

RESEARCH ARTICLE

TRANSLATION, CULTURAL ADAPTATION AND LINGUISTIC VALIDATION OF MOTIVES FOR RISK-TAKING SCALE

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Abstract

Understanding motivations for high risk behaviors is an important yet neglected area in Pakistan. Although, most research on motives for risky behaviors has been done in western cultures but few studies determined its cultural diversity reflecting significant, cultural differences. To enhance the understanding of various motives for risk-taking in eastern culture, this study realized the need of a culturally valid and reliable measure to assess different motivations to engage in high risk behaviors for vulnerable population in Pakistan. This study sets out to investigate perceived motivations involved in actual risks in a sample of emerging adult destitute women (N=400) between 18-25 years approached through various shelter-homes in Pakistan. For this, a measurement scale to assess motivations to engage in high risk behaviors was translated, adapted and culturally validated. For the empirical evaluation, Exploratory Factor Analysis (EFA) performed through SPSS. 21 that reported excellent validity and reliability estimates. Moreover, it became obvious that motives to engage in risky behaviors were slightly different for Pakistani culture as compared to the existing model. All the previously explored motives reported in MRT (1. Audience Controlled, 2. Irresponsibility 3. Thrill seeking, 4. Hedonistic motivation 5. Calculated risk) were nicely emerged in the subsequent model while, few other motives also emerged in the present study which made a distinct category (Authority Defying Motives) reflecting that motivations to engage in risk-taking behaviors are somehow reliant on cultural context. All the factors showed good internal consistency ranging from $\alpha=.70-.82$. To conclude, MRT is a valid and reliable measure for Pakistani population having strong psychometric properties, linguistic and cultural acceptability, which paves the ways for practitioners to better understand the motivations for engaging in high risk behaviors by using the available indigenous measure. *ASEAN Journal of Psychiatry, Vol. 22(9), November 2021: 1-12.*

Keywords; Motives for Risk Taking; High Risk Behaviors; Emerging Adults; Destitute Women; Translation and Validation.

Introduction

Risk-taking behaviors in emerging adult destitute women are becoming incredibly common in Pakistan but the full extent of their impact on society remained a mystery due to the lack of understanding about the underlying motivations

to commit high-risk behaviors. Emerging adulthood is considered as a vulnerable developmental period that reflects rigid and long-term patterns of risky behaviors associated with many harmful or serious health consequences [1]. These behaviors usually begin during adolescence and get intensify in adulthood [2].

The World Health Organization cited such behaviors as one of the top three contributors to disease and mortality around the globe. Risk-taking is defined as involvement in potentially destructive behaviors, either deliberately or involuntarily committed by a person without understanding the adverse social or personal consequences that may endanger not only the health but well-being of individuals [3].

In Pakistan, during the past few decades, a rapid increase has been observed in health risk behaviors engaging in excessive consumption of smoking, use of tobacco associated with mental health issues and physical abuse [4-7]. A national survey on 4583 adolescents, n=1150 females were found engaged in cigarette smoking, tobacco usage and physical inactivity. While, many reported comorbidity in many unhealthy behaviors including suicidal ideation and involvement in physical aggression [8].

In spite of the nonexistence of reliable data in Pakistan, recent decades have witnessed a rise in runaway behavior in young women engaged in risk-taking but unfortunately, the exact figures are unknown. Worldwide research reported that runaway/deserting women are at greater risk to engage in numerous high-risk behaviors that may cause adversative developmental consequences [9-11]. In addition, it may also be accompanied by serious negative consequences such as solicitation, physical or sexual violence or victimization, and frequenting perilous places [12-14] also found that the poor runaway women are involved in criminal activities, substance abuse and immoral activities which society considered as deviant behaviors.

According to the recent statistics by WHO, more than one million adolescents aged 12 to 19 leave their homes every year and 60% to 80% of runaways are likely to become prostitutes if they have not been condemned legally. In addition to Social Consequences, mainly these girls are suffering from several kinds of mental ailments and turn out to be aggressive; with destructive

perceptions of the environment they leave and they try to get their vengeance from the community and subsequently various STDs including HIV and AIDS and many social disorders, will be weighed down the society [15].

In Pakistan, the situation is no different but the underlying motives to engage in high-risk behaviors are never been explored to overcome such concerns in the country. Motivation is generally defined as the common ground between cognitions, emotions and needs; all of these inner processes guide and strengthens the behavior.

In specific, it is the desire to perform activities that are essential to achieve the goals usually involves in three main elements: (a) Activating forces: that cause a person to behave in a certain way; (b) Guiding forces: That direct certain behavior toward things; that are purposeful; and (c) Sustaining forces: That may guide and sustain human behavior to achieve their desired goals [16].

Classified motives according to their functions. For example; i) Motives of irresponsibility ii) Motives of social desirability iii) Thrill-seeking iv) Calculated risk and v) Hedonistic motives that may not be considered as mutually-exclusive.

First of all, motives of irresponsibility are not executed because of the risks they involve but to achieve other immediate or desired goals without thinking about the associated concerns. Secondly, there are motives of social desirability/ audience-controlled which may appear paradoxically and are performed out of fear accompanying many concerns such as loss of social support or approval within a prominent group.

These motives leads to a lack of social security and needs reinforcement by society and most risky behaviors of this kind need an audience. Thirdly, there are thrill-seeking motivations that

include sensation seeking or challengingly exciting activities. Research on thrill seeking [17] denoted it as a key personality trait impacting several high risk behaviors that may appear to peak during adolescence and keep on relatively high at the age of 18-25 years [18]. Thrill seeking motivations are related with arousal-based motivations and thrill seekers are driven to participate in sensory stimulating risky behaviors [19-21].

Fourthly, calculated risk implies decisions to engage in a risky behavior in order to attain a desired goal in future by overcoming an upcoming obstacle [22]. Such type of risks are often chosen very carefully after weighing up the costs and long-term benefits. Such motivations differ from motivations of irresponsibility (those are directed by immediate gratification) as immediate risk is accepted in order to gain a long-term incentive. This category of risk-taking also appeared in a study who differentiated adolescents and adults in their explanation of risk taking [23].

Lastly, Hedonistic motives consisted of those motivations that entails comparatively positive emotions behind risky behaviors wherein people usually engage in risky behaviors to enjoy the present for living in the moment. The original measure has strong reliability and cultural validity. Reported good test-retest reliabilities for both Turkish and Welsh population (audience control $r=0.74$ and 0.59 , hedonistic $r=0.73$ and 0.83 , irresponsible motives $r=0.73$ and 0.73 , thrill-seeking $r=0.41$ and 0.70 , and for calculated risk $r=0.51$ and 0.53) reflecting the reasonable generalizability of the measure.

Although, risk taking has been discussed as a precursor of challenging behaviors, leading to many self-destructive and health compromising situations [24,25]. Previous studies carried out in Pakistan merely focused on drug abusers or sexual risks in adolescents. Whereas, psychological motivations to engage in high-risk behaviors in emerging adult destitute women is

so far a neglected area in Pakistan. This might be due to the non-availability of an indigenous reliable or a valid measure to understand the motivations involved in high risk behaviors in Pakistan.

To our knowledge, the maximum work undertaken on adult's risky behaviors has been done in individualist cultures that is unfortunate, as the potential impact of tradition, society and culture on the character of emerging adult's involvement in risk-taking behaviors can't be neglected and to transfer interventional approaches from one culture to another, we must have deep understanding about the degree to which the motivations involved in young people's risk-taking vary by culture.

In this study, we are merely interested in emerging adult's motivations for engaging in risky behaviors. So, this study sets out to explore the factor structure of motives for risk-taking scale to examine whether the previously identified motives for risk-taking differ in Pakistan, which is predominantly having a collectivistic culture to understand and analyze the problems of emerging adult destitute women.

Pakistan is a lower middle income country (South Asia) having fifth largest population in the world that is approximately, 220,892,340. In Pakistan, 64% of the nation is younger than 30 whereas, 29% of Pakistanis are between the age of 15 to 29 years (young adults).

Awareness of young people's motivations for committing self-destructive or risky behaviors may help to understand what elements of risk-taking are affected by culture to better explain the underlying causes and provides a framework for designing preventive and therapeutic interventions.

Objectives

Hence, the present study was conducted to translate, adapt, culturally validate and evaluate

the psychometric properties of MRT in emerging adult runaway women in Pakistan based on their motivations to engage in high risk behaviors.

Materials and Methods

To translate MRT into Urdu language and ensure that the translated version is age- appropriate and psychometrically sound, the study conducted in two steps. International standard guidelines directed by MAPI Research Trust [26,27] were used to translate the scale. In step I translation of the MRT was made from source language (English) to target language (Urdu). While linguistic validation and psychometric evaluation of MRT was performed in step II.

Phase I: Translation and Adaptation of MRT

After taking formal permission from the author, scale was subjected to the standard procedure of translation using Mapi guidelines [28]. After completing the initial requirements, the translation process was carried out by following the standard steps.

i) Forward translation. This step was carried out to translate the measure from source language (English) to the targeted language (Urdu) by two bilingual experts. One of them was an associate professor of psychology and the second translator was a PhD. scholar of psychology. Before translating the measure, translators were requested to translate the scale in a conceptual and connotation manner avoiding literal translations to keep translations simple, concise, and easily comprehensible so that the general community may understand it easily. Complex and jargon words were avoided. After translation, both of the forward translations were compared. in terms of clarity of speech, conceptual and connotation equality, comprehensibility, and cultural linguistics. Observations were made by the expert reviewers and discrepancies related to sentence formation were amended. In the end, the finalized version

of translation was subjected to back translation from targeted language to source language in order to check discrepancies and further necessary amendments in the final version.

ii) Backward translation. Two different translators were from the field of english literature and experts in translating the assessment tools voluntarily participated to translate the urdu version of MRT back to its original language. Discrepancies between the two back-translated versions were checked for all items and precision, meaning and cultural context was considered before finalizing the items. of items. The translated tools were compared with the original measure of MRT by experts' reviewers to check the language accuracy and confusions were clarified. The conceptual equivalence, expression, clarity of words, and precision were considered before finalizing the final versions of the scale. In the end, the final version of translated tool was given to the experts for face validity.

Review and Scrutiny

Later on, proof reading and grammatical analysis were done by the expert supervisor and another consultant who found no major discrepancies in reviewed and scrutinized measure of MRT.

Adaptation of the Measure

The translated version of the scale was administered on a group of 30 destitute women to check the cultural relevance of the item and content validity. It was observed that the destitute/runaway women reported few motives other than the 26 motives presented to them during a general discussion after completing the original scale. Later on, a focus group discussion conducted with a group of 10 destitute women with the age range of 18-25 years residing in a public shelter-home (Dar-ul-Aman) and participants were asked to respond few questions such as "what motivate people to engage in high risk behaviors? What are the triggering factors or

impulses that make people vulnerable to take such risks? Etc. All of the responses were recorded. The verbatim of participants were then discussed with the experts along with the original 26 statements highlighting different motives presented in the scale for her opinion. The

Phase II: Validation of MRT

Given that more studies exploring the psychometric properties of MRT are needed, the current investigation attempted to determine the validity and reliability of the scale by defining the underlying factor structure of the measure in Pakistan.

Method

Participants

The sample was determined according to the criteria of 10:1 (10 cases per item) [29] for the empirical evaluation of 33 items scale of MRT. After seeking the formal approval from the Social Welfare and Bait-UI-Maal, Department, Government of the Punjab, Four hundred destitute women (runaways) residing in various shelter-homes of Punjab with the (M. age=21.5 years, SD=2.83, range=18–25 years) were approached through purposive sampling technique who voluntarily agreed to participate in the study including chronic (n=196, 49%) and non-chronic runaways n=204, 51%). No significant differences were observed between chronic and non-chronic runaways in terms of their motivations to engage in risky behaviors (F=1.56, p=0.21).

Most of the participants were uneducated 86.5%, while only 8.4% went to the high school and 5.3% left school in 5th grade. Among the participants, 75% were non-working while other was involved in labor work prior taking shelter for their survival. Almost, 84% of the women were from rural background, and their socioeconomic status was reported mostly low (88.6%) while other was from urban areas of

verbatim of destitute women were then converted into statements considering the other items in the scale. The 7 items were finalized with the help of research supervisor and the measure of motives for risk-taking was finalized with 33 items which were then validated in Pakistani culture. various districts of Pakistan belonging to middle class families. Almost 67% of the participants reported deviant associations with peers and (94%) of the participants highlighted getting into problems with the law in the past few months and also reported medico legal issues. Most of the participants had a history of violence and abuse (58.3%) while, 41.8% reported violence in milder forms. 11% of them did multiple marriages while, 40% were divorced, and 60% were separated. Many women reported that they were living with their single parents in their childhood (68% were living with their mothers, 13.8% with father and 17.5% with other caretakers). A large number of women were of the divorced/separated parents (81%). When asked for the birth order, most of the destitute women were the last born in their family (55.8%) whereas, 20.8% were the elder child in their families. As Pakistan has predominantly collectivistic culture, 88% of the participants were from joint family background. Most of the women were uneducated so the measure was completed through verbal administration while, the educated participants self-reported the measure in indigenous language (URDU).

Instruments

Demographic information questionnaire

A self-constructed information questionnaire soliciting basic demographic information regarding age of participants, age at onset of risky behaviors, Education, no. of siblings, birth order, marital status, no. of family members, living style, reason of leaving home, deviant peer association, etc. was prepared to get information from the participants.

Motives for Risk-Taking (MRT)

To measure the motives to engage in risky behaviors, the translated and adapted measure of motives for risky taking by was used including the newly explored motives in Pakistani context. The adapted measure comprises of 33 different statements of various types of motives, and participants were asked to rate on a four-point scale ranging from 1) “disagree totally” to (4) “agree totally”. The preamble of the items states “I sometimes take risks or do something dangerous, because” and to measure the following categories of motives according to their functions: motives for Irresponsibility, Thrill seeking, Audience controlled, Calculated risk, Hedonistic behavior and authority defying motives. The scale was then subjected to exploratory factor analysis (EFA) to understand the factor structure in Pakistani culture.

Risky, Impulsive and Self-Destructive Behavior Questionnaire (RISQ).

To determine the convergent validity of MRT, destitute women responded to an instrument of 38 behavioral responses that represented a variety of risky and self-destructive behaviors [30-32]. For this study, it was used after translating it into Urdu language using the standardized procedure of translation. For each behavior, people were asked to rate on different category of responses for each risky behavior such as: “How many times total have you done this in your life?,” Participants were also asked to rate on a 5- point Likert-type scale (0=“Strongly Disagree” to 4=“Strongly Agree”) to rate their level of agreement for each behavior endorsed: (e) “I do this behavior to stop feeling upset, distressed, or overwhelmed” and (f) “I do this behavior to feel excitement, to get a thrill, or to feel pleasure.” These two questions were about Avoidance motivations and Approach motivations for each behavior to understand the motivating tendencies behind these behaviors. Avoidance scale comprises of negative emotions and impulses (e.g., distress) in order to engage in risky behaviors while, the Approach scale

included positive emotions and impulses that may trigger an individual to involve in risky behaviors. The mean score on lifetime engagement in risky behavior was used as indicator to understand the severity of participant’s risky behaviors. While, the score on affective triggers scales served to understand the motivational triggers for risk-taking.

Procedure

Initially, approval to translate and validate the MRT scale was taken from the scale authors. The classical procedure of translation and adaptation was followed and the translation from English into URDU was completed by two bilingual experts, with the back-translation into English being completed by professional English translators. Discrepancies were reviewed until no semantic differences detected between the original and the translated version of the MRT. The Directorate of Social Welfare and Bait-ul-Maal, Punjab granted the permission to assess the participants residing at various shelter homes in Pakistan after its research committee approved the research request. Later on, the researcher administered the measures to a sample of emerging adult runaway sheltered women in Pakistan from diverse socio-economic backgrounds.

To establish the factor structure of MRT in Pakistani culture, the questionnaire was administered along with demographic information sheet and risk, impulsive and self-destructive behavior questionnaire. The data was factor analyzed, and the items with the factor loadings $>.40$ on each of the factors were retained. The participants were well-informed about the nature and purpose of the study voluntarily collaborated to participate in this research project. Almost 98% of the participants accurately reported the measures as required by the researcher, while incomplete questionnaires were rejected. The SPSS v.21 (IBM SPSS, 2021) was used to analyze the results.

Results

At the initial stage, the socio-demographic variables were analyzed to understand the profile of risky group. Psychometric properties of the MRT were checked by attempting to re-explore its presumed multidimensional factor structure. An exploratory factor analysis (EFA) was carried out to explore the structure using (maximum likelihood extraction, Promax rotation.

The Kaiser-Mayer-Olkin (KMO) measure of sampling adequacy and Bartlett’s test of sphericity were checked prior interpreting the factor analysis to check the suitability of data. Factors extractions were made based on Eigenvalues>1.0. Inspection of scree plot and eigenvalues suggested a six-factor solution, with a new factor, called ‘authority defying/rebellious motives’ emerging alongside the expected factors ‘audience controlled, thrill seeking, irresponsibility, hedonistic and calculated risk

motives’. This new factor consisted of 6 items describing the rebellious intentions involved in risk-taking. In contrast, a new item emerged in the factor of ‘thrill seeking’ that defined the sensations related to risk (I enjoy the thrill to live a liberal life).

Table 2 shows Cronbach’s alphas of MRT subscales and these values can be considered good for each subscale and none of the item observed to improve Cranach’s alpha if the item deleted so, all the items were retained as observed in their factor structure.

The items with the maximum loading on each of the six factors were retained suppressing the loading less than .40. The resulting factor structure for 33 items of MRT is presented below (Table 1). All the items have satisfactory factor loadings above .40. Overall, factors explained 50% of the total variance and reported good internal consistency.

Table 1: Motives for risk-taking (MRT): Pattern matrix for the sample (N=400), after using maximum likelihood extraction and Promax rotation (loadings less than.40 suppressed).

Items	Motives for irresponsibility	Calculated	Thrill seeking	Hedonistic	Audience controlled	Rebellious motives
Irr1	0.67					
Irr2	0.58					
Irr3	0.56					
Irr4	0.72					
Irr5	0.72					
Irr6	0.71					
Irr7	0.65					
Cal1		0.68				
Cal2		0.8				
Cal3		0.7				
Cal4		0.61				
Thrill1			0.67			
Thril2			0.66			
Thril3			0.63			
Thril4			0.53			
Hedol				0.94		

Hedo2				0.42		
Hedo3				0.56		
Hedo4				0.94		
Hedo5				0.57		
Aud1					0.7	
Aud2					0.54	
Aud3					0.58	
Aud4					0.63	
Aud5					0.74	
Aud6					0.56	
Reb1			0.41			0.54
Reb2			0.41			0.58
Reb3						0.88
Thrill5			0.49			
Reb4						0.51
Reb5						0.68
Reb6						0.88
Cumulative variance	14%	24%	32%	38%	44%	50%
Mean	12	6.28	12.89	8.56	16.98	6.5
Standard deviation	2.61	1.96	3.07	1.62	3.67	1.19
α	0.78	0.7	0.7	0.76	0.73	0.82

Note: The highest factor loading in each factor are shown in bold. Irr: irresponsibility, cal: calculated risk, thrill: thrill seeking, hedo: hedonistic, aud: audience controlled, reb: rebellious motives

The correlations among the factors demonstrated that Irresponsible motives were positively linked with audience controlled motives ($r=0.130^{**}$, $p<0.01$), thrill seeking ($r=0.122^*$, $p<0.05$), hedonistic ($r=0.306^{**}$, $p<0.001$) and rebellious motives ($r=0.100^*$, $p<0.05$).

While, audience controlled motives were positively linked with thrill seeking ($r=0.217^{**}$, $p<0.001$), hedonistic motives ($r=0.124^*$, $p<0.05$) and rebellious motives ($r=0.111^*$, $p<0.05$).

Calculated risk was negatively associated with thrill seeking and rebellious behaviors but the relationship was non-significant (Table 2). Moreover, thrill seeking was positively

associated with hedonistic and rebellious motives.

Validity and Reliability of MRT

The measure of MRT was validated with the measure of involvement in risky behavior scale (RISQ). The total score of RISQ was used to check the convergent validity of the measure with different motives to engage in risk behaviors. While, the affective motivations measured through RISQ were also used to see the relationship between MRT and avoidance and approach motivations to engage in risky behaviors.

Table 2: Correlational analysis between motives for risk taking (MRT) and involvement in risk-taking behaviors (RISQ) N=400 (emerging adult destitute women).

Independent variable	Involvement in risky behaviors	Avoidance motivations	Approach motivations	Alpha
Motives of irresponsibility	0.21**	0.22**	0.25**	0.78
Audience controlled	0.25**	0.24**	0.19**	0.73
Calculated risk	-0.08	-0.06	-0.09	0.7
Thrill seeking	0.57**	0.54**	0.45**	0.7
Hedonistic motives	0.25**	0.25**	0.29**	0.76
Rebellious motives	0.32**	0.31**	0.29**	0.82
α	0.8	0.84	0.74	

Note: Significant ($p < 0.05$) coefficients in bold.

Table 2 shows the significant positive relationship between motives for risk taking and involvement in risk taking behaviors. All the explored motives positively correlated with involvement in risky behavior scale except the calculated risk that depicted non-significant negative relationship between involvements in risky behaviors.

All the motives were significantly and positively linked with the affective motivational scale for risky behaviors (avoidance and approach motivations) reflecting that people engage in risky behaviors to avoid negative effect and enhance positive effect. All the factors of MRT reported good internal consistency ranging from ($\alpha=0.70-0.82$) in Pakistani context.

Discussion

In the present study, we translated and validated the MRT in the native language of Pakistan (*i.e.* Urdu) on the emerging adult destitute women between the ages of 18-25 years. Initially, the process of translation and adaptation initiated with the help for expert translators and standardized method of translation comprises of forward and backward translation procedures were strictly followed. Variations and discrepancies observed in the translated tool were settled in the light of our culture and careful content comprehensions were also analyzed. Lastly, the estimations of psychometric properties were calculated by using the quantitative methods.

Exploratory Factor Analysis (EFA) using maximum like hood method and Prom ax rotation was performed in order to analyze the factor structure of the measure in Pakistani culture.

The analysis made sense conceptually as all the items emerged well in their relevant factors, while newly explored motives to engage in risky behaviors (rebellious motives) made a distinct category showing that motives to engage in risk-taking vary by culture as discussed in a cross-cultural study.

With regard to construct validity, the analysis of EFA resulted in a satisfactory 6 factors solution explained reasonable variance and adequate estimates of reliability for the Pakistani version of MRT suggested that it can be considered a useful instrument to assess the different motivations to engage in risky behaviors.

Moreover, the convergent validity estimates were also in-line with the previous research that showed significant positive associations of all the dimensions of motives for risk taking with the measure of risky behaviors. This study is the first ever to evaluate the psychometric properties of MRT. A perusal of the current literature generally revealed consistent findings in terms of factor solution and cultural differences.

Implications

The study has strong implications for vulnerable groups in Pakistan as it provided a valid and reliable measure of different motives for risk taking that may be useful to identify various motivations to engage in risky behaviors among emerging adult destitute women. The current study may also provide directions to researchers to make them realize the importance to study the underlying motives for high risk behaviors to better suggest targeted interventions for the vulnerable population.

Limitations and suggestions

As in all studies of this nature, there are potential limitations to the research design that need to be considered as the representativeness of our

sample of volunteers might be limited due to the fact that a purposive sample of emerging adult destitute women instead of a general population sample was used; thus, generalizability of the results to the Pakistani female population or other populations (such as men, or other risky group) might be limited.

The cross-sectional data used in this study may limit the test-retest and predictive validity of the tool and future research should include longitudinal data to see how the motives to engage in risk-taking changes overtime and vary across different age groups. We therefore recommend future cross-validation of the MRT from diverse ages and backgrounds. Second, most of the participants were from rural background and low socioeconomic status there must a comparison of diverse backgrounds and socioeconomic status to get variety of experiences because motivations to engage in risky behaviors may differ in different backgrounds. Moreover, the resulted factor structure must be reconfirmed through advanced analysis such as confirmatory factor analysis with a larger sample.

Conclusion

Recapitulating the above, MRT was translated into Urdu language using the standardized procedure, and finalized version was empirically evaluated by administering on the targeted sample. To check the construct validity, exploratory factor analysis was conducted which revealed a suitable factor structure comprising of 6 factors.

Reliability coefficients were taken from Cronbach alpha which remained in an acceptable range and the convergent validity estimates supported by existing literature. Despite the limitations, the newly translated, adapted and culturally validated measure is a reliable and valid tool that researchers can use to measure motivations in terms of involvement in risky behaviors among emerging adult women in Pakistan.

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