognitive psychology perspectives (Tamminen & Bennett, 2017). The experience of losing a loved one or an opportunity has an emotional impact that inhibits adolescents' participation in physical activity. Ongoing feelings of guilt for not being able to participate in group activities and feeling like a burden to others led participants to choose to stop engaging in physical activity.

Looking at the third theme from the TPB, the perception of risk aligns with the TPB construct of perceived behavioral control. Adolescents' perception of physical discomfort, experience of loss, and concern about their safety can impact their perceived control over engaging in physical activity. If adolescents perceive physical activity as uncomfortable, associated with loss, or risky in terms of safety, they may perceive a lack of control over engaging in physical activity. Interventions that address safety concerns about the physical environment for physical activity by providing a safe place for them to engage in physical activity can help enhance adolescents' perceived control and increase their intention to engage in physical activity.

## CONCLUSION

This study demonstrates the influence of misperceptions, ambiguity of social support received, and perceived risk in physical activity in adolescent girls with low physical activity levels. Things such as academic priorities, social support, physical discomfort, experiences of loss, and safety concerns all play an important role in shaping their perceptions. Recognizing the impact of academic pressure on physical activity choices could lead to discussions on how to achieve a better balance between academic responsibilities and physical health. This could potentially improve academic performance as well. Future researchers could also investigate other psychological factors that influence adolescents' perceptions of physical activity, including self-esteem and body image. The research that we conducted cannot be denied to have limitations. The limitations come from the small sample size. Results from interviewing only 5 adolescent girls with low physical activity may limit the generalizability, which is not the purpose of this research. For future research, a larger sample size would provide a more comprehensive

understanding of the experiences and perspectives of adolescent girls with low physical activity in Indonesia.

**Acknowledgments** The authors thank the adolescents for their participation in the study.

**Statement of Competing Interests** The authors have no competing interests.

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