

Psychological and Social Barriers to Physical Activity Perceived by Female College Students

Amber Bashir¹, Asim Akbar², Shumila Irum³, Raja Asim Ur Rehman⁴, Nasir Hussain⁵, Dr. Saddam Akbar⁶

¹ Assistant Professor, Health and Physical Education Govt Associate College 98/NB Sargodha.
Email: Amberbashir74@mail.com

² Department of Sports Sciences and Physical Education Muslim Youth University Islamabad.
Email: asimakbar4all@gmail.com

³ PhD Scholar Department of Physical Education and Sports Sciences Gomal University D.I. Khan. Email: shumila.sonia@gmail.com

⁴ Department of Physical Education and Sports Sciences Government College University Lahore.
Email: rehmanasim05@gmail.com

⁵ Department of Physical Education and Sports Sciences Government College University Lahore.
Email: nasir.hussain@gcu.edu.pk

⁶ Department of Physical Education and Sports Sciences Government College University Lahore,
Corresponding Author Email: jusaddamakbar4@gmail.com

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Abstract

Physical activity plays an important role in promoting healthy lifestyles. It helps with physical, mental, social and emotional health. Present study investigates psychological and social barriers to physical activity perceived by female college students. Primary aim is to examine psychological and social barriers as predictors of physical activity. Psychological predictors include depression, anxiety and stress and to measure these Depression anxiety and Stress scale (DASS-21), and social predictors include parenting influence measured by Parental Involvement in Sport Questionnaire (PISQ), body image measured by Adolescents Body Image Satisfaction Scale and social support measured by Multidimensional perceived social support scale (MSPSS) and physical activity was accessed using Exercise Benefits/Barriers Scale (EBBS). Results revealed that psychological predictors (depression, anxiety and stress) are negative predictors of physical activity and social predictors' parental influence and social support are positive predictors of physical activity and body image significantly negatively predicts physical activity.

Keywords. Depression, anxiety, stress, parental influence body image social support and physical activity.

Introduction

It is an acknowledged and golden principle that a healthy body carries a healthy mind. Under these lines, the health benefits of women's participation in physical activities are well understood. Therefore, participation in physical activities can also facilitate good mental health for women of all ages (World Health Organization, 2007). Owing to many inventions, modern technology has

made our lives much easier and comparatively less active, resulting in many personal variables, including physiological, behavioral, and psychological factors.

Understanding common barriers in order to promote physical activities and creating strategies to overcome them may help us make physical activity part of our lives. Regular exercise is said to improve attention span, memory, and learning, as well as being an effective way to decrease psychological symptoms as depression, anxiety, and stress. The benefits of women's participation in physical activity and sport are now well established and facilitate good mental health (WHO, 2007). Psychopathology is the study of brain and behavioral disorders. These may result in genetic effects, biological, psychological, and social reasons. The present study aims to investigate social and psychological barriers to physical activity perceived by female college students. The study aims to examine how psychological and social barriers relate to physical activity among female college students, and to determine how each type of barrier predicts their level of physical activity.

Psychological Barriers

The psychological barriers measured in the present study are depression, anxiety, and stress. Globally, there is a startling lack of physical exercise, particularly among teenagers and young people (Guthold et al., 2020). Psychological barriers such as stress, worry, and depression are important but sometimes disregarded challenges. Depression can drastically lower motivation to exercise since it is characterized by enduring unhappiness, loss of interest, poor energy, and exhaustion (Craft & Perna, 2004). Depleted emotional and cognitive resources make it difficult for those with depressive symptoms to start and stick to an exercise regimen. According to Asmundson et al. (2013), anxiety, which is typified by extreme concern, dread, and physiological arousal, can also serve as a barrier, causing people to avoid exercise environments out of social discomfort, performance anxiety, or fear of being judged.

One of the biggest psychological obstacles is stress, which is the body's reaction to perceived difficulties. Excessive stress can interfere with decision-making, interfere with time management, and decrease health-promoting activities like exercise (Stults-Kolehmainen & Sinha, 2014). Persistent stress might further deter people from leading physically active lives, increase sedentary behavior, and lower life satisfaction. According to certain research, college students' negative emotions and moderate physical activity are negatively correlated (Aperocho et al., 2021; Tao et al., 2023). Additionally, by lowering academic anxiety, physical activity can help college students perform better academically (Fricke et al., 2017). There is a bidirectional association between psychological emotions and physical activities. According to Rosenbaum et al. (2016), physical activity can be decreased by depression, anxiety, and stress, but a lack of it might exacerbate these mental health issues. Promoting physical exercise and enhancing mental health outcomes requires addressing psychological obstacles. Promoting holistic well-being requires focused interventions, mental health assistance, and inclusive physical exercise programs.

Social barriers

Despite growing knowledge of physical activity's health advantages, participation rates are still low worldwide. Physical exercise habit is greatly influenced by social obstacles, including parental influence, body image issues, and social support. These elements influence attitudes toward physical exercise from early infancy into adulthood and are firmly anchored in social interactions, cultural norms, and community dynamics (Bauman et al., 2012).

According to Cohen and Wills (1985), social support is a feeling of care and inclusion in a network of helpful people. It includes instrumental, emotional, and informational assistance from colleagues, family, friends, or significant others and promotes stress reduction and healthful lifestyle choices. By offering encouragement, knowledge sharing, and company, social support,

including emotional, instrumental, informational, and companionship, significantly improves motivation, confidence, and enjoyment in physical exercise situations (Troost et al., 2003). Engagement in physical exercise is strongly influenced by social support, both instrumental and emotional. Encouragement to lead an active lifestyle can come from friends, family, coaches, and neighbors. On the other hand, involvement may be hampered by discouragement, unfavorable peer pressure, or a lack of encouragement (Troost et al., 2003). According to research, those who feel more supported by their social network are more inclined to exercise regularly (Molloy et al., 2010).

The term "body image" describes a person's opinions, feelings, and ideas regarding their physical attributes and physiological processes, such as their beauty, aesthetics, and level of contentment or discontent with their body (Cash & Pruzinsky, 2002). Physical exercise habit is strongly influenced by body image, especially in young people and adolescents. Because of low self-esteem, shame, or fear of being judged, people who are unhappy with their body shape may avoid physical activities (Sabiston et al., 2010). These worries are heightened by social comparisons and cultural beauty standards, which lower confidence and cause people to shy away from public exposure-related activities (Prichard et al., 2020). Ironically, physical exercise can eventually lead to a better body image, but people may encounter initial obstacles that prevent them from reaping these advantages.

Parental influence involves modeling, encouraging, supporting, and setting expectations, particularly in physical activity, to influence children's behaviors, attitudes, and lifestyle choices (Yao & Rhodes, 2015). Children's habits regarding health during their teenage years are greatly influenced by their parents. Children's physical activity can be influenced by the expectations, resources, encouragement, and modeling provided by parents (Gustafson & Rhodes, 2006). Negative associations with physical exercise, however, might result from an excessive focus on performance, criticism, or disinterest. Boys and girls may also be impacted differently by gendered expectations; conventional ideas of femininity may discourage girls from engaging in energetic or competitive activities (Edwardson & Gorely, 2010).

Social barriers provide a complicated web of factors that can either promote or hinder participation in physical exercise. Individual-focused therapies as well as more extensive societal and cultural change are needed to address these issues. Promoting inclusive settings, encouraging a healthy body image, strengthening family ties, and dispelling gender stereotypes are some strategies.

Physical Activity

Physical activity is any bodily movement produced by skeletal muscles that requires energy expenditure, including activities undertaken while working, playing, carrying out household chores, travelling, and engaging in recreational pursuits (WHO, 2007). The term physical activity should not be confused with exercise, which is a subcategory of physical activity that is planned, structured, repetitive, and aims to improve or maintain one or more components of physical fitness. Physical activity improves physical fitness and overall health and well-being (Kalosov & Gigrov, 2011). It is offered for a variety of reasons, including development, strengthening the muscle and concentration system, athletic skills, weight loss or maintenance, and fun (Berstrom, 2016). Numerous research studies on women's engagement and commitment to physical activities have been carried out in innumerable nations (Laar, Zhang, Yu, Qi, & Ashraf, 2019; Nanayakkara, 2012). However, there is a dearth of knowledge and a lack of studies conducted in Pakistan on the several issues that prevent women from engaging in leisure activities. According to certain research, enabling female empowerment in sports can help girl's advance and gain confidence in their ability to participate in sports (Story & Markula, 2017).

Materials and Methods

The study was a cross-sectional research design in which the sample was studied once, with purposive sampling applied for the collection of data.

Sample

The selected sample for the present study was 300 students ($N = 300$). The sample was collected from different female colleges of Sargodha, with an age range of 17 to 22 years.

Instruments

A survey research was designed by using different psychological self-report instruments to measure present variables of the study. The scales used for the present study include

Depression Anxiety Stress Scale (DASS)

DASS is a self-report instrument designed to study different emotional states of a person while experiencing stress, anxiety, and depression. DASS was developed by Lovibond and Lovibond (1995). It is a 21-item scale with 3 subscales exhibiting 7 items each for depression, anxiety, and stress. The response format of the scale ranges from 0 to 4. The scale yields a satisfactory alpha reliability for depression ($\alpha = 0.91$), anxiety ($\alpha = 0.84$), and stress depression ($\alpha = 0.90$).

Adolescents' Body Image Satisfaction Scale (ABISS)

The scale was introduced by Leone et al. (2014), and it measures body image satisfaction. It's a 16-item questionnaire with a response format of 1 = strongly agree to 4 = strongly disagree. Items 1, 4, 6, 7, 9, 14, and 16 were reverse-coded. ABISS comprised three subscales, named body competence, body inadequacy, and internal conflict. ABISS and subscales yield satisfactory alpha reliability ($\alpha = 0.64 - 0.82$).

Multidimensional Scale of Perceived Social Support (MSPSS)

A brief tool called the Multidimensional Scale of Perceived Social Support (MSPSS) was created by Zimet et al. (1990) to measure perceived social support. It is composed of three subscales: family support, friends support, and significant others support. There are twelve items on this instrument. This scale measures perceived social support on a 12-point Likert-type response format.

Parental Involvement in Sport Questionnaire (PISQ)

The 19-item Parental Involvement in Sport Questionnaire (PISQ), developed by Lee and MacLean (1997), was used to assess how children felt about their parents' participation in their sport. Response format of the scale ranges from 1 (Strongly Disagree) to 5 (Strongly Agree). Reliability values demonstrate satisfactory reliability ($\alpha = 0.77 - 0.85$).

Exercise Benefits/ Barriers Scale (EBBS)

The advantages and discrepancies considered to be involved in physical activity were diagnosed by EBBS. This a 43 item scale. The respondents were told that their agreement should be considered useful benefits and barriers at 4 points. By reducing the items to 14 barriers, the score of overall perceived barriers is also counted, with high values indicating the most acceptable obstacles.

Procedure

The study adhered to the American Psychological Association's ethical guidelines and was approved by the Riphah International University review board. Data collection began after obtaining permission from the authors. Participants were informed of the study's objectives, selection process, and participation. Privacy and confidentiality were ensured, and participants were approached from different female colleges of Sargodha. Participants were grateful for their time and expertise. The collected data was carefully reviewed, and surveys with haphazard or insufficient responses were removed. The study aimed to understand the impact of psychological and social barriers on physical activity.

Results

The sample included ($N = 300$) participants who are female college students from different colleges of Sargodha. The results are analyzed by using SPSS 26 V and are described below in tabular form.

Table 1: Correlation between Study Variables

Variables	α	1	2	3	4	5	6	7
1 Physical Activity	.77	-						
2 Depression	.64	-.26**	-					
3 Anxiety	.62	-.16**	.51**	-				
4 Stress	.70	-.27**	.61**	.53**	-			
5 MSPSS	.83	.23**	-.36**	-.19*	-.13*	-		
6 PISQ	.75	.35**	-.10*	-.14*	-.15**	.31**	-	
7 Body Image	.77	-.32**	.15**	.22**	.46**	-.26**	.35**	-

Reliability analysis reveals satisfactory alpha coefficients among the variables of study. Correlation analysis from above table also depicts that among psychological barriers [depression ($r = -.26^{**}$, $p < .01$), anxiety ($r = -.16^{**}$, $p < .01$) and stress ($r = -.27^{**}$, $p < .01$)] significantly negatively correlates with physical activity. From social barriers social support ($r = .23^{**}$, $p < .01$) and parental influence ($r = .35^{**}$, $p < .01$) concerns positively correlates with physical activity and body image concerns ($r = -.32^{**}$, $p < .01$) negatively correlates with physical activity.

Table 2: Psychological Barriers as Predictor to Physical Activity

Variables	B	SE	β	P	95% CI LL, UL
Constant	26.83	.76		.000	[25.33, 28.33]
Depression	-.32	.14	-.17**	.02	[.04, .59]
Anxiety	-.04	.13	.02	.74	[-.29, .21]
Stress	-.31	.12	-.19**	.01	[.07, .55]

Simple linear regression analysis revealed that depression ($\beta = -.17^{**}$, $p < .01$) and stress ($\beta = -.19^{**}$, $p < .01$) significantly predicts physical activity. But anxiety ($\beta = .02$, p n.s) is not a significant predictor of physical activity. The overall model was significant explaining 10% variance with $\{F(3, 296) = 10.11, p < .001\}$.

Table 3: Social Barriers as Predictor to Physical Activity

Variables	<i>B</i>	<i>SE</i>	β	<i>p</i>	95% <i>CI</i> <i>LL, UL</i>
Constant	38.07	1.91		.000	[34.30, 41.82]
Social Support	.12	.02	.23**	.01	[.18, .63]
Parental Influence	.28	.08	.35**	.01	[.02, .21]
Body Image	-.26	.04	-.32**	.01	[-.07, -.55]

Simple linear regression analysis revealed that social support ($\beta = .23^{**}$, $p < .01$) and parental influence ($\beta = .35^{**}$, $p < .01$) significantly predicts physical activity and body image ($\beta = -.32^{**}$, $p < .01$) significantly negatively predict physical activity. The overall model was significant explaining 30% variance with $\{F(3, 296) = 36.14, p < .001\}$.

Discussion

The current study's major aim is to investigate the impact of psychological and social barriers as predictors of physical activity perceived by female college students. The sample included ($N = 300$) female college students, and data were collected from different government colleges of Sargodha. At first, reliability analysis revealed significant alpha reliabilities, and the correlation among all variables of the study was significant.

The first hypothesis is that Psychological barriers will negatively predict the physical activity among female college students. Maintaining both mental and physical well-being requires physical activity, but psychological obstacles like stress, anxiety, and depression can make it difficult for some people to participate, particularly female college students going through life transitions with more social and academic demands (Eisenberg et al., 2007). Depression, which is marked by melancholy, disinterest, and exhaustion, might discourage people from exercising. Reduced exercise and sports engagement are associated with depression symptoms among female college students. According to a meta-analysis by Schuch et al. (2017), people who experience more depressive symptoms are also much less active. Starting or maintaining a regular physical exercise regimen is sometimes hampered by the lack of energy, discouragement, and lessened pleasure associated with depression (Craft & Perna, 2004).

Excessive concern, dread of receiving a poor grade, and physical symptoms like elevated heart rate are all signs of anxiety that can be made worse by physical exertion, particularly in social or competitive contexts. Fear of failure or shame may cause female students to shun physical exercise (Biddle & Asare, 2011). According to Stanton et al. (2020), anxiety is also associated with

overanalyzing and perfectionistic worries, which might postpone or prevent action, including physical activity.

Stress, especially psychological and academic stress, is a major deterrent to physical exercise among college students. Excessive stress frequently results in a lack of energy, drive, and time, which fuels sedentary habits and harmful coping strategies like screen time or emotional eating (Nguyen-Michel et al., 2006). According to Lutz et al. (2010), long-term stress also throws off hormonal and physiological balances, which results in exhaustion and a decreased desire for physical activity.

Furthermore, the second hypothesis is also supported by existing study results, which states that Social barriers, including social support and parental influence, significantly positively predict physical activity among female college students. Health habits, particularly physical activity (PA), are greatly influenced by social influences. Peer, family, and parental support are powerful motivators for persistent PA involvement for female college students, even in the face of psychological obstacles that may prevent them from participating.

Increased physical activity is associated with social support, which encompasses informational, practical, and emotional assistance from others. Research has indicated that those who sense more social support are more inclined to be physically active. For instance, Darlow and Xu (2011) found that peer and parental encouragement significantly increased the amount of physical activity involvement among female college students. As peer connections gain greater clout in young adulthood, friend social support becomes even more important. In general, both adults and children who have more social support are more likely to be physically active (Sallis et al., 2000).

Parents' modeling, support, and participation in their daughters' physical activity have a big impact on their health decisions, especially when it comes to girls. According to a study by Gustafson and Rhodes (2006), children's physical activity habits are highly predicted by their parents' active lifestyles, with regular exercise routines having a higher chance of enduring into adolescence and adulthood. College-aged females' levels of physical activity are also positively impacted by parental encouragement, which includes verbal reinforcement, support for participating in sports, and the availability of equipment (Yao & Rhodes, 2015).

Moving on to 3rd hypothesis of the study, which states that body image negatively predicts physical activity, is also supported by the present study results. Physical exercise is severely hampered by body image issues, especially among female college students. Even while physical exercise is marketed as having health advantages, it is heavily impacted by social standards of beauty, especially for women. Ironically, worries about looks, body image, and fear of being judged can discourage physical exercise.

Females' levels of physical activity are significantly influenced by their body image or body dissatisfaction. Social pressure, comparison with desired body types, and fear of being negatively judged in public workout situations are common causes of this discontent (Hausenblas & Fallon, 2006). Exercise engagement is discouraged by social anxiety and body-related guilt, particularly in public or group settings like gyms, according to a 2010 study by Sabiston and Chandler. Because they are afraid of being judged, embarrassed, or feeling uncomfortable, female students who are unhappy with their bodies tend to avoid physical activity.

Similarly, lower motivation and self-efficacy operate as a mediating factor between higher levels of body surveillance and body shame and lower levels of physical activity (Vartanian & Shaprow, 2008). Furthermore, female college students who internalize thin-ideal body norms may avoid or participate in physical exercise inconsistently because they see it as an exercise or weight-control job (Berry et al., 2020).

Limitations and Suggestions

The study explores the impact of social and psychological barriers on female college students' physical activity levels. However, its limitations include the inability to conclusively demonstrate causality between factors like depression, anxiety, stress, body image, social support, and parental influence, the reliance on self-reported data, its sample specificity, and the potential impact of unmeasured confounding factors like personality characteristics, socioeconomic position, academic burden, and access to exercise facilities. Additionally, results from one cultural setting may not apply to various groups due to cultural variations, particularly body image and parental influence.

To prove causal links between obstacles and physical activity, future studies should use an experimental or longitudinal design. Pedometers and other objective metrics can decrease self-reporting and increase data accuracy. Generalizability can be enhanced by broadening the sample to encompass a range of age groups, genders, and cultural backgrounds. Interviews and other qualitative techniques can offer more in-depth understandings of students' experiences. It is possible to investigate intervention-based strategies such as body positivity programs. It's also important to take into account more general environmental and cultural elements, such as media impacts and conventional beauty standards.

Conclusions

The study looks at how social and psychological obstacles affect college-aged students' physical activity. It was discovered that while social support and parental influence are favorable indicators, psychological problems, including stress, anxiety, and depression, have a detrimental impact on physical exercise. However, issues with body image have a detrimental impact on physical activity, indicating that exercise may be discouraged by self-consciousness and fear of social rejection. According to the study, removing these obstacles with focused interventions may help female college students' emotional and physical well-being.

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