

# CORRELATION BETWEEN OCCLUSAL PARAMETERS AND BORDERLINE TREATMENT NEED ORTHODONTIC CASES IN THERAPIST'S TREATMENT DECISION

Trpevska Vesna<sup>1</sup>, Srbinoska Daniela<sup>1</sup>, Mijoska Aneta<sup>2</sup>, Pejkovska Shahpaska Budima<sup>3</sup>

<sup>1</sup>PHO Dental clinical center Sv. Pantelejmon, Clinic for orthodontics, Skopje, Republic of North Macedonia

<sup>2</sup>Faculty of Dentistry, Department of Prosthodontics, Skopje, Republic of North Macedonia

<sup>3</sup>PHO University Dental Clinical Center „St. Pantelejmon“, Department for removable prosthetics, Skopje, Republic of North Macedonia

## INTRODUCTION

In everyday clinical practice, most treatment decisions for improvement the facial and dental aesthetic, as main reasons for orthodontic treatment are based on orthodontic treatment need indices. The overall occlusion is also important and play significant role in therapist's decision.



Figure 1. T-Scan III system.

## AIM

To assess the correlation between the need for orthodontic treatment through the use of contemporary diagnostic T-Scan III system in the borderline orthodontic cases diagnosed by the indices: Dental Health Component (DHC) of Orthodontic Treatment Need index (IOTN) and DAI index.

## MATERIAL AND METHOD

30 orthodontically untreated subjects, aged between 15 and 18 years, with the desire to receive orthodontic treatment were used in this study. Dental component of IOTN index and DAI index ranked all subjects as borderline need for orthodontic treatment/elective treatment. T-Scan III System was used for measuring the occlusal status represented by occlusal time.

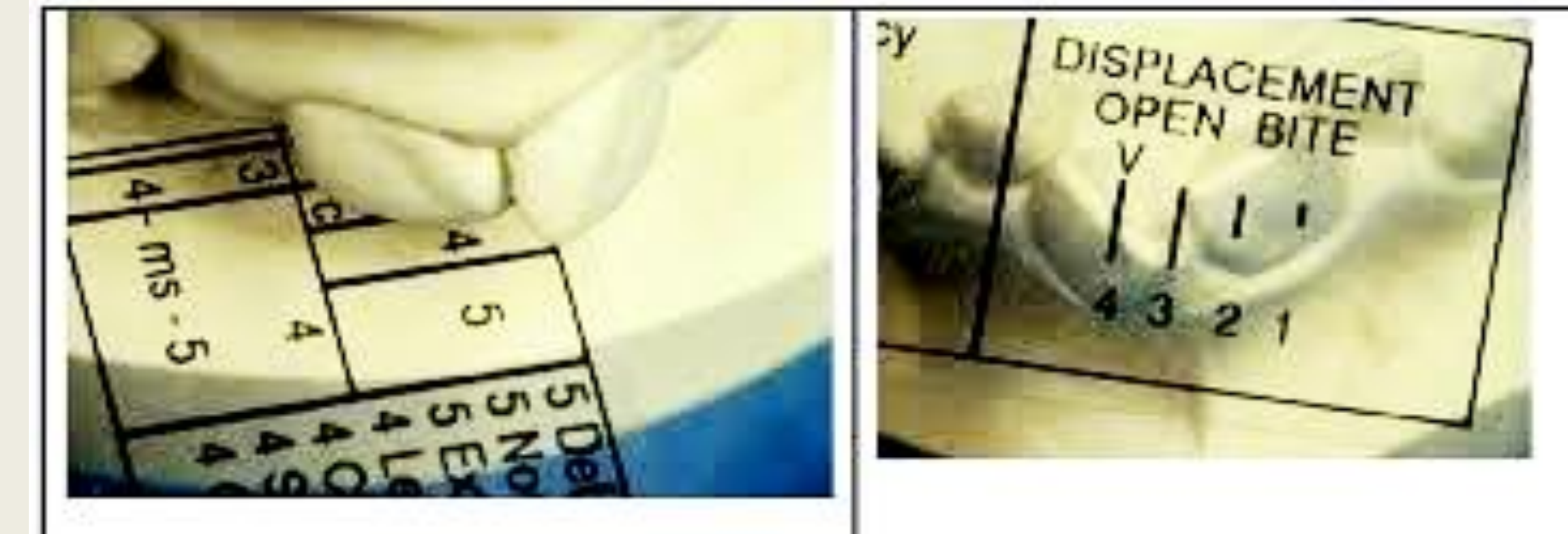


Figure 2. Occlusal indices ruler.

## RESULTS

We found statistically significant correlation between parameters: occlusion time and the values from DHC (score equal to 3) and DAI (score between 26 and 30) for borderline orthodontic cases, as well as statistically significant correlation between DHC and DAI indices.

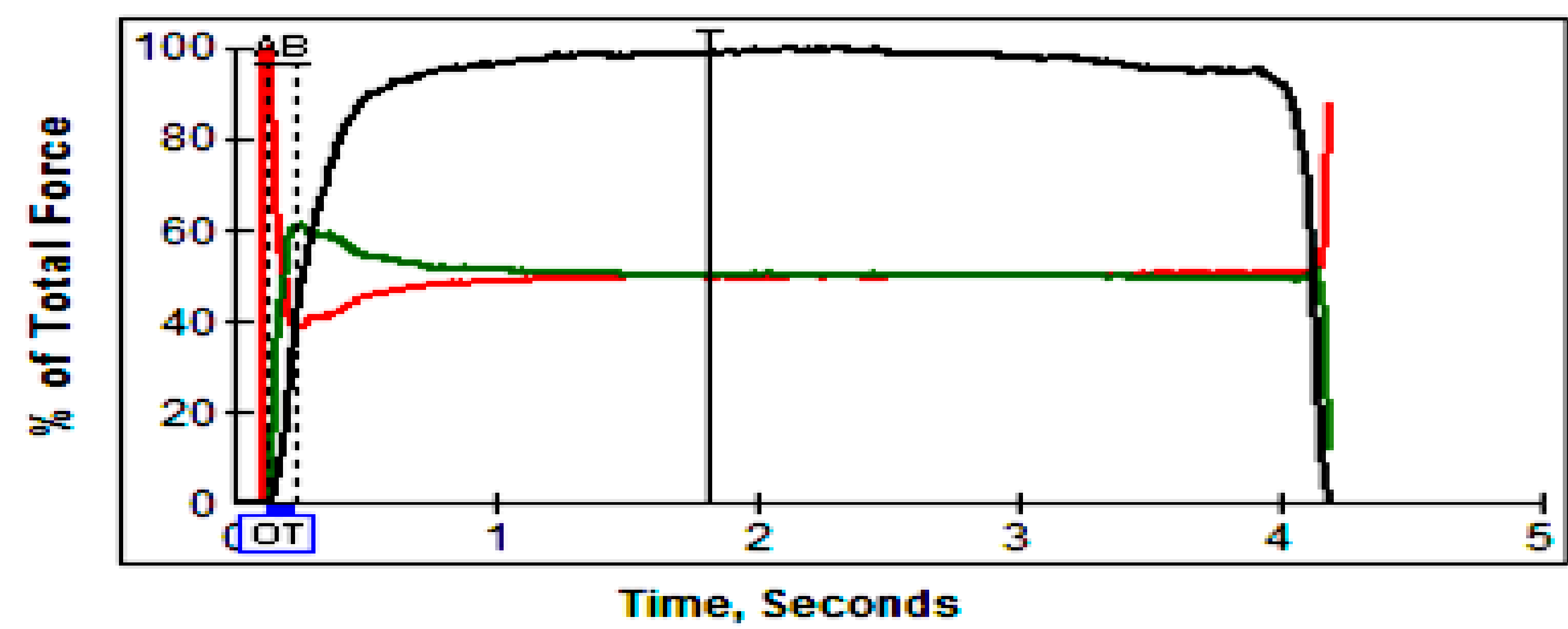


Figure 3. T-Scan III occlusion time.

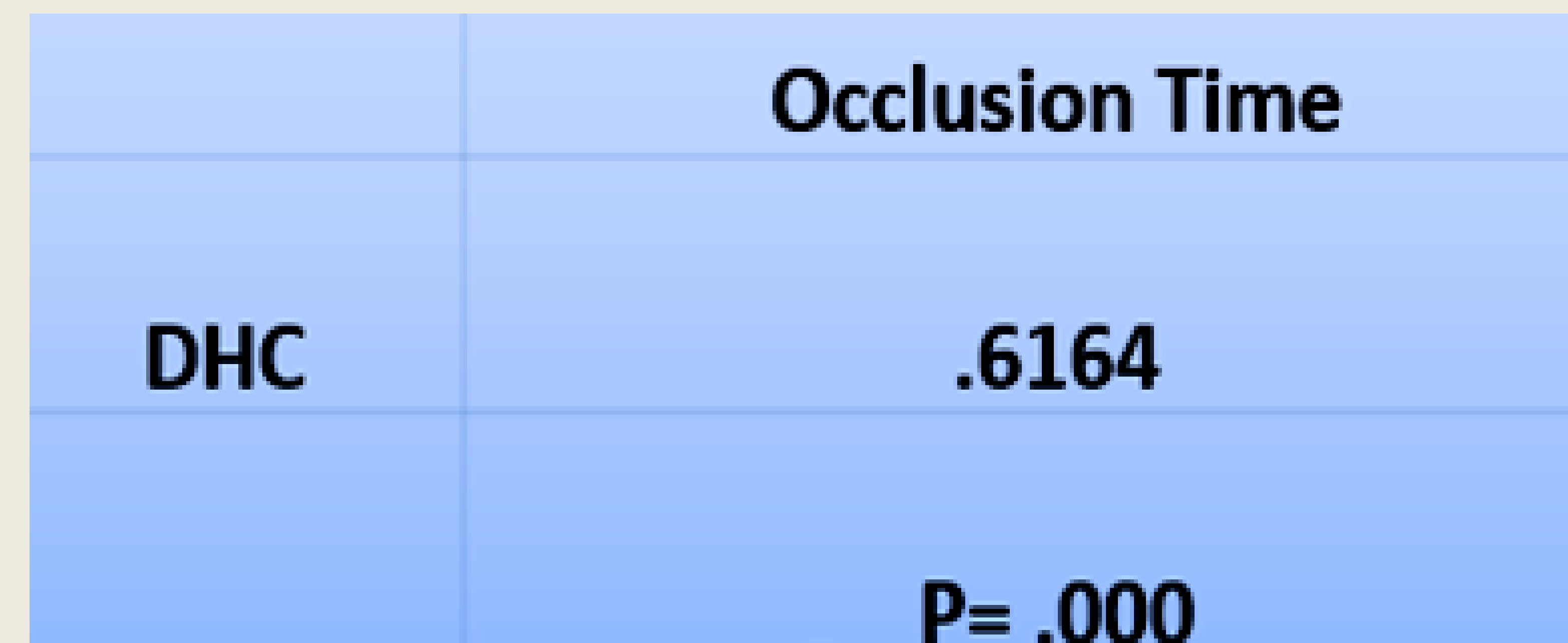
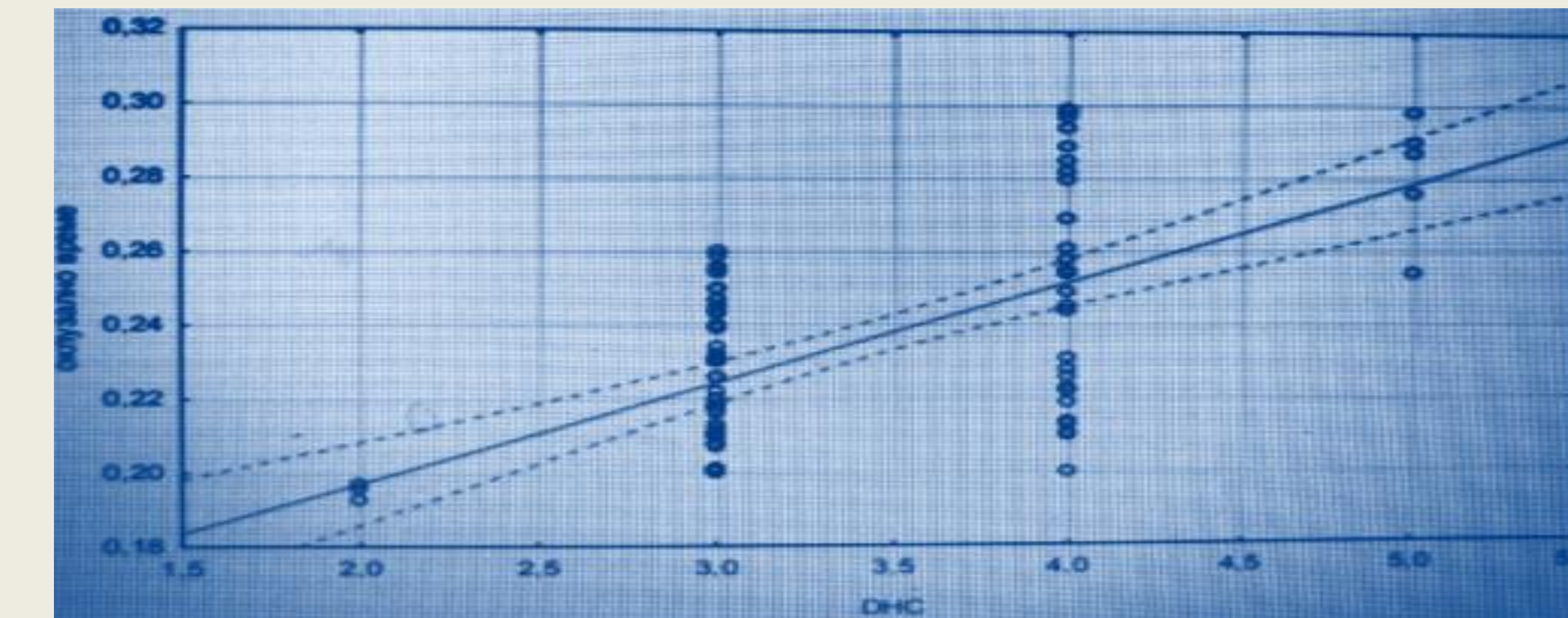
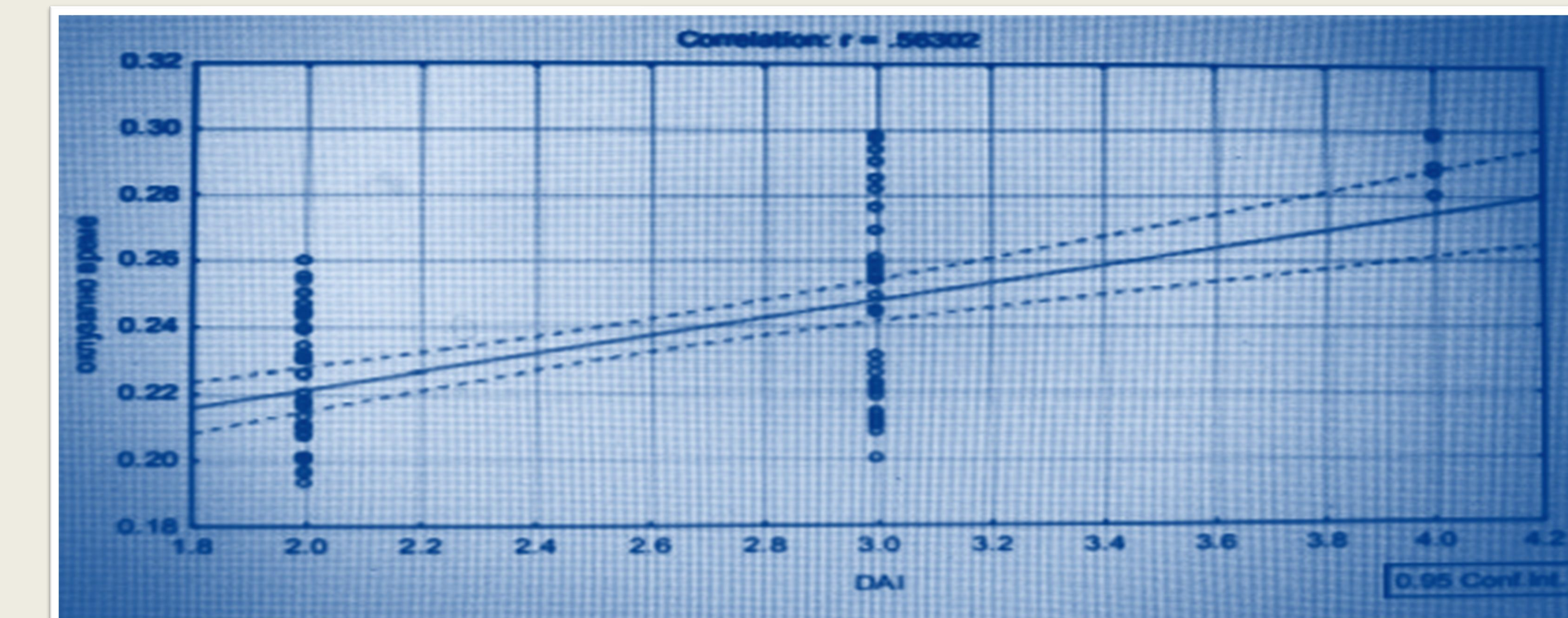
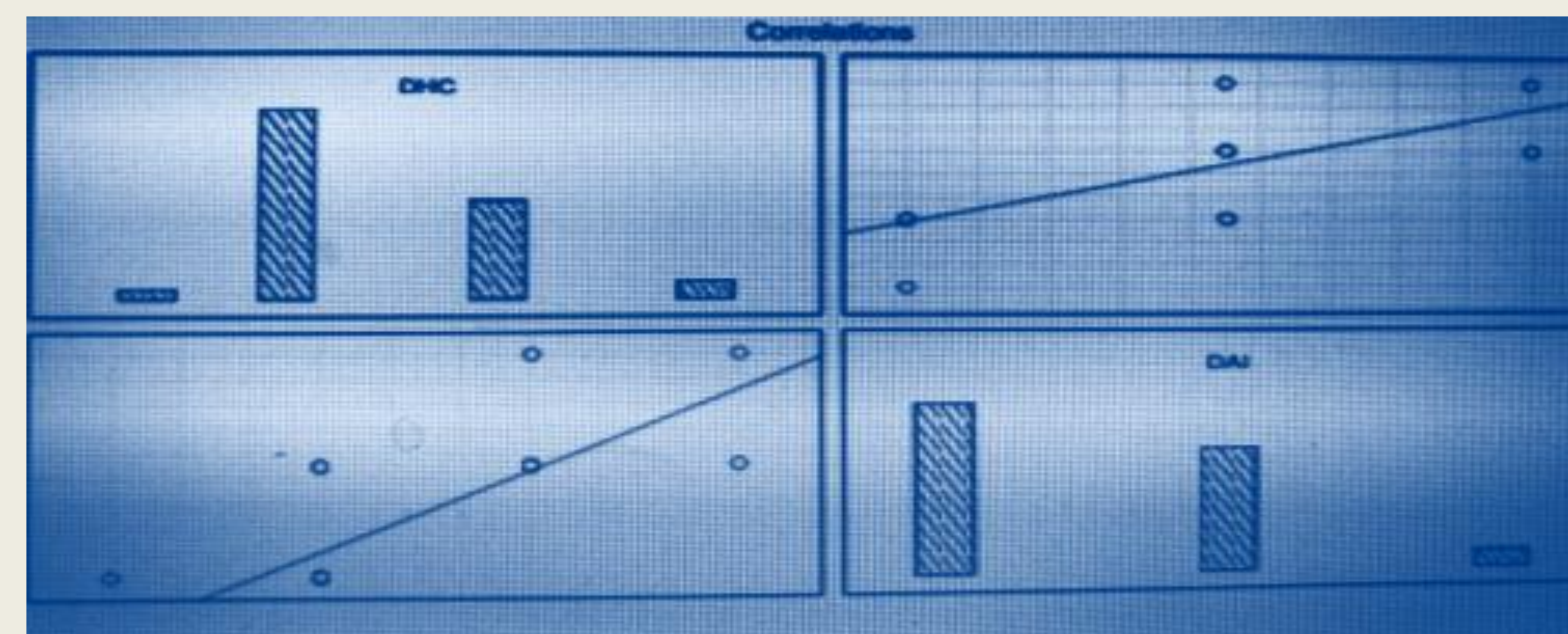


Table and graphic 1. Correlation between DHC and occlusion time.



	Occlusion Time
	5630
DAI	
	P= .000

Table and graphic 2. Correlation between DAI and occlusion time



Graphic 3. Correlation between DHC and DAI indices.

## CONCLUSION

Our findings confirm that the relationship between the application of DHC (IOTN) and DAI indices together with the T-scan III system can significantly simplify the therapist's decision based on the results obtained. Diagnosis of the occlusal relationships based on T-Scan parameters is important both in understanding symptoms and providing precise indication in the treatment of borderline orthodontic cases.