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STUDY THE ISSUE OF THE BODY IMAGE

The image, which we have about ourselves influences us and it is influenced by all our perceptions, experiences and actions. A person who perceives himself or herself to be weak and fragile is different from someone who perceives himself or herself to be strong and agile. Our emotions and actions are inseparable from the body image, so are the emotions and actions of others inseparable from their bodies. According to this, the psychometric properties of a Russian version of the Multidimenional Body-Self Relations Questionnaire–Appearance Scales (MBSRQ–AS) were studied. A total of 1035 university students (147 males, 887 females) were administered the Russian MBSRQ–AS, the Russian Body Image Questionaire and Resenberg Self-Esteem assessment.

An exploratory factor analysis revealed that the Russian MBSRQ–AS items significantly loaded with the scale's main factors. Internal consistencies of the subscales ranged from .58 to .82. Test-retest reliabilities ranged from .65 to .77. Convergent validity was also confirmed as the Russian MBSRQ–AS subscales correlated positively with the Russian Body Image Questionnaire.

Key words: body image, body-self relation, self-esteem, self-regulation, ideal body.

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Дене бейнесін зерттеу мәселесі

Өзіміз жайлы ойымыздағы бейнеміз бізге әсер етеді және оған біздің барлық қабылдауымыз, уайым мен іс-әрекеттеріміз әсер етеді. Өзін әлсіз және нәзік сезінетін адам өзін күшті және қозғалыссыз сезінетін адамнан ерекшеленеді. Біздің эмоцияларымыз бен іс-әрекеттеріміз денеміздің бейнесінен ажыратылмайды, сондай-ақ басқа да эмоциялар мен іс-әрекеттер олардың денелерінен ажыратылмайды. Осыған байланысты, көп өлшемді дене-бойлық қарым-қатынастар сұрақ-көрініс шкаласының (MBSRQ-AS) орыс тіліндегі нұсқасының психометриялық қасиеттері зерттелді. Ресейлік MBSRQ-AS, ресейлік сауалнамасы және Resenberg Self-Esteem (өзін-өзі бағалау) бағалауы бойынша жалпы 1035 студент (147 еркек, 887 әйел) қатысты.

Зерттеу факторының талдауы ресейлік MBSRQ-AS элементтері масштабтағы негізгі факторларға айтарлықтай жүктелгенін көрсетті. Ішкі субсидиялардың ішкі реттілігі 58-ден 82-ге дейін өзгерді. Сынақ-қайта сынау сенімділігі 65-тен 77-ге дейін өзгерді. Сонымен қатар, ресейлік MBSRQ-AS ішкі саны ресейлік «Body Image Question» сауалнамасына тура корреляция ретінде дәлелденді.

Түйін сөздер: дене имиджі, денеге өзіндік қарым-қатынасы, өзін-өзі бағалау, өзін-өзі реттеу, мінсіз дене.

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К вопросу об исследовании образа тела

Образ, который мы имеем о себе, влияет на нас, а на этот образ, в свою очередь, влияют наши процессы, включающие восприятие, переживания и действия. Человек, воспринимающий себя слабым и хрупким, отличается от того, кто воспринимает себя сильным и подвижным. Наши эмоции и действия неотделимы от образа тела, так и эмоции и действия других неотделимы от их тел. В связи с этим были изучены психометрические свойства российской версии Многоаспектного анкетирования отношения к телу – шкала (весы) внешности. В общей сложности 1035 студентов университетов (147 – мужского пола, 887 – женского пола) прошли российскую версию MBSRQ–AS, российское анкетирование образа тела, а также задание по самооценке Ресенберга.

Исследовательский факторный анализ показал, что российские позиции MBSRQ–AS существенно нагружены основными факторами шкалы. Внутренняя консистенция подшкал варьировала от 58 до 82. Вероятности повторного тестирования варьировались от 65 до 77. Внешняя валидность также подтверждена как и в Российской версии MBSRQ – подшкалы положительно коррелирует с российским анкетированием образа тела.

Ключевые слова: образ тела, отношение к телу, самооценка, саморегуляция, идеальное тело.

Introduction

The image, which we have about ourselves influences us and it is influenced by all our perceptions, experiences and actions. A person who perceives himself or herself to be weak and fragile is different from someone who perceives himself or herself to be strong and agile. Just as when a child is treated like a fool, his or her body image will absorb his or her reactions to people's impressions and to his or her own. In addition, we feel images of other people's bodies. Experience, the feeling of their own body image and experience, the experience of other people's body are closely intertwined. Just as our emotions and actions are inseparable from the body image, so are the emotions and actions of others inseparable from their bodies.

The interest in Body Image has been growing steadily over the past decade (Cash, 2004). Body image attitudes are linked to self-esteem, interpersonal confidence, eating and exercise behaviors, grooming activities, sexual behaviors and experiences and emotional stability (Cash, 1990; Cash & Pruzinsky, 2002). The trend towards ideal body of a certain shape creates a negative attitude toward the real body (Neagu, 2015). Especially with the increased use of social media sites, such as Instagram and Facebook, the body image satisfaction among young people decreases (Fadouly &Vartanian, 2016). Exposure to media images of thin-and-beautiful women negatively affects the body image and mood states of young women (Yamamiya et al., 2004). Moreover, negative body image is a part of diagnostic criteria of a potentially deadly disorders of anorexia nervosa and bulimia nervosa is DSM-5 (American Psychiatric Association, 2013) and in IDC-10 (World Health Organization, 1996). The research into body image is very sparse in Russian-speaking world and even the concept of body image is less known.

Body image is a multidimensional construct that refers to subjective perceptual and attitudinal experiences about one's body, particularly one's physical appearance (Cash & Pruzinsky, 1990, 2002). There are many questionnaires available that assess body image in English (Thompson&van den Bergh, 2002). However, there are very few questionnaires that assess body image satisfaction in Russian language, which prevents the exploration of the body image construct in Russian-speaking population. The need for adaptation of a well researched and validated questionnaire is great.

The Multidimensional Body Self Relation Questionnaire (MBSRQ) is a the self-report inventory that assesses people's attitudes towards various dimensions of body image construct (Brown, Cash & Mikulka, 1990). It is a validated and widely-used questionnaire all over the world.

The full 69-item version of the MBSRQ consists of seven factor subscales: Appearance Evaluation, Appearance Orientation, Fitness Evaluation, Fitness Orientation, Health Evaluation, Health Orientation

and Illness Orientation. The scale also has three additional subscales: Body Areas Satisfaction Scale (BASS), the Overweight Preoccupation Scale, and the Self-Classified Weight Scale (Cash, 2000). There is also a shorter version of MBSRQ, Multidimensional Body Self Relation Questionnaire -Appearance Scales (MBSRQ-AS), which is the 34-item questionnaire and is the most widely used (Rusticus & Hubley, 2006). It consists of two of the main factor subscales of the original version and the three addition- all multi-item subscales. These include the 7-item Appearance Evaluation scale, which measures how one is feeling about their physical attractiveness and how satisfied they are with it. High score on this scale indicate that one is feeling mostly positive and satisfied with their appearance and low scores indicates the dissatisfaction and negative evaluation of one's appearance. The 12-item Appearance Orientation scale measures how one is invested in their appearance. High scores indicate high involvement and low scores indicate low involvement. The 9-item Body Areas Satisfaction Scale (BASS) assesses how one is satisfied or dissatisfied with specific parts of their body on the 5-point Likert Scale. The 4-item Overweigh Preoccupation scale assess how much anxiety one has about one's weight and how likely they are to engage in dieting and other behaviors to influence one's weight. And finally, the self-classified weight scale that consists of two items reflects how one perceives and labels one's weight from very underweight to very overweight. According to Cash (2000), MBSRQ-AS subscales have a good psychometric properties with chrobach's alphas ranging from .70 to .89 and test-retest reliabilities ranging from .74 to .91. MBSRQ-AS has been translated into French (Untas, Koleck, Rascle & Borteyrou, 2009), German (Vossbeck-Elsebusch, Waldorf, Lagenbauer, Bauer, Cordes & Vocks, 2014, and Greek (Argyrides& Kkeli, 2013).

The goal of this study is to translate and adapt the MBSRQ-AS to Russian language, so that the Russian version of the MBSRQ-AS had the comparable factor-structure and psychometric properties as the original.

Method

A study design was reviewed and approved by the Ethics committee. A total of N=1035 participants were recruited for the study from a population of al-Farabi Kazakh National University students, 887 females and 148 males. Ages ranged from 17 to 32 years. Hight (M=165.80, SD=7.71), weight (M=56.95, SD=8.8), BMI (M=20.66, SD=2.5). Descriptive statistics are summarized in Table 1.

Table 1 – Descriptive statistics for age and sex distribution

		Mean	SD	MIN	MAX
Total	BMI	20.66	2.53	13.71	39.56
N=1037	Height	165	–	149	195
	Weight	56.95	–	40	100
	Appearance Evaluation	3.73	0.71	–	–
	Appearance Orientation	3.61	0.51	–	–
	Body Areas Dissatisfaction Scale	3.88	0.71	–	–
	Overweight Preoccupation Scale	2.45	0.87	–	–
	Weight Classification	3.02	0.66	–	–
female	BMI	20.50	2.54	13.71	39.56
N=887	Height	163.69	5.85	149	195
	Weight	54.94	7.21	40	100
	Appearance Evaluation	3.71	0.72	–	–
	Appearance Orientation	3.67	0.48	–	–
	Body Areas Dissatisfaction Scale	3.83	0.72	–	–
	Overweight Preoccupation Scale	2.58	0.84	–	–
	Weight Classification	3.08	0.65	–	–
male	BMI	21.43	2.36	16.65	27.78
N=147	Height	176	7.54	150	193
	Weight	66.58	9.81	45	95
	Appearance Evaluation	3.84	0.62	–	–
	Appearance Orientation	3.32	0.52	–	–
	Body Areas Dissatisfaction Scale	4.12	0.61	–	–
	Overweight Preoccupation Scale	1.81	0.68	–	–
	Weight Classification	2.68	0.62	–	–

Participation was voluntary and no reward was offered.

Participants completed questionnaire packets, which consisted of demographic information sheet, where they were asked to indicate their sex, age, height and weight. It was followed by the MBSRQ-AS, Body Image Questionnaire developed by Skugarevki and Sivuha (2006) and Rosenberg's Self-Esteem Scale.

Descriptive statistics for age and sex distribution in the sample are presented in table 1.

Translation

In order to properly translate the MBSRQ-AS, the directions by Sousa & Rojjanasrirat (2010) and Sperber (2004) were closely followed. First step, was the translation into Russian language, the English version was translated by two independent professional interpreters into Russian language. Second step was the comparison of the two translated version by the third, bilingual and bicultural interpreter, who combined the two version into one preliminary Russian version of the questionnaire. Third step was the back-translation, where another interpreter translated the new Russian version back to English. As part of the forth step, the multidisciplinary committee was formed, consisted of one member of the research team, who is bilingual health care practitioner, one researcher, whose mother language is Russian and two interpreters, previously involved in translating the questionnaire. The committee carefully compared and evaluated back translation with the original. All discrepancies were discussed, evaluated and corrected. The fifth step was pilot test of the Russian version questionnaire on the convenience sample of 15 people. These people were asked to assess the clarity and comprehension of all the questions. After this step the final version of the questionnaire was confirmed.

Measures

Participants were given the newly translated MBSRQ-AS. In addition to that, in order to assess convergent and discriminant validities, they were given Body Image Questionnaire developed by (Skugarevki and Sivuha, 2006 and Rosenberg's Self-Esteem Scale, 1965).

Body Image Questionnaire (Skugarevki & Sivuha, 2006) is the only questionnaire that assesses body image in Russian language. It measures how one is satisfied or not satisfied with one's weight, body shape and specific body parts, presence of negative feelings and thoughts about one's body

and behaviors that one is using to deal with their thoughts and feeling about their body. It is an 18-item instrument that asks participants to rate statements on a scale from 0-3, 0-never, 1-sometimes, 2 – often, 3-always. High scores indicate dissatisfaction with one's body image and greater number of negative thoughts, emotions and behaviors about it, whether low scores indicate satisfaction with one's body and lower number of negative thoughts, emotions and behaviors. Chtobach's alpha is .88. One the main uses of this tool is to differentiate clinical population that is diagnosable with an eating disorder from non-clinical, effect size was found to be substantial for that purpose (t=10.719, cohen's d=1.22) (Skugarevki&Sivuha, 2006).

Rosenberg's Self-Esteem (RSE) scale is a widely used tool to assess one's self-esteem (Rosenberg, 1965). It was included in this study to assess convergent validity. It consists of 10 items that participants are asked to rate on the scale from 0 to 3, 0-strongly agree, 1-agree, 2-disagree, 3-strongly disagree. A higher score indicates higher self-esteem. Internal consistency for the RSE ranges from 0.77 to 0.88. Test-retest reliability for the RSE ranges from 0.82 to 0.85.

Results

Descriptive statistics of the sample, as well as computations of all subscales were done. Furthermore, exploratory factor analysis was performed, and internal consistency, test-retest reliability, convergent and discriminant validity were analyzed with Pearson correlations and Cronbach's alpha coefficients.

Factor Structure

According to Cash (2000) manual, only two sub-scales of the MBSRQ-AS are part of the original factor structure: Appearance Evaluation and Appearance Orientation sub-scales. Therefore, only 19 items were included in exploratory factor analysis with varimax rotation, and extracted two factors, which explained 31.5% of the total variance. The first factor corresponded to Appearance Orientation sub-scale and explained 19.7% of the variance. The second factor corresponded to Appearance Evaluation sub-scale and explained 11.7% of the variance. 18 items out of 19 had significant factor loadings <0.3, with one item 11, which has factor loading 0.25. There was no significant relationship between two factors (r=-.001, ns). Factor Analysis results are presented in table 2.

Table 2 – Explained variance and loadings of 19 items on 2 main factors [appearance orientation (F1) and appearance evaluation (F2)]

Item	Total Sample F1	Total Sample F2
1. Before going out in public, I always notice how I look		0.551
2. I am careful to buy clothes that will make me look my best.	0.234	0.537
3. My body is sexually appealing.	0.647	0.161
5. I like my looks just the way they are.	0.642	
6. I check my appearance in a mirror whenever I can.	0.120	0.589
7. Before going out, I usually spend a lot of time getting ready.		0.584
9. Most people would consider me good-looking.	0.594	0.389
10. It is important that I always look good.	0.241	0.613
11. I use very few grooming products		0.257
12. I like the way I look without my clothes on.	0.540	
13. I am self-conscious if my grooming isn't right.	0.157	0.330
14. I usually wear whatever is handy without caring how it looks.		0.353
15. I like the way my clothes fit me.	0.632	
16. I don't care what people think about my appearance.	0.423	0.293
17. I take special care with my hair grooming.	0.130	0.336
18. I dislike my physique.	0.657	
19. I am physically unattractive.	0.567	0.208
20. I never think about my appearance.	0.179	0.493
21. I am always trying to improve my physical appearance.		0.564
Explained Variance	31.5%	11.7%

Internal Consistency

Internal Consistencies for MBSRQ-AS Russian version were acceptable. Cronbach's coefficient for the Appearance Orientation subscale was .65, and for Appearance Evaluationas .75. For the three additional subscales of the MBSRQ-AS, Cronbach's missed word? were .82 for Body Areas Satisfaction Scale (BASS), and .72 for Self-Classified Weight subscale, but it was quite low for the Overweight Preoccupation subscale .58.

Test-Retest Reliability

Test-Retest correlations were acceptably high: Appearance Evaluation r=.73, (p>.001), Appearance Orientation r=.65, (p>.001), Body Areas Satisfaction Scale r=.77, (p>.001), Overweight Preoccupation r=.77, (p>.001) and Self-Classified Weight r=.71, (p>.001)

Convergent and Discriminant Validity

Correlations between the five MBSRQ-AS scales and Russian Body Image Questionnaire showed significant relations. As can be seen from the Table 3, Appearance Evaluation (r=-.404, p>.05) and Body Areas Satisfaction Scales (r=-.573, p>.01) are negatively correlated with Body Image Questionnaire, whereas Overweight Preoccupation (r=.398, p>.05) and Weight Classification (r=.417, p>.05) scales correlate positively, only Appearance Orientation Scale (r=.037, p>.05) was not correlated at all, as was expected, since the Body Image Questionnaire only assesses the level of satisfaction with one's body, and not the extent of investment in one's appearance. Regarding discriminant validity, Self-Esteen Scale only correlated with Appearance Evaluation (r=-.288, p>.01) and Body Areas Satisfaction Scale (r=-.282, p>.01), however, the correlations were low.

Table 3 – Correlations between five MBSRQ-AS scales and Body Image Questionnaire (Russian) and Rosenberg's Self Esteem Scale

	APPEVAL	APPOR	BASS	OWPREOC	WTCLASS
BIQ (RUSSIAN)	-0.60**	0.057	-.673	.293	.417*
ROSENBERG'S SE	-.306 *	0.099	-.203	0.008	0.048

'. 05 significance
''. 01 significance

Discussion

In this study researchers attempted to translate and adapt MBSRQ-AS to Russian language. The psychometric properties of the new Russian MBSRQ-AS provide good support that it is an adequate tool to assess body image dimensions in Russian-speaking population.

The two-factor structure of the 19 items belonging to the initial Body Self Relations Questionaire is consistent with the results of (Brown, et al, 1990). All the factor loading are quite high >.3, with the exception of item 11. Vossbeck and Elsebusch (2014) in their translation of MBSRQ-AS to German also had a lower loading for this item. Excluding the item will result in better statistical outcome, however, the question of how one grooms oneself, can carry a significance in clinical setting. Additionally, there is no correlation between these two factors, which suggests that Appearance Evaluation and Appearance Orientation are independent constructs. Also, in comparison with other translations of the MBSRQ-AS by (Untas et al, 2009) in French and (Argyrides, 2013) in Greek, internal consistency and test-retest reliability are quite similar, except

for the Overweight Preoccupation subscale with a quite low internal consistency of .57. As expected, both subscales of the MBSRQ-AS assessing body dissatisfaction were significantly associated with the Body Image Questionnaire by Skugarevki and Sivuha. These results support convergent validity of these measures.

One limitation of our study is that we collected data at two different timeframes, and therefore the composition of questionnaire sets was not completely identical for the various samples. For this reason, we were only able to include subsamples for some of the reliability and validity analyses. Additionally, the body mass index (BMI), which was assessed by self-reported height and weight, and therefore, might be biased by self- presentation. Another major limitation is that 95% of the sample were self-identified as ethnic Kazakhs, for whom Russian is not the first language, even though they reported speaking Russian fluently.

Overall, we believe that the Russian MBSRQ-AS is adequate in screening for body image issues in non-clinical Russian-speaking population.

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