

Relationship between Dance Performance Anxiety, Perfectionism Propensity, and Body Image of the Ballet Class Participants Since 2020

Hye In Won¹

¹ Student, Dance Department, Sung Kyun Kwan University, South Korea, supreme82@naver.com

Abstract: This study focused on the relationship between obstacle factors and barriers that affect ballet class participants' during the COVID-19 pandemic. During the pandemic, in higher education, students who majored in dance or are in the learning process had difficulties learning, practicing, and demonstrating due to the changing learning routine. Especially, ballet major students' psychological and physical difficulties affected performance anxiety. This study aims to verify the between body image, perfectionism, and performance anxiety which could negatively influence learning and performance. Subjects who learned ballet at S, Y, and B universities participated in this study. There were 308 samples through purposive sampling. Perfectionism Propensity Scale, Multidimensional Body-self Relations Questionnaire, and Korean version Kenny Dance Performance Inventory were used as the measurement tools. The purposive quasi-experimental design was applied as the experimental research design. Additionally, multiple regression analysis was used for hypothesis verification ($p < .05$). As a result, weight control and appearance-oriented body image factor significantly affected personal and parental expectations of perfectionism propensity. In addition, weight control, and appearance-oriented body image significantly affected anxiety and intergenerational communication, depression and control, parental empathy and negative perception, and desperation and fear factors of dance performance anxiety. Health care and body satisfaction significantly affected concerns about the performance of dance performance anxiety. Moreover, personal and parental expectations and concerns and expectations about mistakes of perfectionism propensity significantly affected anxiety and intergenerational communication, concerns about performance, and anxiety about dance performance anxiety. In conclusion, Weight control and appearance were related to expectations and negative perceptions such as anxiety, depression, despair, fear, and communication with parents. In addition, the concern for the body and health was related to anxiety about performance. The expectations of themselves and their parents and concerns about performance were related to anxiety and communication.

Keywords: COVID-19 Pandemic, Dance Performance Anxiety, Perfectionism Propensity, Body Image, Ballet

1. Introduction

In early 2020, COVID-19 pandemic led to the fear of large in public. As humans are essentially living in a public society[1], during the pandemic, depression (21%) and anxiety (19%) appeared more frequently in young adults than in any previous epidemiological study[2]. Although we are in the "new normal" era post-COVID-19 pandemic, personal and private living has continued to be preferred and practiced rather than public or mass living. Before the outbreak, of the pandemic, education was

Received: December 29, 2022; 1st Review Result: February 11, 2023; 2nd Review Result: March 08, 2023
Accepted: March 31, 2023

conducted in public. However, face-to-face education was discontinued or replaced by priority-enabled education methods during the pandemic[3]. For example, an exercise-based subject education, creatively using digital technology, was applied to practical classes[4].

However, in higher education, students who majored in dance or are in the learning process have difficulties learning, practicing, and demonstrating due to the changing learning routine[5]. Previously, was common for ballet professionals to perform on the stage and receive audience feedback. These professionals faced psychological, and physical difficulties as several public performances were shut down[6]. In particular, psychological difficulties, such as the pressure to maintain physical appearance and concern about the practice, can lead to performance anxiety.

In addition, physical changes and management difficulties due to decreased practice frequency, unpredictable social situations, and psychological and mental fears about the affected academics and life. Specifically, a decrease in physical movements affected changes in body image and body satisfaction, leading to psychological anxiety and depression in ballet performers[7]. Therefore, the physical differences between dance professionals' sensitivity and inevitable in the body and technique have been maintained[8].

Thus, ballet professionals must be interested in body images[9], which include conscious and unconscious information and emotions about their body condition[10]. The physical profile, the physical image in which the physical experience reveals a mental image[11][12] constantly changes per the mood and environment.

In addition, the COVID-19 pandemic influenced ballet professionals' perfectionism[13]. Perfectionism is the tendency to achieve difficult and high standards[14]. On the other hand, a positive tendency is an effort to achieve self-actualization, higher adaptability, goals, and self-confidence[15]. Though, a negative tendency is to set impossible achievement standards, lower achievement motivation, and confidence, a weak ability to solve overly self-critical responsibilities and obligations, and a question the performance[16]. Therefore, perfectionism would cause performance anxiety and the negative effect of physical dissatisfaction and a negative eating attitude[17], resulting in dissatisfaction with a dance performance.

Performance phobia or performance anxiety means the anxiety or fear experienced when performing for the audience[18]. Therefore, performance anxiety negatively affects dancers' performance[19] performing careers, and quality of life[20]. Furthermore, if experiencing performance anxiety[21], talented performers with enough practice, and perfect preparation, eventually face anxiety and fear during the performance[22]. Hence, performance anxiety is classified as a social anxiety disorder and has been discussed as a performance obstruction factor[23]. Therefore, during social and environmental instabilities such as the COVID-19 pandemic, performance anxiety among dancers may increase.

Meanwhile, this approach has not been under-verified due to the lack of unusual circumstances for an appropriate measure of ballet practice. Hence, psychological factors related to body image, perfectionism, and performance anxiety must be analyzed as anxiety disorders.

This study aimed to determine the relationship between obstacle factors and barriers that affect the perceived troubles of ballet class participants who continued learning and practicing ballet during the COVID-19 pandemic. The study goal as a research issue was selected based on the background that concerns the interruption in perceived practical skills and technic of practical classes such as ballet would potentially have psychological characteristics similar to the majoring in dance, sports, entertainment, and performing arts students. For this study, body image, perfectionism, and performance anxiety were selected as specific obstacles to verify, the relation between the psychological variables of the class participants. Therefore, this study aims to provide meaningful results to improve the psychological happiness and satisfaction of ballet major students when dancers perform on stage post-Corona by verifying the significance of body image, perfectionism, and dance performance anxiety.

1.1 Conceptual Framework

1.1.1 Body Image

Body image is the way to reveal the body as self and is the body image people draw in their minds[24]. It consists of thoughts, feelings, evaluations, and behaviors related to one's body. Hence, it includes a multidimensional concept. This can be appreciated by four components:

- Cognitive dimension includes thoughts and beliefs about the body
- Perceptual dimension includes how people perceive the size and shape of their body and body parts
- Affective dimension includes feelings about the body
- Behavioral dimension includes people's actions to check, tend to, alter, or conceal their bodies[25].

1.1.2 Perfectionism

Perfectionism is the tendency to set high standards for self and others which are difficult to reach, but must be achieved[26].

Positive perfectionists exhibit positive efforts for achievement and self-realization, high personal adaptation and goal orientation, sincerity, and self-confidence. However, negative perfectionists set unachievable standards, lack achievement motivation, and confidence, lack self-critical responsibility and duty, and always question the quality of their tasks[27].

1.1.3 Performance Anxiety

Performance anxiety is the distressful apprehension or impairment of performance technique in public. It causes unwarranted individual aptitude, training, and level of preparation.

It is a subtype of social anxiety disorder, and the abnormal anxiety inherent in public performances leads to panic symptoms[28].

Further, Kenny's conceptual definition consists of "concern/fear", "physical anxiety", and "self/another scrutiny", and includes personal factors, especially the relationship between the respondents and their parents, or the attention received in childhood[29].

2. Method

2.1 experimental Design

A purposive quasi-experimental design was applied for experimental research design to consider the reliability of the sample size and the statistical power. This study is similar to general studies applying a quasi-experimental design for purposive convenience sampling. Since it was conducted on students in a specific selected subject, it is a design with a limitation of selective bias in the sampling of experimental design.

2.2 Subject

The Study's subjects were female students who learned ballet at S, Y, and B universities whereby 343 students were sampled by purposive sampling. Considering the homogeneity and normal distribution of the sample, relatively few men were excluded. Finally, 308 responded data were selected for analysis. By detecting the outlier deviations, the cases were based on the assumption of GRA criteria for multiple regression analysis calculated with G*power 3.1.9.7 program ($\alpha = .05$, $\beta = .85$) [Table 1].

[Table 1] General Characteristics

Variable	Level	n	%
Age (yr)	18-19	26	8.3
	20-22	181	57.6
	23-25	59	18.8
	25-30	47	15.0
Dance experience (yr)	5 >	68	22.1
	5-10	164	53.2
	11 ≤	69	22.4
	Others	7	2.3
Subjective happiness	Bad	26	8.4
	Normal	100	32.5
	Good	182	59.1
Subjective physical health	Bad	6	1.9
	Normal	46	14.9
	Good	256	83.1
Subjective mental health	Bad	20	6.5
	Normal	94	30.5
	Good	194	63.0
Total		308	100.0

2.3 Measurement Scale

2.3.1 Perfectionism Propensity (PPS)

The perfectionism propensity scale was developed[24] to measure the perfectionism tendencies for competitive sports and was verified for validation[25] by the dancers. It consisted of 16 items and four factors. Chronbach α showed ‘concern over mistakes’ (.746), ‘personal standards’ (.766), ‘parental criticism’ (.756), and ‘instructor criticism’ (.683).

2.3.2 Body Image (MBSRQ)

The multidimensional body-self relations questionnaire was used (MBSRQ)[26]. It was developed[27] with 28 items and six factors. α showed ‘appearance evaluation’ (.89), ‘appearance-oriented’ (.85), ‘body evaluation’ (.75), ‘body-oriented’ (.80), ‘health evaluation’ (.66), ‘body satisfaction’ (.80), and total (.85).

2.3.3 Dance Performance Anxiety (KMPAI)

The Kenny Music Performance Inventory[28] was revised into the Korean version called Kenny Dance Performance Inventory (KKDPAI)[29]; 40 items showed α ‘worry/dread and negative cognitions’ (.914), proximal somatic anxiety and worry about performance’ (.843), ‘depression/hopelessness’ (.882), ‘parental empathy–memory–controllability’ (.732), ‘generational transmission of anxiety’ (.590), ‘trust’ (None), ‘rumination’ (None), and total (.916).

2.4 Reliability and Validity

Reliability was verified by absolute agreement Cronbach's α and Intraclass Correlation Coefficient (ICC). Reliability showed the perfectionism propensity scale (α =.911, ICC=.896), the dance performance anxiety inventory (α =.822, ICC=.816), and the multidimensional body-self relations

questionnaire ($\alpha=.568$, $ICC=.554$) and total Cronbach's α (.791) [Table 2].

[Table 2] Reliability ($p<.05$)

Variable	Factor	Item	N	ICC	Cronbach's α
Perfectionism Propensity Scale	Personal & parental expectations	8,9,10,12,13,14,15,16	8	.896	.911
	Concerns & expectations about mistakes	1,2,3,4,5,6,7,11	8		
	Deleted	None	0		
Multidimensional Body-self Relations Questionnaire	Health care	15,16,17,18,20,21,22	7	.554	.568
	Weight control	7,8,9,10,11,12,14	7		
	Appearance-oriented	1,2,3,4,5,6	6		
	Body satisfaction	23,24,25,26,27,28	6		
	Deleted	13,19	2		
	Anxiety & intergenerational communication	24,25,26,27,28,29,30,36	8		
Dance Performance Anxiety Inventory	Depression & Control	1,2,3,4,5,6,10,13,14,15,	10	.816	.822
	Concerns about the performance	16,17,18,19,32,33,34,35	8		
	Anxiety	37,38,39,40	4		
	Parental empathy & negative perception	21,22,23	3		
	Desperation & fear	20,31	2		
	Deleted	9,11,12	3		
Total	12	79	84	.791	

The validity of the measurement scales was conducted by reducing the dimensions by exploratory factor analysis (EFA). maximum likelihood method (MLM), eigenvalue 1, factor loading over .50, and Promax rotation were applied to extract factor components. The perfectionism propensity scale extracted 2 factors and 16 items. Kaiser-Meyer-Olkin measure of sampling adequacy (KMO)=.943, Bartlett sphericity (BS) (120)=4673.249 ($p=.001$), and goodness-of-fit χ^2 (89)=506.294 were showed. The multidimensional body-self relations questionnaire extracted four factors and 26 items, then two items were deleted(13 and 19). KMO=.929, BS (325)=7421.069 ($p=.001$), and goodness-of-fit χ^2 (227)=660.307 showed. The dance performance anxiety inventory extracted six factors and 37 items, then three items were deleted (9,11, and 12). KMO=.945, BS (595)=10201.114 ($p=.001$), and goodness-of-fit χ^2 (400)=1033.080 ($p=.001$) were showed [Table 3].

[Table 3] EFA of the Perfectionism Propensity Scale (PPS), the Multidimensional Body-self Relations Questionnaire (MBSRQ), and the Dance Performance Anxiety Inventory (DPAI) ($p<.05$)

Item	DPAI						Item	MBSRQ				Item	PPS	
	DPAI1	DPAI2	DPAI3	DPAI4	DPAI5	DPAI6		MBSRQ1	MBSRQ2	MBSRQ3	MBSRQ4		PPS1	PPS2
27	.916	.002	-.068	.012	-.004	.023	15	.939	-.039	-.061	-.109	15	.961	-.136
29	.912	.011	.020	.001	-.041	-.083	18	.922	-.030	.076	-.066	16	.874	.006
26	.843	.093	.011	.004	-.131	.034	16	.900	.042	-.060	-.069	9	.823	.081
28	.838	.036	.069	-.008	-.044	-.132	20	.852	.069	-.036	.013	12	.801	.013
25	.829	-.021	.043	-.026	.139	-.151	21	.827	.039	-.026	.071	14	.772	.098
30	.805	.031	.004	.065	-.014	.079	22	.792	.012	-.016	.087	8	.714	.223
36	.515	-.151	.315	-.037	.076	-.070	17	.773	-.037	.088	.102	13	.673	.205
24	.474	.039	-.018	.025	.365	.054	14	.001	.946	-.035	.045	10	.597	.177
3	.032	.845	-.182	.025	.000	.084	10	-.044	.878	.058	.048	3	-.001	.884
2	.094	.838	-.036	.021	-.043	-.088	9	-.005	.875	.022	-.007	4	.058	.856
4	-.130	.829	.037	-.017	-.077	.115	8	-.032	.869	-.053	-.002	5	.130	.762

1	.045	.739	.058	-.041	-.003	-.086	11	.065	.863	.038	-.063	11	.280	.554
5	-.122	.738	.242	.003	.000	-.107	7	.051	.807	.052	-.036	2	.312	.546
10	-.002	.698	.081	-.050	-.013	-.042	12	.020	.571	.270	.050	7	.274	.519
6	-.006	.675	.101	.040	-.050	.011	3	.033	-.039	.917	-.024	1	-.099	.500
13	.037	.601	-.136	-.001	.113	.065	5	-.004	.005	.834	-.037			
14	.147	.536	-.028	.005	.111	.049	6	-.006	.050	.826	.016			
15	.193	.498	.020	-.025	.068	.062	2	-.021	.086	.773	.015			
17	-.084	.025	.977	.055	-.008	-.102	1	-.068	.105	.738	-.038			
18	-.021	.063	.817	.042	.083	-.029	4	.012	.079	.734	.015			
16	.066	-.039	.803	-.001	-.012	.020	27	-.069	.041	-.043	.874			
19	-.058	.139	.748	-.025	.110	-.081	28	-.024	.020	.043	.830			
32	.216	-.023	.682	-.047	-.130	.244	26	-.094	.064	-.087	.775			
33	.219	-.006	.627	-.025	-.069	.242	25	.193	-.103	-.001	.646			
34	.170	.029	.606	.006	-.077	.271	24	.176	-.082	.033	.608	6	.128	.455
35	.300	-.054	.511	-.003	.030	.119								
40	-.101	.040	-.025	.907	.004	.047								
38	.003	.058	-.002	.890	-.079	-.033								
39	.030	-.060	.028	.821	.036	.013								
37	.102	-.064	.030	.804	.039	-.027								
22	.074	-.084	-.030	-.015	.899	.048	23	.280	.008	.062	.522			
21	-.034	.076	.031	.024	.811	.038								
23	.013	.051	.086	-.013	.768	.018								
31	-.036	.006	.496	-.005	.041	.648								
20	-.094	.043	.510	.010	.095	.599								

Perfectionism propensity scale **PPS1**; personal & parental expectations, **PPS2**; concerns & expectations about mistakes
Multidimensional body-self relations questionnaire **MBSRQ1**; health care, **MBSRQ2**; weight control, **MBSRQ3**; appearance-oriented, **MBSRQ4**; body satisfaction
Dance performance anxiety inventory **DPAI1**; anxiety & intergenerational communication, **DPAI2**; depression & Control, **DPAI3**;
concerns about the performance, **DPAI4**; anxiety, **DPAI5**; parental empathy & negative perception, **DPAI6**; desperation & fear

2.5 Data Processing

Reliability (Cronbach's α), validity (EFA), correlation coefficient (Pearson's r), normal distribution (Descriptive analysis & frequency), and the standard MRA (VIF & partial correlation) were presented for the processing. Multicollinearity was considered close to 1 or VIF was judged to be suitable if it satisfies less than 10, and the standard regression analysis method was used for the variable input. MS-Excel. version 2211 for the data coding and IBM SPSS. version 23.0 (SPSS, Chicago, IL, USA) for the data analysis. Moreover, the type 1 error α at .05 and type 2 error β at .85 were set in one tail test.

2.6 Consideration of Research Ethics

The Institutional Review Board (IRB) for the research process and participation was approved under the Personal Information Protection Act (Act No. 10465 on March 29, 2011) of the Korea Bioethics and Safety Act and following the Helsinki Declaration of Research Ethics.

3. Result

The assumption of normality of the factors of the model's variables was confirmed based on the skewness <1 and the kurtosis <7 . As a result of descriptive analysis, the assumption of normal distribution of 12 factors was satisfied [Table 4].

[Table 4] Descriptive Analysis

Factor	M	Error	SD	Variance	Skewness	Kurtosis
Personal & parental expectations	3.68	.05	.88	.77	.14	1.05
Concerns & expectations about mistakes	3.91	.05	.94	.88	.35	1.21
Health care	4.23	.04	.71	.50	.54	.52
Weight control	4.03	.04	.75	.56	.23	.93
Appearance-oriented	3.86	.04	.77	.60	.07	1.11
Body satisfaction	3.97	.04	.71	.51	.00	.99
Anxiety & intergenerational communication	3.89	.04	.75	.56	.19	1.20
Depression & control	4.13	.04	.73	.54	.36	1.14
Concerns about the performance	3.98	.05	.80	.65	.16	1.12
Anxiety	3.76	.05	.91	.82	.04	1.17
Parental empathy & negative perception	4.05	.05	.86	.75	.42	.84
Desperation & fear	4.05	.04	.75	.56	.12	1.19

On the PPS1-PPS2, MBSRQ1-DPAI5, MBSRQ2-MBSRQ3, MBSRQ2-DPAI1, MBSRQ2-DPAI2, MBSRQ2-DPAI4, MBSRQ2-DPAI5, MBSRQ2-DPAI6, MBSRQ3-DPAI1, MBSRQ3-DPAI2, MBSRQ3-DPAI4, MBSRQ3-DPAI5, MBSRQ3-DPAI6, DPAI1-DPAI2, DPAI1-DPAI4, DPAI1-DPAI5, DPAI1-DPAI6, DPAI2-DPAI4, DPAI2-DPAI5, DPAI2-DPAI6, DPAI4-DPAI5, DPAI4-DPAI6, and DPAI5-DPAI6 were positively and significantly correlated (** $p < .01$). MBSRQ1-MBSRQ2, MBSRQ1-MBSRQ4, and MBSRQ1-DPAI6 were positively and significantly correlated (* $p < .05$, 2-tailed). The PPS1-DPAI1 was negatively and significantly correlated (* $p < .05$) [Table 5].

[Table 5] Correlation Coefficient (** $p < .01$, * $p < .05$ 2-tailed)

	PPS1	PPS2	DPAI1	DPAI2	DPAI3	DPAI4	MBSRQ1	MBSRQ2	MBSRQ3	MBSRQ4	MBSRQ5	MBSRQ6
PPS1												
PPS2	.838**											
DPAI1	-.094	-.100										
DPAI2	.003	.044	.119*									
DPAI3	-.108	-.035	.047	.714**								
DPAI4	-.109	-.093	.628**	-.003	-.026							
MBSRQ1	-.113*	-.025	.043	.730**	.941**	-.041						
MBSRQ2	.038	.056	.083	.606**	.539**	.035	.541**					
MBSRQ3	-.029	.070	-.065	.059	.071	.069	.060	-.007				
MBSRQ4	-.033	.045	.033	.615**	.595**	-.056	.654**	.531**	-.034			
MBSRQ5	-.014	.020	.148**	.903**	.641**	.033	.681**	.602**	.029	.608**		
MBSRQ6	.016	.055	.135*	.931**	.692**	.033	.732**	.635**	.066	.643**	.864**	

Perfectionism propensity scale **PPS1**; personal & parental expectations, **PPS2**; concerns & expectations about mistakes
 Multidimensional body-self relations questionnaire **MBSRQ1**; health care, **MBSRQ2**; weight control, **MBSRQ3**; appearance-oriented, **MBSRQ4**; body satisfaction
 Dance performance anxiety inventory **DPAI1**; anxiety & intergenerational communication, **DPAI2**; depression & Control, **DPAI3**; concerns about the performance, **DPAI4**; anxiety, **DPAI5**; parental empathy & negative perception, **DPAI6**; desperation & fear

3.1 Relationship of Body Image to Perfectionism Propensity

By regression analysis, body image on the “personal and parental expectations” model showed Dubin-Watson=1.454, $F(4)=3.126$ ($p < .05$), adjusted $R^2=.03$ in “weight control” ($p=.032$) and “appearance-oriented” ($p=.004$) accounted for “personal and parental expectations” significantly. However, “health care” ($p=.475$) and “body satisfaction” ($p=.261$) accounted for “personal and parental expectations” insignificantly.

Body image on the “concerns and expectations about mistakes” model showed Dubin-Watson=1.428, $F(4)=3.126$ ($p<.05$), adjusted $R^2=.01$ in “health care” ($p=.249$), “weight control” ($p=.055$), “appearance-oriented” ($p=.075$), and “body satisfaction” ($p=.561$) accounted for “concerns and expectations about mistakes” insignificantly.

3.2 Relationship of Body Image to Dance Performance Anxiety

Body image on the “anxiety and intergenerational communication” model showed Dubin-Watson=2.044, $F(4)=625.001$ ($p<.05$), adjusted $R^2=.89$ in “weight control” ($p=.001$) and “appearance-oriented” ($p=.001$) accounted for “anxiety and intergenerational communication” significantly. However, “health care” ($p=.975$) and “body satisfaction” ($p=.428$) accounted for “anxiety and intergenerational communication” insignificantly.

Body image on the “depression and control” model showed Dubin-Watson=1.859, $F(4)=48.955$ ($p<.05$), adjusted $R^2=.39$ in “weight control” ($p=.001$) and “appearance-oriented” ($p=.001$) accounted for “depression and control” significantly. However, “health care” ($p=.975$) and “body satisfaction” ($p=.394$) accounted for “depression and control” insignificantly.

Body image on the “concerns about the performance” model showed Dubin-Watson=1.407, $F(4)=2.541$ ($p<.05$), adjusted $R^2=.02$ in “health care” ($p=.009$) and “body satisfaction” ($p=.009$) accounted for “concerns about the performance” significantly. However, “weight control” ($p=.583$) and “appearance-oriented” ($p=.510$) accounted for “concerns about the performance” insignificantly.

Body image on the “anxiety” model showed Dubin-Watson=1.871, $F(4)=57.101$ ($p<.05$), adjusted $R^2=.42$ in “weight control” ($p=.001$) and “appearance-oriented” ($p=.001$) accounted for “anxiety” significantly. However, “health care” ($p=.980$) and “body satisfaction” ($p=.397$) accounted for the “anxiety” insignificantly.

Body image on the “parental empathy and negative perception” model showed Dubin-Watson=2.068, $F(4)=339.354$ ($p<.05$), adjusted $R^2=.82$ in “weight control” ($p=.001$) accounted for “parental empathy and negative perception” significantly. However, “health care” ($p=.336$), “appearance-oriented” ($p=.880$), and “body satisfaction” ($p=.598$) accounted for “parental empathy and negative perception” insignificantly.

Body image on the “desperation and fear” model showed Dubin-Watson=1.828, $F(4)=508.443$ ($p<.05$), adjusted $R^2=.87$ in “weight control” ($p=.001$) and “appearance-oriented” ($p=.054$), accounted for “desperation and fear” significantly. However, “health care” ($p=.844$) and “body satisfaction” ($p=.205$) accounted for “desperation and fear” insignificantly.

3.3 Relationship of Perfectionism Propensity to Dance Performance Anxiety

Perfectionism propensity on the “anxiety and intergenerational communication” model showed Dubin-Watson=1.522, $F(2)=4.567$ ($p<.05$), adjusted $R^2=.02$ in “personal and parental expectations” ($p=.003$) and “concerns and expectations about mistakes” ($p=.025$) accounted for “anxiety and intergenerational communication” significantly.

Perfectionism propensity on the “depression and control” model showed Dubin-Watson=1.840, $F(2)=.517$ ($p>.05$), adjusted $R^2=.003$ in “personal and parental expectations” ($p=.783$) and “concerns and expectations about mistakes” ($p=.445$) accounted for “depression and control” insignificantly.

Perfectionism propensity on the “concerns about the performance” model showed Dubin-Watson=1.522, $F(2)=4.567$ ($p<.05$), adjusted $R^2=.02$ in “personal and parental expectations” ($p=.005$) and “concerns and expectations about mistakes” ($p=.003$) accounted for “concerns about the performance” significantly.

Perfectionism propensity on the “anxiety” model showed Dubin-Watson=1.621, $F(2)=2.958$ ($p<.05$),

adjusted $R^2=.01$ in “personal and parental expectations” ($p=.022$) and “concerns and expectations about mistakes” ($p=.019$) accounted for “anxiety” significantly.

Perfectionism propensity on the “parental empathy and negative perception” model showed Dubin-Watson=1.433, $F(2)=.544$ ($p>.05$), adjusted $R^2=.003$ in “personal and parental expectations” ($p=.325$) and “concerns and expectations about mistakes” ($p=.312$) accounted for “parental empathy and negative perception” insignificantly.

Perfectionism propensity on the “desperation and fear” model showed Dubin-Watson=1.433, $F(2)=.544$ ($p>.05$), adjusted $R^2=.001$ in “personal and parental expectations” ($p=.344$) and “concerns and expectations about mistakes” ($p=.189$) accounted for “desperation and fear” insignificantly [Table 6].

[Table 6] Results of the Multiple Regression Analysis ($p<.05$)

DV	Model (IV)	B	Sd. Er	β	t	p	Correlation		Collinearity		Adjusted R^2		
							Partial	Part	Tolerance	VIF			
Perfectionism propensity	(Constant)	4.553	.416		10.955	.001							
	Personal & parental expectations	Health care	.065	.091	.052	.715	.475	.041	.040	.590	1.694	.03	
		Weight control	.206	.095	.175	2.158	.032	.123	.122	.480	2.083		
		Appearance-oriented	.265	.092	.233	2.895	.004	.164	.163	.488	2.048		
		Body satisfaction	.101	.090	.082	1.126	.261	.065	.063	.600	1.667		
	Concerns & expectations about mistakes	(Constant)	4.497	.448		10.034	.001						
		Health care	.113	.098	.085	1.155	.249	.066	.066	.590	1.694	.01	
		Weight control	.198	.103	.158	1.927	.055	.110	.109	.480	2.083		
		Appearance-oriented	.176	.099	.145	1.785	.075	.102	.101	.488	2.048		
	Body satisfaction	.056	.097	.043	.582	.561	.033	.033	.600	1.667			
	Dance performance anxiety	Anxiety & intergenerational communication	(Constant)	.277	.119		2.320	.021					
			Health care	.001	.026	.001	.032	.975	.002	.001	.590	1.694	.89
Weight control			.119	.027	.119	4.362	.001	.243	.082	.480	2.083		
Appearance-oriented			.831	.026	.855	31.634	.001	.876	.598	.488	2.048		
Body satisfaction		.020	.026	.019	.794	.428	.046	.015	.600	1.667			
Depression & control		(Constant)	1.398	.276		5.066	.001						
		Health care	.012	.060	.012	.200	.842	.011	.009	.590	1.694	.39	
		Weight control	.443	.063	.453	7.002	.001	.373	.314	.480	2.083		
		Appearance-oriented	.206	.061	.218	3.397	.001	.192	.152	.488	2.048		
Body satisfaction		.051	.060	.049	.853	.394	.049	.038	.600	1.667			
Concerns about the performance		(Constant)	3.644	.382		9.529	.001						
		Health care	.221	.084	.194	2.637	.009	.150	.149	.590	1.694	.02	
	Weight control	.048	.088	.045	.549	.583	.032	.031	.480	2.083			
	Appearance-oriented	.056	.084	.053	.660	.510	.038	.037	.488	2.048			
Body satisfaction	.218	.082	.193	2.639	.009	.150	.149	.600	1.667				
Anxiety	(Constant)	.666	.331		2.012	.045							
	Health care	.002	.073	.001	.026	.980	.001	.001	.590	1.694	.42		
	Weight control	.470	.076	.388	6.190	.001	.335	.269	.480	2.083			
Appearance-oriented	.373	.073	.317	5.111	.001	.282	.222	.488	2.048				

	Body satisfaction	.061	.071	.048	.849	.397	.049	.037	.600	1.667	
	(Constant)	.373	.178		2.088	.038					
Parental empathy & negative perception	Health care	.038	.039	.031	.964	.336	.055	.024	.590	1.694	
	Weight control	1.043	.041	.903	25.502	.001	.826	.626	.480	2.083	.82
	Appearance-oriented	.006	.039	.005	.151	.880	.009	.004	.488	2.048	
	Body satisfaction	.020	.038	.017	.527	.598	.030	.013	.600	1.667	
	(Constant)	.085	.130		.657	.512					
Desperation & fear	Health care	.006	.029	.005	.197	.844	.011	.004	.590	1.694	
	Weight control	.889	.030	.890	29.805	.001	.864	.617	.480	2.083	.87
	Appearance-oriented	.055	.029	.057	1.935	.054	.110	.040	.488	2.048	
	Body satisfaction	.036	.028	.034	1.269	.205	.073	.026	.600	1.667	
	(Constant)	4.128	.189		21.792	.001					
Anxiety & intergenerational communication	Personal & parental expectations	.264	.088	.309	2.988	.003	.169	.169	.298	3.358	.02
	Concerns & expectations about mistakes	.187	.083	.233	2.258	.025	.128	.127	.298	3.358	
	(Constant)	3.975	.187		21.211	.001					
Depression & control	Personal & parental expectations	-.024	.087	.029	.276	.783	.016	.016	.298	3.358	.003
	Concerns & expectations about mistakes	.063	.082	.080	.765	.445	.044	.044	.298	3.358	
	(Constant)	3.914	.203		19.282	.001					
Concerns about the performance	Personal & parental expectations	.267	.095	.291	2.820	.005	.159	.159	.298	3.358	
	Concerns & expectations about mistakes	.269	.089	.314	3.036	.003	.171	.171	.298	3.358	.02
	(Constant)	3.746	.230		16.274	.001					
Anxiety	Personal & parental expectations	.247	.107	.239	2.297	.022	.130	.130	.298	3.358	.01
	Concerns & expectations about mistakes	.237	.100	.245	2.361	.019	.134	.134	.298	3.358	
	(Constant)	4.041	.221		18.281	.001					
Parental empathy & negative perception	Personal & parental expectations	.102	.103	.103	.985	.325	.056	.056	.298	3.358	.003
	Concerns & expectations about mistakes	.098	.096	.106	1.013	.312	.058	.058	.298	3.358	
	(Constant)	3.929	.191		20.578	.001					
Desperation & fear	Personal & parental expectations	.084	.089	.099	.948	.344	.054	.054	.298	3.358	.001
	Concerns & expectations about mistakes	.110	.083	.138	1.316	.189	.075	.075	.298	3.358	

4. Discussion

This study focused on the relationship between obstacle factors and barriers that affected the

perceived challenges of ballet class participants who continued learning and practicing ballet during the COVID-19 pandemic. For this study, body image, perfectionism, and performance anxiety were selected as specific obstacles to verify, the relation between the psychological variables of class participants. Thus, this study provided meaningful results to improve psychological happiness and satisfaction when dancers performed on stage post-Corona by verifying the significance of body image, perfectionism, and dance performance anxiety.

Dancers are required to develop skills such as increasing flexibility, strength, and control ability. In addition, they need mental strength, concentration, and accurate timing. Confidence on stage is required to maintain psychological stability for practice, improvement, and training.

This study's results demonstrated that body image positively affected perfectionism propensity in weight control and appearance-oriented for personal and parental expectations regarding physical appearance.

Positive body image perception was associated with dancers' grit. Moreover, ballet dancers' psychological factors demonstrated higher weight preoccupation than non-dancers leading to weight control with the same implications as influencing a dancer's appearance management. The evidence supporting the outcomes explained overcoming a negative physical appearance was considered proper behavior for physical appearance control.

Furthermore, during the COVID-19 pandemic, body image led to anxiety, which caused serious psychological problems, that threatened their well-being. Positive body appreciation, internal body orientation, and functional body satisfaction positively influenced appearance-based exercise concerning shape control for dancers. In addition, it indicated that higher appearance-based exercise could weaken these aspects. Rato & Alves (2020)[30] reported that body image was associated with movement a complex phenomenon that impacted the dancers' psychology, emotion, and behavior. These derived and indicated psychological characteristics of perfectionism are particularly high for concern over mistakes, personal standards, parental expectations, and doubts about actions to support and emphasize discussion.

Perfectionism propensity affected dance performance anxiety regarding personal and parental expectations and concerns and expectations about mistakes for anxiety and intergenerational communication, concerns about the performance, and anxiety. Performance anxiety negatively affected on performers' mental and physical stress, leading to further fear and adversely affecting their performance, career, and health. Hence, undergraduate students of performing arts, such as theater, acting, music, and dance, could control their perfectionism. A result supports it performance anxiety is related to decreasing performance level and frequency of the individual pressure of expectations on perfectionism. On the other hand, a result that doesn't support anxiety may appear unexpectedly in some performers' cases who are obliged to be on the stage for professional reasons[31] These results indicated that concern over mistakes, personal standards, parental expectations, and parental criticism of perfectionism were related to anxiety and were important points for discussion.

5. Conclusion

This study aimed to determine the relationship between the obstacle factors and barriers that affected the perceived challenges of ballet class participants who continued learning and practicing ballet during the COVID-19 pandemic. Meaningful results could be constructed to improve positive psychological effects to prepare the post-Corona dance education. Therefore, body image, perfectionism, dance performance anxiety, weight control, and appearance were related to expectations, anxiety, depression, empathy, negative perception, desperation and fear. In addition, health care, body satisfaction, expectations and concerning mistake were related to anxiety and performance concern.

This study has a limitation in that it studied students who took ballet courses at universities during

the COVID-19 pandemic from 2020. In addition, the background of the study was the period of exposure to extremely limited face-to-face classes. Research should also be conducted to provide information on the primary response to students majoring in performing arts' unstable studies and performances when they face the new normal era in the future.

In conclusion, body image, perfectionism, and dance performance anxiety regarding weight and appearance were related to expectations and negative perceptions, and body perception and expectations were related to performance anxiety.

References

- [1] Amuna, F. B. Zotor, Epidemiological and nutrition transition in developing countries: impact on human health and development, *Proceedings of the Nutrition Society*, (2008), Vol.67, No.1, pp.82-90.
DOI: <http://dx.doi.org/10.1017/s0029665108006058>
- [2] C. Pieh, S. Budimir, P. Thomas, The effect of age, gender, income, work, and physical activity on mental health during coronavirus disease (COVID-19) lockdown in Austria, *Journal of psychosomatic research*, (2003), Vol.136, 110186.
DOI: <http://dx.doi.org/10.1016/j.jpsychores.2020.110186>
- [3] D. Qutishat, R. Obeidallah, Y. Qawasmeh, Y. An Overview of attendance and participation in online class during the COVID pandemic: A case study, *International Journal of Interactive Mobile Technologies*, (2022), Vol.16, No.4, pp.103-115.
DOI: <http://dx.doi.org/10.3991/ijim.v16i04.27103>
- [4] Z. Li, Teaching introduction to dance studies online under COVID-19 restrictions, *Dance education in practice*, (2020), Vol.6, No.4, pp.9-15.
DOI: <https://doi.org/10.1080/23734833.2020.1831853>
- [5] D. Milovanovic, Virtual democracy: Online ballet and contemporary dance classes during the COVID-19 crisis, *The International Journal of Screendance*, (2021), Vol.12.
DOI: <https://doi.org/10.18061/ijds.v12i0.7927>
- [6] Q. Li, Z. Li, J. Han, JA hybrid learning pedagogy for surmounting the challenges of the COVID-19 pandemic in the performing arts education, *Education and Information Technologies*, (2021), Vol.26, No.6. pp.7635-7655.
DOI: <http://dx.doi.org/10.1007/s10639-021-10612-1>
- [7] A. Danis, A. N. Jamaludin, H. A. M. A. Majid, K. A. M. Isa, Body image perceptions among dancers in urban environmental settings, *Procedia-Social and Behavioral Sciences*, (2016), Vol.222, pp.855-862.
DOI: <https://doi.org/10.1016/j.sbspro.2016.05.196>
- [8] D. van Winden, R. M., Van Rijn, G. J. P., Savelsbergh, R. R. D., Oudejans, J. H. Stubbe. Characteristics and extent of mental health issues in contemporary dance students, *Medical problems of performing artists*, (2020), Vol.35, No.3, pp.121-129.
DOI: <http://dx.doi.org/10.21091/mppa.2020.3019>
- [9] M. McCloskey, Exercise and eating habits of university students in relation to their body image and life satisfaction, *Dublin Business School*, (2019)
Available from: <https://esource.dbs.ie/handle/10788/3864>
- [10] T. F. Cash, E. C. Fleming, The impact of body image experiences: development of the body image quality of life inventory, *International Journal of eating disorders*, (2002), Vol.31, No.4, pp.455-460.
DOI: <http://dx.doi.org/10.1002/eat.10033>
- [11] P. Schiler, *The image and appearance of the human body*, Routledge, (2013)
- [12] S. Duschek, N. S. Werner, G. A. R. del Paso, R. Schandry, The contributions of interoceptive awareness to cognitive and affective facets of body experience, *Journal of Individual Differences*. (2015), Vol.36, No.2, pp.110-118.
DOI: <http://dx.doi.org/10.1027/1614-0001/a000165>

- [13] K. Baab, An Investigation into the relationships between perfectionism and self-efficacy for learning during online dance classes, doctoral dissertation, Trinity laban conservatoire of music and dance (United Kingdom)(8884), (2020)
- [14] M. J. Kim, Construct validity of perfectionism propensity scale for university dancers, *Korean Society of Measurement and Evaluation for Physical Education and Sports Science*, (2010), Vol.12, No.3, pp.45-57.
- [15] G. L. Flett, P. L. Hewitt, Reflections on perfection and the pressure to be perfect in athletes, dancers, and exercisers: A focus on perfectionistic reactivity in key situations and life contexts, In *The psychology of perfectionism in sport, dance and exercise*, Routledge, pp.312-336, (2016)
DOI: <https://doi.org/10.4324/9781315661100>
- [16] G. L. Flett, T. Nepon, P. L. Hewitt, P. L. Perfectionism, worry, and rumination in health and mental health: A review and a conceptual framework for a cognitive theory of perfectionism, *Perfectionism, health, and well-being*, (2016), pp.121-155.
DOI: https://doi.org/10.1007/978-3-319-18582-8_6
- [17] R. Tobin, D. M. Dunkley, Self-critical perfectionism and lower mindfulness and self-compassion predict anxious and depressive symptoms over two years, *Behaviour Research and Therapy*, (2021), Vol.136, 103780.
DOI: <http://dx.doi.org/10.1016/j.brat.2020.103780>
- [18] H. M. Haraldsen, A. Ivarsson, B. E. Solstad, F. E. Abrahamsen, H. Halvari, Composites of perfectionism and inauthenticity in relation to controlled motivation, performance anxiety and exhaustion among elite junior performers. *European journal of sport science*, (2021), Vol.21, No.3, pp.428-438.
DOI: <http://dx.doi.org/10.1080/17461391.2020.1763478>
- [19] D. T. Kenny, *The psychology of music performance anxiety*, 1st ed., Oxford: Oxford University Press, (2011)
- [20] Z. D. Yondem, Performance anxiety, dysfunctional attitudes and gender in university music students, *Social Behavior and Personality: an international journal*, (2007), Vol.35, No.10, pp.1415-1426.
DOI: <https://doi.org/10.2224/sbp.2007.35.10.1415>
- [21] K. Chow, III. E. Mercado, Performance anxiety and the plasticity of emotional responses, *Cognition and Emotion*, (2020), Vol.34, No.7, pp.1309-1325.
DOI: <http://dx.doi.org/10.1080/02699931.2020.1749568>
- [22] D. U. Yoon, B. A. Song, H. J. Lee, E. R. Yu, The Relationship between Taking Propranolol Related to Music Performance Anxiety and Stress Coping Model in Art High School Students Majoring in Music, *Stress*, (2021), Vol.29, No.4, pp.227-234.
DOI: <http://dx.doi.org/10.17547/kjsr.2021.29.4.227>
- [23] S. H. Oh, E. R. Yu, H. J. Lee, D. M. Yoon, Reliability and validity of the Korean version of the Kenny Music Performance Anxiety Inventory, *Journal of Korean neuropsychiatric association*, (2020), Vol.59, No.3, pp.250-259.
DOI: <http://doi.org/10.4306/jknpa.2020.59.3.250>
- [24] T. F. Cash, T. E. Pruzinsky, *Body images: Development, deviance, and change*, Guilford Press, (1990)
- [25] S. A. Hosseini, R. K. Padhy, *Body image distortion*, In *StatPearls [Internet]*, Treasure Island (FL): StatPearls Publishing, (2022)
- [26] P. L. Hewitt, G. L. Flett, W. Turnbull-Donovan, S. F. Mikail, The Multidimensional Perfectionism Scale: reliability, validity, and psychometric properties in psychiatric samples, *Psychological assessment: a journal of consulting and clinical psychology*, (1991), Vol.3, No.3, pp.464-468.
DOI: <https://doi.org/10.1037/1040-3590.3.3.464>
- [27] G. L. Flett, P. L. Hewitt, The perils of perfectionism in sports and exercise, *Current directions in psychological science*, (2005), Vol.14, No.1, pp.14-18.
DOI: <https://doi.org/10.1111/j.0963-7214.2005.00326.x>
- [28] American Psychiatric Association, *Diagnostic and statistical manual of mental disorders (DSM-5)*, 5th ed., Washington DC: American Psychiatric Association, p.2037, (2013)
- [29] D. H. Powell, Treating individuals with debilitating performance anxiety: an introduction, *Journal of clinical psychology*, (2004), Vol.60, No.8, pp.801-808.

DOI: <https://doi.org/10.1002/jclp.20038>

[30] R. Rato, M. J. Alves, Somatic education and the undergraduate dance student's body image: a qualitative study, *Cadernos de Educação Tecnologia e Sociedade*, (2020), Vol.13, No.3, pp.319-328.

DOI: <https://doi.org/10.14571/brajets.v13.n3.272-278>

[31] K. P. Akguül, The effects of performance anxiety on performance level, *Music and dance research*, (2020), Vol.1, pp.1-95.

E-ISBN: 978-605-2238-36-3