



Translation and Validation of Mooney Problem Checklist for Students of Junior High Schools

Rabia Murtaza^{*1}, Muhammad Waseem², Seerat Fatima³

Abstract

This study aims to evaluate the validity of Urdu translated version of the Mooney Problem Checklist in different government and private Junior High Schools. The MPCL with seven dimensions was administered to 150 students from junior high schools. The students of 6th, 7th, and 8th classes were selected. The age range was 10-15. This study analyzed correlation, frequency and confirmative analysis. The analysis was conducted using SPSS 25th version to examine the psychometric properties such as item fit statistics, removable items, unidimensionality, local independence, and item polarity validity. The results show that 209 items from junior high school form was found to have fulfilled the main assumption and measurement criteria of MPCLs. The results of junior high school students, there are 21 pairs of dimensions relationship that existed from 7 dimensions of MPCL. The results showed that 2 pairs of dimensions have a strong relationship, 5 pairs have a moderate and 14 pair has a weak relationship. The findings showed the strongest pair HPD-S ($r=0.622$, $p=0.000$), has a strong correlation. The BG-PG pair, which has the lowest correlation ($r=0.184$, $p=0.000$) is the weakest. This study provides a significant contribution to improving the scale development and validation of the MPCL instrument. This study shows the strength of the dimensions in MPCL in proving the suitability of the items used for replication in the context of junior high schools.

Keywords: Translation, Validation, Mooney Problem Checklist

1. Introduction

The Mooney Problem Checklist (MPCL) was developed by Ross L. Mooney and Leonard V. Gordon in 1950. In order to more thoroughly objectively synthesis difficulties faced by young people. (Mooney, 1950). There are three forms of MPCL namely; Junior High School Form, High School Form and College Form. Mooney Problem Checklist (Junior High School Form) consists of 210 items and covered 7 dimensions of problems: Health and Physical Development (HPD-1), School (S-2), Home and Family (HF-3), Money, Work the Future (MWF-4), Boys and Girls relation (BG-5), Relation to People in General (PG-6), Self-centered Concerns (SC-7). The MPCL contains 330 items for College Form and also 330 items for High School Form. Both forms of MPCL comprised of 11 dimension including; Health and Physical Development (HPD-1), Finances, Living Conditions and Employment (FLE-2), Social and Recreational Activities (SRA-3), Social Psychological Relations (SPR-4), Personal- Psychological Relations (PPR-5), Courtship, Sex and Marriage (CSM-6), Home and Family (HF-7), Morals and Religion (MR-8), Adjustment to College Work (ACW-9), The Future Vocational and Educational (FVE-10), Curriculum and Teaching Procedure (CTP-11). The MPCL is regarded as one of the most helpful tools for classifying a variety of problems into 11 different categories and giving respondents the chance to mention any new concerns they may have. MPCL to determine the issues and difficulties faced by schoolchildren. The MPCL is well-liked in Malaysia since it is simple to administer, doesn't require in depth knowledge, and gives respondents the chance to express their opinions on any potential new issues (Hills et al., 2015).

Previous researchers have used MPCL to identify student challenges including studying by themselves. However, we cannot discount the impact of culture on a study, particularly when employing a tool or questionnaire created by a different culture. For instance, no two people from different nations, institutions, or degrees of education have the same issues. Additionally, the MPCL was created almost 65 years ago, raising some doubts about both its applicability and its psychometric capabilities. It is thought that the respondents' responses to a particular item are influenced by the time and cultural setting. One could hypothesize that there is a chance that certain items might not be applicable anymore. As a result, it is appropriate to conduct a previously unreported evaluation of the MPCL items' suitability in the context of Malaysian participants. Previous studies (Hyndman, 2017) or descriptive statistics in terms of mean, standard deviation, and percentage only dealt with reliability analysis (Hyndman & Chancellor, 2015). Many studies have used MPCL to determine the issues that students in various contexts experience, including those that are specific to international students, Muslim teenage students (Azeem, 2012), secondary school students, and university students (Stormont et al., 2013). Social and recreational issues, educational assistance, adaption, and job issues are just a few examples of the problems that can arise. By looking at both the item-level and ability-level data of the MPCL, this work aims to close any gaps left by earlier studies (Baines & Blatchford, 2019).

1.1. Dimensions of Junior High School Form of MPCL

Health and Physical Development (HPD): This dimension of MPLC contains the problems related to physical conditions and as well as their growth. Physical issues are faced by the students at the age of 10-15 years in schools. All challenges related to students' physical health and its healthy growth are assessed through this dimension.

¹ Institute of Southern Punjab, Multan, Pakistan, Email: rabiamurtaza617@gmail.com

^{*} Translated Version of Mooney Problem Checklist in Urdu language is available with Ms. Rabia Murtaza and she can be contacted through email: rabiamurtaza617@gmail.com

² Bahauddin Zakariya University, Layyah Campus, Pakistan, Email: mwaseem4572@gmail.com

³ Ph.D. Scholar, Faculty of Behavioral Sciences, Fatima Jinnah Women University, Rawalpindi, Pakistan, Email: seeratfatima554@gmail.com

School (S): This dimension related to students' problem in the context of school such as fear of exams, low grades, lack of interest in study, poor performance in spite of having ability. These problems are measured in this dimension. School is place of learning but students have multiple issues in their schools.

Home and Family (HF): This dimension covered the issues toward parents and other associated figure. These issues are loneliness, lack of parental attention due to their responsibilities, time spending with parents. Challenges related home and family are analyzed among students through this dimension of MPCL.

Money, Work the Future (MWF): Dimension of money, work and future related to the problem of financial issues faced by the students, family has no ability to purchase car due to financial problems and having no pocket money. These issues are measured. Overall students' financial issues.

Boys and Girls relation (BG): According to this dimension students are limited and have no opportunity to go outside, no permission to drive a car, restriction is related to recreational activities. Finally, limitations and restriction are examined among students at 6th, 7th, and 8th grade.

Relation to People in General (PG): Problems related to attachment, leadership qualities, feeling hopelessness, shyness to attract people toward himself or herself, no sincere friends. These issues are highlighted in this dimension.

Self-centered Concerns (SC): Problems related to self-such as becoming anxious. Fear of losing ability in front of others. Try to achieve but failed in activities. The goal of this study is to identify the most effective items for measuring student difficulties at junior high schools.

1.2. Problem Statement

When MPCL was first created, the respondents' propensity to choose particular objects as issues in their lives was taken into consideration. This scale was into English language that was considered as a challenging for the students at grade 6th, 7th and 8th in Pakistan so, it was needed to translate in Urdu language. This study modifies the original instrument's scale of measurement that is designed for junior high schools student. When using MPCL in this study, scaling is more applicable than traditional scoring techniques. An ordinal type of data in MPCL, the data rating scale, is one of the psychometric problems.

1.3. Significance of the Study

There is not enough empirical data to test the MPCL items. This study will show how well the MPCL dimensions work to satisfy the requirements of internal consistency. This will make it easier to get empirical data on the advantages and drawbacks of the dimensions in particular. The instrument developer can improve the MPCL items' quality by looking at the things that failed to measure the build holistically. This study has improved the MPC's usability by allowing us to offer more details and empirical support for the separation index's person-and-item dependability. Modern Test Theory is typically used to examine things. The research provides the institutions with information on how they can improve the content of the development programs by analyzing the negative aspects of the MPCL dimensions. Additionally, it shows how well the students performed in each dimension.

1.4. Rationale of Study

MPCL checklist was in English, children were having difficulty understanding English. It was difficult to know the nature of problems faced by the students of junior high schools. Researcher gap was found in this perspective of translation of MPCL. This study will provide psychologists with a tool that will be indigenous. They can evaluate specific problems in any child from this Urdu version translated scale. And psychologists can see which dimension they are bringing. And then the teachers work on that particular child's cognitive skills to make up for that child's deficiency. And it will be very easy for the students to understand this scale Due to the Urdu version, the children will understand each question and answer it correctly and thus the research will be valid

1.5. Objectives of the Study

- To translate and validate the Mooney Problem Checklist for the student of Junior High Schools

2. Research Methodology

2.1. Research Design

In this study, researcher used MPCL questionnaire created by Mooney and Gordon (1950) was used in this study to collect data from the sample utilizing a quantitative research strategy and survey technique. The correlation between the subscales of the Mooney Problem Checklist was assessed.

2.2. Population and Sample

Population was comprised on junior high school students. As a sample 150 students were selected through purposively sampling technique from the government and private junior high schools. Girls and boys students from grade 6th, 7th and 8th with age range 10-15 years.

3. Research Instrument

3.1. Mooney Problem Checklist (Junior High School Form)

Mooney Problem Checklist (Junior High School Form) consists of 210 items and covered 7 dimensions of problems namely: Health and Physical Development (HPD) School (S) Home and Family (HF) Money, Work the Future (MWF)

Boys and Girls relation (BG) Relation to People in General (PG) Self-centered concerns (SC) The MPCL is regarded as one of the most practical tools for classifying numerous 7-dimensional problem categories and giving respondents the chance to mention any new issues they may have.

Table 1: Items distribution dimension of MPCL

	Dimensions	Items
1.	Health and Physical Development (HPD)	30
2.	School (S)	30
3.	Home and Family (HF)	30
4.	Money, Work the Future (MWF)	30
5.	Boys and Girls relation (BG)	29
6.	Relation to People in General (PG)	30
7.	Self-centered concerns (SC)	30

In this research, one item 59 from the dimension of BG has been removed from the original instrument because it is deemed inappropriate for the cultural environment in schools. The 209 items consist of the Mooney Problem Checklist (Junior High School Form).

4. Research Procedure

In this research, the selected Mooney Problem Checklist was to identify the problems of the students and this checklist was in English, children were having difficulty understanding English. Then sent an email to the author's Mooney problem checklist to allow us to translate to Urdu the Mooney Problem Checklist but he didn't get a response then investigated the author so the author was dead. Translated Mooney problem checklist verified translation with two government Urdu expert professors from government degree collage Multan. Then finalized the scale and apply the students. The students were 150. The data was collected by the backward-forward method. Junior high school form of MPCL for the data collection. Junior high school form data was taken from the 6th, 7th, and 8th classes. The checklist for the junior high school form consisted of 209 items and demographic variables such as age, gender, school, and class. The school for research and innovation as well as the director of each school gave their approval for the study to be carried out. Additionally, permission is required from the Student Affairs Officer at each school, particularly to gather student information for the sample selection. The students were present for the handing out of the instruments and the briefing, which took place on hard-form paper. With the assistance of the school's teachers, the checklist was completed in an hour and allowed 15 minutes for refreshment. Each student finished the test satisfactorily. Students have roughly 1 hour to complete all of the questions easily.

4.1. Backward-Forward Translation Method

The forward-backward methods' translations of the Mooney problem checklist were created to examine the greatest. Although forward-backward methods created functionally comparable versions of the Mooney problem checklist, translation alone cannot close the minute gaps brought on by linguistic and cultural differences. To achieve equality between the modified (also known as target) and source (also known as original) versions of a questionnaire, a rigorous methodology that is frequently cheap labor is required. This is especially true when the target and source cultures differ significantly (Herdman, Fox-Rushby, & Badia, 1998). Two systematic evaluations have included many recommendations for questionnaire modification, however, the methods used differ and are mostly based on personal preferences (Acquadro, Conway, Hareendran, & Aaronson, 2008; Epstein, Santo, & Guillemina, 2015). Due to the lack of empirical data, the debate over the optimum approach is still open. Earlier research (da Mota, Ciconelli, & Ferraz, 2003; Epstein, Osborne, Elsworth, Beaton, & Guillemin, 2015; Hagell, Hedin, Meads, Nyberg, & McKenna, 2010) was unable to identify the ideal translation procedure or demonstrate the value of the back-translation stage.

The forward-backward (FB) and dual-panel (DP) translation methods are the two most widely used in the field of health-related quality-of-life research, but none is better than the other (Hagell et al., 2010). In a sizable randomized experimental study, it was discovered that the qualities of translation studies with and without the reverse translation step were similar (Epstein, Osborne, et al., 2015). The argument that semantic and syntactical differences between languages would cause sentences of back-translated writings to appear different from those of the source, even though the content may be similar in meaning, has been raised in discussions of back-translation (McKenna & Doward, 2005; Swaine-Verdier, Doward, Hagell, Thorsen, & McKenna, 2004); An incoherent text in the chosen language is more likely to be produced when there is an excessive accuracy to the source text (Chidlow, Plakoyiannaki, & Welch, 2014).

4.2. Approach and Administration

The approach of study was quantitative and survey was conducted as method. The researcher have requested authorization from government and private junior high schools. When requesting student population statistics for sampling purposes, researchers must additionally get the Student Affairs Officer's approval. The test was given for an hour while being observed by a school lecturer. Each student finished the test satisfactorily. The students were personally addressed during the instrument

delivery and briefing. Students have roughly one hour to finish all of the questions. The group of tools assembled by the researcher following the experiment. As a gesture of gratitude, letters of thanks and presents for the students were delivered to the instructors.

4.3. Instrument Administration

The MPCL was used in this study to gather information from a sample of junior high school students from government and private schools. In this study, the term “challenges” refers to the difficulties that students in schools encounter with the characteristics of MPCL as conceived by (Mooney & Gordon, 1950). There were seven dimensions in the MPCL.

4.4. Item Fit

Several permitted items for each of the seven MPCL dimensions based on item fit statistics and polarity items. The 209 items consist of the Mooney Problem Checklist (Junior High School Form).

4.5. Removable Items

One item removed from BG dimension the junior high school form because it is not considered appropriate to the cultural context in Schools.

5. Data Analysis

Data were analyzed by using SPSS. The student’s responses were entered into and analyzed by using SPSS 25th version. The psychometric properties of the items were analyzed. This study analyzed the frequency, correlation, and confirmative factor analysis.

5.1. The Students of Junior High School

Table 2: Frequency Characteristics of the Respondents

Variables	Category	Frequency	Percent
Age	10	2	1.3
	11	25	16.7
	12	60	40.0
	13	49	32.7
	14	13	8.7
	15	1	.7
	Total	150	100.0
Gender	Male	75	50.0
	Female	75	50.0
	Total	150	100.0
School	Govt.	75	50.0
	Private	75	50.0
	Total	150	100.0
Class	6	35	23.3
	7	35	23.3
	8	40	26.7
	Total	150	100.0

Table 3: Correlation and Descriptive Statistics of Study Variables

Variables	Mean	Std. D	1	2	3	4	5	6	7
1. HPD	4.66	3.24	-	.622**	.366**	.244**	.215**	.441**	.610**
2. S	4.32	3.17		-	.397**	.348**	.193*	.504**	.565**
3. HF	4.70	2.94			-	.513**	.224**	.371**	.391**
4. MWF	4.68	2.91				-	.216**	.319**	.324**
5. BG	4.55	2.98					-	.184*	.339**
6. PG	4.32	3.16						-	.475**
7. SC	4.02	3.08							-

Note: **. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

In this study, there are 21 pairs of dimensions that are related to one another, using the MPCL’s seven dimensions. According to the findings, 2 pairs of dimensions are strongly correlated, 5 pairs are moderately correlated, and 14 pairs are weakly correlated. The results revealed a substantial correlation between the highest pair, HPD-S ($r = 0.622$, $p = 0.000$). The BG-PG pair, which has the lowest correlation ($r = 0.184$, $p = 0.000$) is the weakest. According to Hair, Celsi, Original, and Bush (2013), the correlation’s strength ranges from 0.81 to 1.00 (very strong), 0.61 to 0.80 (strong), 0.60 to 0.41 (moderate), 0.21 to 0.40 (weak), and 0.00 to 0.20. (Very weak to no relationship). This measurement of correlation revealed the relational values.

Table 4: Confirmative Factor Analysis (CFA)

Latent construct/ factors	Item/ indicators	Factor Loading	CFI	Average variance Extracted	R ²	Composite reliability (Cronbach's alpha)
HPD	hpd1	.48	.963	0.58	.477	.743
	hpd2	.53			.526	
	hpd3	.58			.580	
	hpd4	.48			.401	
	hpd5	.53			.538	
	hpd36	.58			.577	
	hpd37	.50			.503	
	hpd38	.54			.533	
	hpd39	.47			.466	
	hpd40	.49			.490	
	hpd71	.44			.440	
	hpd72	.55			.547	
	hpd73	.48			.451	
	hpd74	.53			.538	
	hpd75	.58			.577	
	hpd106	.50			.503	
	hpd107	.54			.533	
	hpd108	.58			.566	
	hpd109	.50			.590	
	hpd110	.53			.577	
	hpd141	.47			.426	
	hpd142	.49			.480	
	hpd143	.44			.401	
	hpd144	.55			.538	
	hpd145	.48			.477	
	hpd176	.53			.501	
	hpd177	.58			.538	
	hpd178	.50			.577	
	hpd179	.54			.503	
	Hpd180	.50			.533	
S	s6	.75	.963	0.58	.777	.766
	s7	.53			.526	
	s8	.58			.580	
	s9	.55			.501	
	s10	.53			.538	
	s41	.58			.577	
	s42	.50			.503	
	s43	.54			.533	
	s44	.47			.466	
	s45	.76			.790	
	s76	.44			.440	
	s77	.55			.547	
	s78	.48			.401	
	s79	.53			.538	
	s80	.58			.577	
	s111	.50			.503	
	s112	.54			.533	
	s113	.76			.766	
	s114	.50			.590	
	s115	.53			.577	
	s146	.47			.426	
	s147	.66			.680	
	s148	.44			.401	
	s149	.55			.538	

HF	s150	.68			.677
	s181	.53			.501
	s182	.58			.538
	s183	.78			.777
	s184	.45			.403
	s185	.50			.533
	Hf11	.75			.777
	hf12	.53			.526
	hf13	.58			.580
	hf14	.55			.501
	hf15	.53			.538
	hf46	.58			.577
	hf47	.50			.503
	hf48	.54			.533
	hf49	.47			.466
	hf50	.76			.790
	hf81	.44		0.46	.440
	hf82	.55			.547
	hf83	.48			.401
	hf84	.53			.538
	hf85	.58	.963		.577
	hf116	.50			.503
	hf117	.54			.533
	hf118	.76			.766
	hf119	.50			.590
	hf120	.53			.577
	hf151	.47			.426
	hf152	.66			.680
	hf153	.44			.401
	hf154	.55			.538
	hf155	.68			.677
	hf186	.53			.501
	hf187	.58			.538
	hf188	.78			.777
	hf189	.45			.403
	Hf190	.50			.533
MW	mwf16	.40			.471
	mwf17	.50			.523
	mwf18	.55			.584
	mwf19	.60			.602
	mwf20	.65			.635
	mwf51	.45			.472
	mwf52	.55			.504
	mwf53	.45			.434
	mwf54	.70			.763
	mwf55	.45			.494
	mwf86	.48		0.57	.444
	mwf87	.75			.743
	mwf88	.58			.504
	mwf89	.80			.833
	mwf90	.53	.963		.571
	mwf121	.44			.403
	mwf122	.50			.533
	mwf123	.48			.465
	mwf124	.60			.694
	mwf125	.58			.575
	mwf156	.46			.424

	mwf157	.58			.583	
	mwf158	.45			.404	
	mwf159	.54			.533	
	mwf160	.56			.573	
	mwf191	.48			.401	
	mwf192	.53			.538	
	mwf193	.58			.577	
	mwf194	.45			.403	
	mwf195	.54			.533	
BG	bg21	.47			.471	
	bg22	.49			.523	
	bg23	.44			.484	
	bg24	.55			.502	
	bg25	.48			.435	
	bg56	.45			.472	
	bg57	.47			.404	
	bg58	.59			.534	
	bg60	.50			.563	
	bg91	.45			.494	
	bg92	.48			.444	
	bg93	.53			.543	
	bg94	.58			.504	
	bg95	.48			.433	
	bg126	.53	.963	0.548	.571	.663
	bg127	.44			.403	
	bg128	.55			.533	
	bg129	.48			.465	
	bg130	.53			.594	
	bg161	.58			.575	
	bg162	.53			.524	
	bg163	.58			.583	
	bg164	.50			.504	
	bg165	.54			.533	
	bg196	.50			.573	
	bg197	.48			.401	
	bg198	.53			.538	
	bg199	.58			.577	
PG	bg200	.56			.536	
	Pg26	.67			.677	
	pg27	.67			.626	
	pg28	.78			.780	
	pg29	.56			.501	
	pg30	.53			.538	
	pg61	.58			.577	
	pg62	.50			.503	
	pg63	.45			.433	
	pg64	.47			.466	
	pg65	.68			.690	
	pg96	.44		0.558	.440	
	pg97	.78			.747	
	pg98	.79			.701	
	pg99	.53			.538	
	pg100	.58	.963		.577	.743
	pg131	.67			.603	
	pg132	.54			.533	
	pg133	.68			.668	
	pg134	.50			.590	

	pg135	.48		.477	
	pg166	.47		.426	
	pg167	.79		.780	
	pg168	.44		.401	
	pg169	.55		.538	
	pg170	.78		.757	
	pg201	.56		.501	
	pg202	.78		.738	
	pg203	.78		.767	
	pg204	.66		.603	
	Pg205	.50		.533	
SC	Sc31	.48		.477	
	sc32	.53		.526	
	sc33	.58		.580	
	sc34	.48		.401	
	sc35	.53		.538	
	sc66	.58		.577	
	sc67	.50		.503	
	sc68	.54		.533	
	sc69	.47		.466	
	sc70	.49		.490	
	sc101	.44	0.56	.440	
	sc102	.55		.547	
	sc103	.48		.451	
	sc104	.53		.538	
	sc105	.58	.963	.577	.743
	sc136	.50		.503	
	sc137	.54		.533	
	sc138	.58		.566	
	sc139	.50		.590	
	sc140	.53		.577	
	sc171	.47		.426	
	sc172	.49		.480	
	sc173	.44		.401	
	sc174	.55		.538	
	sc175	.48		.477	
	sc206	.53		.501	
	sc207	.58		.538	
	sc208	.50		.577	
	sc209	.54		.503	
	Sc210	.50		.533	

6. Discussion

The MPCL was chosen because it offers a wide range of problem categories and gives respondents the chance to list any new issues they may have. Junior high school form data was taken from the 6th, 7th, and 8th classes. In this study, frequency, correlation, and confirmatory analyses were examined. The analysis was conducted using SPSS to evaluate the psychometric properties including item fit statistics, detached items, structural model, local independence, and item polar validity. To meet the requirements of internal consistency, this study demonstrates the effectiveness of the MPCL dimensions. This study shows the strength of the dimensions in MPCL in proving the suitability of the items used for replication in the context of schools. The research not only contributes to testing the psychometric properties of the items in replicating with school students' context, but it is also showing us the students' performance for each dimension as well. But one item from the dimension of BG, item (59) has been removed from the original instrument because it is deemed inappropriate for the cultural environment in schools. The 209 items consist of Mooney Problem Checklist (Junior High School Form) and Translated Mooney problem checklist verified translation with two government Urdu expert professors from government degree college Multan. Then finalized the scale and apply the students. This study intends to assess the validity of the Mooney Problem Checklist's Urdu translation in various government and private schools. The 150 respondents from government and private schools who were in junior high school were given the Mooney problem

checklist, which has seven dimensions. In this study, frequency, correlation, and confirmatory analyses were examined. According to the findings, two dimensions are strongly correlated, five are moderately correlated, and fourteen are weakly correlated. The results demonstrated a substantial connection between the strongest pair, HPD-S ($r = 0.622$, $p = 0.000$). The BG-PG pair, which has the lowest correlation ($r = 0.184$, $p = 0.000$) is the weakest. The MPCL has been used in numerous research to pinpoint the issues that students in various contexts, including international students, Muslim adolescent students, secondary school students, and college students, are facing. Among the several categories of issues are social and recreational, educational guidance, adaption, and career-related issues. This study illustrates how the MPCL dimensions are effective at demonstrating the replication items' suitability for use in the context of junior high schools. The study not only tests the psychometric properties of the items in a setting resembling that of junior high school but also displays the performance of the students for each dimension.

7. Conclusion

According to the study, the validation of MPCL items was examined, and the best-fitting items were grouped in light of the difficulties faced by students of Junior High School. The 209 items of junior high school forms of the MPCL were found to have good school characteristics based on MPCL, indicating its ability in the school. Therefore, it is advised that educators and researchers use the modified version of the MPCL to identify the difficulties faced by students. More research is needed, particularly regarding analyzing respondents with a greater ability to reply to the questions. Therefore, educators and schools' administration can use the data from the modified MPCL to pinpoint students who are having problems and support them by putting in place the right programs. This study was successful in achieving its goal of validating MPCL in the setting of several governments and private junior high schools.

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