

## **DETERMINATION OF KOHLBERG'S MORAL DEVELOPMENT STAGES AND CHRONOLOGICAL AGE**

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### **Abstract**

The purpose of this study is to verify the correlation between the developmental stages of Kohlberg's moral attitudes and chronological age, through non-experimental methodology in a general sample of 167 subjects included in the study.

In the theory of stages addressed in this study, there are three levels (six stages in total) in the hierarchical structure of Kohlberg's theory of moral development.

In the first level, the judgments of the individual derive from obedience and punishment, respectively personal interests, in the second level, interpersonal interests such as authority are involved, while in the third level, the individual refers to a set of universal principles such as justice and fairness.

The results presented through correlation analysis show that there is no statistically significant relationship between the first, second and third stage and the chronological age, while the relationship resulted as average with a positive direction, but statistically significant between the fourth, fifth and sixth stage. The data of the difference resulted as statistically significant, showing a higher mean rank in moral judgments at all stages of development in female subjects versus male subjects. Whereas, the analysis of the difference of moral judgments according to Kohlberg's developmental stages, the findings show that doctors had the most developed judgment in the first and fifth developmental stage, as opposed to students and teachers, while teachers, as opposed to doctors and students, resulted with the most developed second, third, fourth and the sixth stage.

*Keywords:* Kohlberg's developmental stages, chronological age

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### **1. Introduction**

The variables of this research belong to the field of moral psychology and are treated through non-experimental methodology, putting efforts into verifying the correlation between Kohlberg's developmental stages and chronological age.

Kohlberg assesses people's moral judgments based on the way people justify their moral judgments regarding these three levels (preconventional, conventional, and postconventional). The three levels vary from the lowest to the highest degree, with each level having stability, but substantively responding with different types of moral reasoning. The first and primary motive of the first level (preconventional), which includes the first two stages (obedience and punishment; individual interests), is avoiding punishment and attain

pleasure. At the second level (conventional), which includes the third and fourth stages (interpersonal; authority), the individual has a motivation that is concerned with mutual relations and expectations. The main motivation of the individuals at this level is to be accepted and socially approved by others and, in this context, to fulfill the orders of those who are hierarchically superior. At the last and third (postconventional) level, the individual develops an autonomous moral conception, while in moral judgment he often refers to a universal set of principles (such as justice and fairness) (Yılmaz. O, Bahçekapili. G. H, Sevi. B. 2019; cited by Ahmeti, K and Ramadani, N, 2020). According to Kohlberg, this stage corresponds to a set of universal moral principles that all people should follow, and moral superiority is characterized as attainment in this stage.

The theory of this research is based on Kohlberg's theory and the use of main concepts from the research of Ahmeti and Ramadani (2020), who treated the same theoretical approach concerning the moral/philosophical approach of utilitarianism. The instrument for measuring the developmental stages is also the motive of the respective research by finding a new relationship and statistical data which were not assessed previously in the relevant sample and wider in the Republic of North Macedonia.

## **2. Theoretical framework**

### **1.1 Kohlberg's stages of moral development and the chronological age**

Since the very beginning, Kohlberg's theory has incited controversy and stimulated a heated debate. However, just as he obstinately defended the cognitive-developmental approach, Kohlberg also listened carefully to his critics, as he continued to revise and reformulate his theory throughout his career, admittedly "eating his own words" while doing so. (Kohlberg, 1973, cited by; Arnold. L. M, 2000; Ahmeti, K. and Ramadani, N., 2020).

There are three levels (six stages in total) in Kohlberg's moral development theory (Yılmaz. O, Bahçekapili. G. H, Sevi. B. 2019; cited by Ahmeti, K and Ramadani, N. 2020)

1. The first level (preconventional): which includes the first two stages (obedience and punishment; individual interests), is avoiding punishment and attain pleasure. In the first stage, the individual does not understand or care about the fact that other people may have desires and want things similar to theirs.
2. The second level (conventional): includes the third and fourth stages (interpersonal; authority), the individual has a motivation that is concerned with mutual relations and expectations. The main motivation of the individuals at this level is to be accepted and socially approved by others and, in this context, to fulfil the orders of those who are hierarchically superior.
3. The third level (postconventional): the individual develops an autonomous moral conception, while in moral judgment he often refers to a universal set of principles (such as justice and fairness).

Kohlberg argued that the formal and structural aspects of morality are universal, while the content of morality can vary with culture. In addition, he believed the criteria of adequacy and superiority of moral principles are intrinsically encompassed in the sphere of moral reasoning (Naito. T, 2013).

Furthermore, he proposed that all people in all cultures use universal concepts of morality: “All individuals in all cultures use the same thirty basic categories, concepts, or principles” (Kohlberg, 1971, p. 175; cited by Naito. T, 2013). Examples of the issues in these basic categories include life, law, property, authority, trust, and so on. People in all cultures are faced with conflicts within these universal domains. Because there are universal moral issues and conflicts, the moral stages of individuals are usually measured by presenting dilemmas that are supposed to be resolved in any society. Further, Kohlberg claimed that moral reasoning develops according to a universal sequence of stages (Naito. T, 2013).

Dawson, L.TH (2002) study found that there is a correlation between the ability of moral reasoning and age, academic achievements and gender, whereby moral reasoning with academic achievements have a relationship with positive direction ( $r=.7948$ ,  $p<0.01$ ); it is found that moral reasoning with age have a strong correlation with positive direction ( $r=.6593$ ,  $P<0.01$ ), while moral reasoning and gender do not correlate ( $r=-.0212$ ,  $p>0.05$ ).

According to Kohlberg (1971), moral development does not progress only with age (i.e., biological maturity); however, moral reasoning should be related to cognitive reasoning capacity (cited by: Yılmaz. O, Bahçekapili. H. G, Sevi. B (2019).

While Hardin. F.J (1978) claims that one of the characteristics of Kohlberg’s theory is that stages are not congruent with any definite age group, it is possible to fix approximate ages to each level suggesting that children at those ages should be operating at the designated stage:

- **Up to age 7 - Stage 1**
- **Preadolescence - Stage 2**
- **Ages 10 -11 - Stage 3**
- **Adolescence - Stage 4**
- **Adulthood - Stages 5 and 6**

### **3. Research methodology**

The variables of this research were treated through non-experimental methodology, theory and previous findings review on the same variables, and data collection through appropriate instruments to achieve the purpose of the study. The selection of the sample in this study is intentional, including all respondents who filled in the questionnaire and were residents of the Republic of North Macedonia. The instrument was distributed online on the social network Facebook from two profiles that did not have mutual friends, thus respondents have not been able to fill in the questionnaire twice. The rules and instructions related to answering the questions were specified in advance, and the anonymity of each respondent has been ensured by respecting all ethical norms and rules for protecting the study sample. A total of 167

respondents participated in the study, of which 73 (43.7%) are male and 94 (56.3%) are female. According to the place of residence 61 (36.5%) of respondents are from rural areas and 106 (63.5%) from urban. In the categorization of respondents by occupation, the study includes 51 (30.5%) students, 56 (33.5%) doctors, and 60 (35.9%) teachers.

### **3.1 The instrument for assessing the level of moral development stages according to Kohlberg**

The instrument used to assess the level of moral development according to Kohlberg is created by Ahmeti and Ramadani (2020), to measure the same variable, where there were five improvised situations for the actual standard, where each included six moral judgments and the respondent had the option to assess each moral judgment according to Likert scale: 1 (Completely disagree), 2 (Disagree), 3 (Agree) and 4 (Completely agree).

The situations of the respective instrument were oriented to put the respondent in the position of a student who is about to graduate and at the last exam should make a few non-standard decisions to pass or fail the exam, the situation of the citizen who should spend more or less water than the allowed quantity by the city reserves, the pay toll employee who should let an urgent case pass or not without payment, break the speed limits in traffic as a consequence of urgency to pay the loan installment and the unmasking of a work colleague who has committed a robbery at the workplace.

The moral judgments for which the respondents have provided their assessment, based on particular scales, have been oriented towards collecting data about judgments as a result of obedience and punishment based on personal interests, judgments from the wishes of other people and authority figures, and judgment based on a set of universal principles (such as justice and fairness).

This instrument resulted in high internal reliability and consistency, with a value of Alpha Cronbach's .69.

Concerning the age measurement, the chronological age of the subject in years from the date of birth to the moment of application of the questionnaire was used.

## **4. Findings**

Table 1 shows the descriptive data of the respondents, respectively that this study included 73 (43.7%) are male and 94 (56.3%) female, 61 (36.5%) respondents are from rural areas and 106 (63.5%) from urban areas, while according to the category of occupation, the study includes 51 (30.5%) students, 56 (33.5%) doctors, and 60 (35.9%) teachers of the total of 167 subjects.

Table 1. Descriptive data of respondents.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	73	43,7	43,7	43,7
	Female	94	56,3	56,3	100,0
	Rural	61	36,5	36,5	36,5
	Urban	106	63,5	63,5	100,0
	Student	51	30,5	30,5	30,5
	Doctor	56	33,5	33,5	64,1
	Teacher	60	35,9	35,9	100,0
	Total	167	100,0	100,0	

Table 2 shows the descriptive data regarding Kohlberg's moral development stages, whereas the mean value reached in the first stage is  $M=10.62$ , the minimum 5, the maximum 15 and  $SD=1.95$ ; The second stage reaches a mean of 13.66, the minimum value 10, maximum 19 and  $SD = 1.69$ ; the third stage reaches mean of 11.98, the minimum value 8, the maximum 16 and  $SD = 1.69$ ; the fourth stage reaches mean of 12.99, the value minimum 8, maximum 18 and  $SD = 1.79$ ; the fifth stage reaches mean of 13.62, minimum value 9, maximum 18 and  $SD = 1.89$  and the sixth stage reaches mean of 13.74, minimum value 9, maximum 20 and  $SD = 1.96$ . The respective values indicate that all moral stages are above the expected average and show presence in the included sample except for the first stage, which does not show presence in the sample since the obtained average is below the expected average. The same is shown by the value of Skewness stating that the developmental stages are right-tailed except for the first developmental stage which is left-tailed, while the value of Kurtosis indicates that the distribution of variables is within the allowed limits.

Table 2. Descriptive data on Kohlberg's moral development stages

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
First stage	167	5	15	10,62	1,95	-,390	,188	,140	,374
Second stage	167	10	19	13,66	1,69	-,007	,188	-,098	,374
Third stage	167	8	16	11,98	1,69	-,448	,188	-,140	,374
Fourth stage	167	8	18	12,99	1,79	-,293	,188	,184	,374

Fifth stage	167	9	18	13,62	1,89	,043	,188	-,265	,374
Sixth stage	167	9	20	13,74	1,96	,111	,188	,010	,374
Valid N (listwise)	167								

The data presented in Table 3 show the normal distribution test for the moral development stages, which shows that none of the stages has a normal distribution according to Kolmogorov-Smirnov ( $p < .00$ ), therefore non-parametric statistics were used to test the hypotheses, the results of which are not generalizing but only apply to the tested sample.

Table 3. Normality Tests of developmental stages

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
First stage	,156	167	,000	,960	167	,000
Second stage	,137	167	,000	,962	167	,000
Third stage	,175	167	,000	,948	167	,000
Fourth stage	,160	167	,000	,965	167	,000
Fifth stage	,134	167	,000	,967	167	,001
Sixth stage	,127	167	,000	,968	167	,001

a. Lilliefors Significance Correction

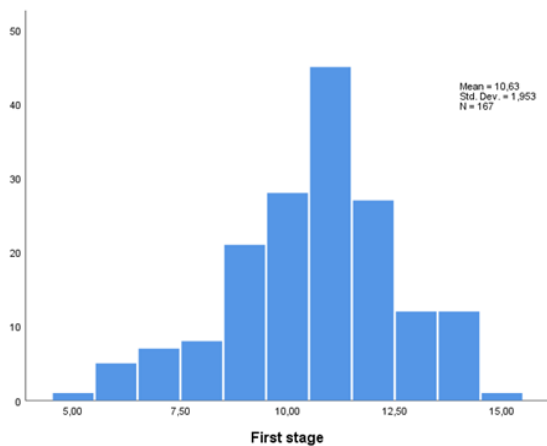


Chart 1. First stage

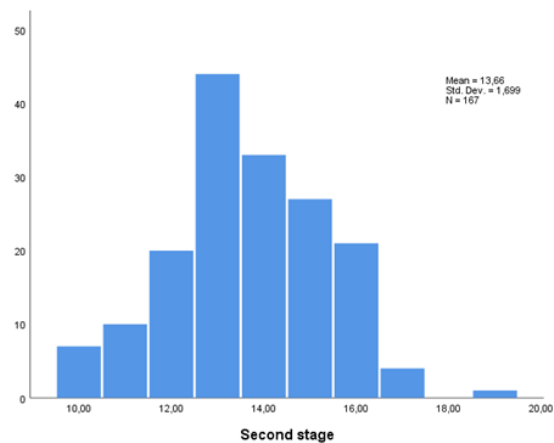


Chart 2. Second stage

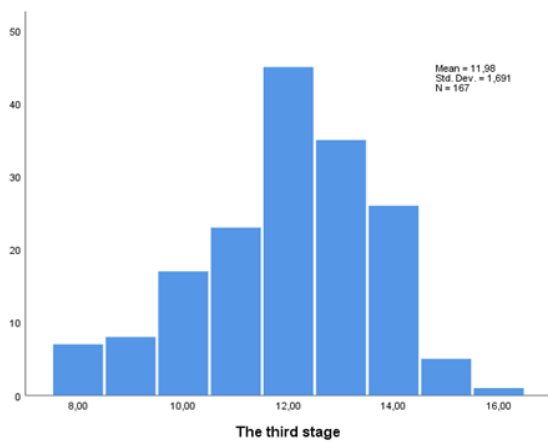


Chart 3. Third stage

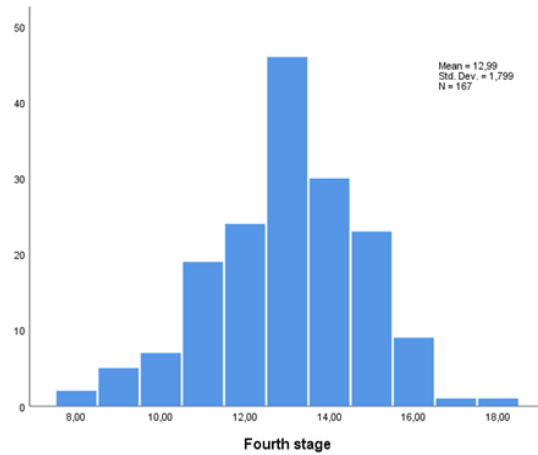


Chart 4. Fourth stage

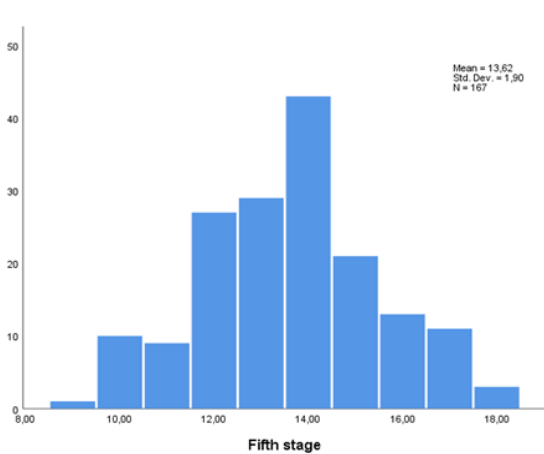


Chart 5. Fifth stage

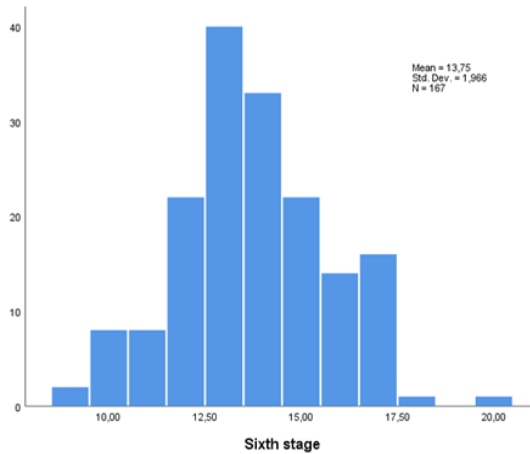


Chart 6. Sixth stage

The data presented in Table 4 show the non-parametric correlation analysis according to Spearman's rho between the moral development stages and chronological age, where it is stated that there is no statistically significant correlation between the first stage, the second stage and the third stage ( $p > 0.05$ ), while there is a weak correlation but statistically significant with positive direction ( $r = .307$ ,  $p < .307$ ) between the fourth stage and the chronological age, an average correlation with positive direction also exists between the fifth stage and the chronological age ( $r = .455$ ,  $p < .05$ ), and there is a strong correlation with a positive direction ( $r = .646$ ,  $p < .05$ ) between the sixth stage and the chronological age. This shows that the ability of moral judgment according to Kohlberg's stages increases with age.

Table 4. Correlation analysis between developmental stages and age.

		Chronological age	
Spearman's rho	Correlation Coefficient	,080	
	First stage	Sig. (2-tailed)	,131
		N	167
		Correlation Coefficient	,140
	Second stage	Sig. (2-tailed)	,066
		N	167
		Correlation Coefficient	,060
	Third stage	Sig. (2-tailed)	,093
		N	167
		Correlation Coefficient	,307
	Fourth stage	Sig. (2-tailed)	,031
		N	167
		Correlation Coefficient	,455
	Fifth stage	Sig. (2-tailed)	,041
		N	167
		Correlation Coefficient	,646
	Sixth stage	Sig. (2-tailed)	,033
		N	167
Correlation Coefficient			

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Table 5 shows the assessment of the difference of developmental stages by gender, indicating that there are significant differences in moral judgment in developmental stages by gender. Women achieve the highest mean rank in all stages of development and this difference is statistically significant in all stages of development ( $p < .05$ ), therefore the findings show that women have a more developed moral judgment in all stages compared to men included in the sample.



Table 5. Analysis of difference of developmental stages by gender through Mann-Whitney U test.

	Gender	N	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
First stage	Male	73	77,77	5677,50	.021
	Female	94	88,84	8350,50	
Second stage	Male	73	78,37	5721,00	.033
	Female	94	88,37	8307,00	
Third stage	Male	73	83,81	6118,00	.029
	Female	94	84,15	7910,00	
Fourth stage	Male	73	82,84	6047,50	.039
	Female	94	84,90	7980,50	
Fifth stage	Male	73	82,27	6005,50	.030
	Female	94	85,35	8022,50	
Sixth stage	Male	73	81,90	5978,50	.045
	Female	94	85,63	8049,50	
	Total	167			

The analysis presented in tables 6 and 7 shows the difference of developmental stages by occupation. Based on the respective values, it is found that doctors judge more based on the first stage with a mean rank MR= 91.28 ( $p < 0.05$ ), contrary to teacher and student profession, in the second developmental stage, teachers judge more, with mean rank MR = 93.51 ( $p < 0.05$ ), in the third stage, again teachers judge more, with mean rank MR = 87.75 ( $p < 0.05$ ), contrary to doctor and student profession, according to the fourth stage, teachers also judge more, with mean rank MR = 94.22 ( $p < 0.05$ ), according to the fifth stage doctors judge more, by reaching the highest mean rank MR = 85.01 ( $p < 0.05$ ), contrary to teacher and student profession and according to the sixth moral stage, the teachers judge with the highest indicated mean rank MR = 87 ( $p < 0.05$ ).

Table 6. Analysis of the difference of developmental stages by occupation

	Occupation	N	Mean Rank
First stage	Student	51	80,59
	Doctor	56	91,28
	Teacher	60	80,11
Second stage	Student	51	73,09
	Doctor	56	83,75
	Teacher	60	93,51
Third stage	Student	51	82,18
	Doctor	56	81,64
	Teacher	60	87,75
Fourth stage	Student	51	74,15
	Doctor	56	82,03
	Teacher	60	94,22
Fifth stage	Student	51	82,35
	Doctor	56	85,01
	Teacher	60	84,46
Sixth stage	Student	51	82,27
	Doctor	56	82,31
	Teacher	60	87,04
	Total	167	

Table 7. Test Statistics <sup>a,b</sup>

	First stage	Second stage	Third stage	Fourth stage	Fifth stage	Sixth stage
Kruskal-Wallis H	5,873	6,093	5,588	5,962	6,992	6,381
Df	2	2	2	2	2	2
Asymp. Sig.	,043	,038	,045	,040	,005	,016

a. Kruskal Wallis Test

b. Grouping Variable: Occupation

## 5. Discussion

During the examination of the goal through appropriate instruments for measuring the variables of this study and verifying the hypotheses, we found that there is no statistically significant relationship between the first, second and third stage ( $p > 0.05$ ), while between the fourth stage and the chronological age there is weak correlation but statistically significant with positive direction ( $r = .307$ ,  $p < .307$ ) between the fourth stage and the chronological age, an average correlation with positive direction also exists between the fifth stage and the chronological age ( $r = .455$ ,  $p < .05$ ), and there is a strong correlation with a positive direction ( $r = .646$ ,  $p < .05$ ) between the sixth stage and the chronological age. This shows that the ability of moral judgment according to Kohlberg's stages increases with age. This finding is supported by the research conducted by Dawson, L.TH (2002) where is stated that: there is a correlation between the ability of moral reasoning and age, academic achievements and gender, whereby moral reasoning with academic achievements have a relationship with positive direction ( $r = .7948$ ,  $p < 0.01$ ); it is found that moral reasoning with age have a strong correlation with positive direction ( $r = .6593$ ,  $P < 0.01$ ), while moral reasoning and gender do not correlate ( $r = -.0212$ ,  $p > 0.05$ ). From the previous findings stating the relevant relationship, Kohlberg (1971) added an additional element to the moral development claiming that moral development does not progress only with age (i.e., biological maturity); however, moral reasoning should be related to cognitive reasoning capacity (cited by: Yılmaz. O, Bahçekapili. H. G, Sevi. B (2019). It was also found that women achieved the highest mean rank in all developmental stages and this difference is statistically significant in all developmental stages ( $p < .05$ ), therefore the findings show that women have a more developed moral judgment in all stages compared to men included in the sample although Hardin. F.J (1978) claims that there is no relationship between gender and age, but the differences here resulted statistically significant. The reason for this variance of results may be the included sample since the findings in this research are processed with non-parametric statistics and apply only to the estimated sample and the results are not generalized, while the results in Hardin. F. J (1978) research are generalized and apply to the whole population using parametric statistics. This research found that judgment in the first and fifth stage is more developed in doctors, in contrast to students and teachers, while judgment in the second, third, fourth and sixth stage is more developed in teachers, in contrast to doctors and students and these findings resulted as statistically significant. These results are not found in

any previous research in our country regarding the respective comparisons and represent a new step towards other research on the same issue.

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