

# DEOMI Diversity Climate Scale (DDMCS): Final Deliverable



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# DEOMI DIVERSITY CLIMATE SCALE (DDMCS): FINAL DELIVERABLE

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DEOMI Human Resource Assessment  
Survey Contractor Report

*This document is submitted in completion of Task E under the HRT  
Statement of Work.*

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## I. Executive Summary

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The objective of this report is to discuss the process used to develop and validate the DEOMI Diversity Climate Scale (DDCS). The final version of the DDCS scale consists of thirty items which measure three dimensions of a pro-diversity climate (inclusion, justice, and benefits). A psychometric strategy was implemented to determine if the DDCS is both reliable and valid. To establish this, four data collection pilot studies were conducted over the span of several months. A rigorous statistical process was implemented to determine the reliability and validity of the diversity climate items. After careful analysis, the author concluded that the thirty-item DDCS demonstrates high reliability, as well as strong construct and criterion validity. In summary, the DDCS is a psychometrically sound scale that is ready for deployment alongside or in addition to the current DEOMI Organizational Climate Scale (DEOCS).

## II. Introduction

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The definitive purpose of this project was to develop a measure of diversity climate that is consistent with the military working environment and which demonstrates internal reliability, structure, construct and criterion-related validity. The project included four main stages, which closely followed the scale development methodology suggested by Spector (1992) and employed by Hammer, Kossesk, Yragui, Bodner & Hanson (2007) and Matsumoto, Yoo, Hirayama, & Petrova (2005). The major steps in developing the DDCCS included: (1) defining the construct, (2) designing the scale, (3) piloting the items, (4) item analysis/validation, and (5) norming the scale.

### **1. Theoretical Rationale**

At its foundation, diversity climate reflects perceptions of fairness which are best understood from an organizational justice perspective. Organizational justice theory is directed toward understanding fairness perceptions within the workplace. Three interrelated forms of justice are generally acknowledged: *distributive, procedural, and interactional* (Byrne & Cropanzano, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Cropanzano & Randall, 1993).

*Distributive justice* is commonly defined as fairness perceptions with respect to the distribution of assignments, promotions, and other work opportunities (Adams, 1965). Related to diversity climate, employees who perceive that the distribution of work opportunities is made on the basis of performance rather than demographic characteristics should hold positive perceptions of distributive justice, due to the parallel between employee performance and distributed opportunities.

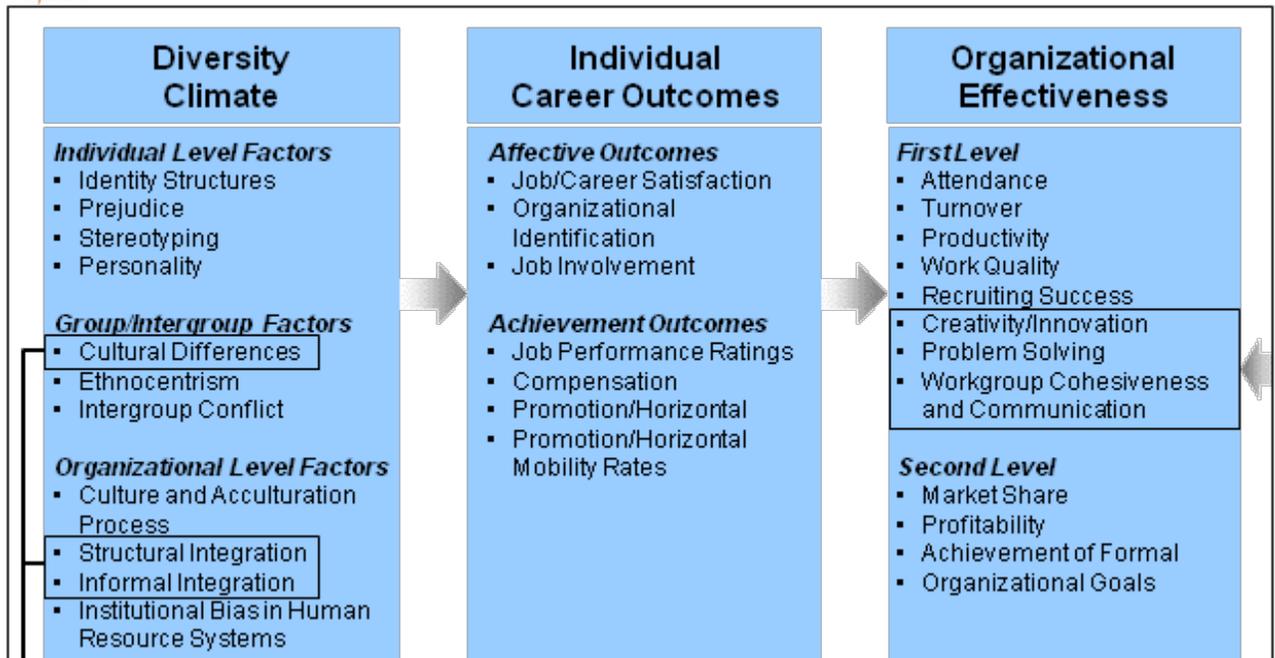
*Procedural justice* is the extent to which employees perceive that processes used to determine outcomes are fair (Lind & Tyler, 1988). For example, if a supervisor recommends both a younger and older employee for promotional consideration, both of whom are qualified for the position, then perceptions of procedural justice should be positive. Furthermore, research has also shown the importance of general perceptions of fair interpersonal treatment (from supervisors *and* coworkers) beyond those pertaining specifically to formal organizational processes or decisions (Donovan, Drasgow, & Munson, 1998).

Additional aspects of organizational justice are reflected in *interactional justice* (Bies & Moag, 1986), or the degree to which employees perceive they are

treated fairly and with dignity by supervisors or other authority figures. As an example, if, prior to an organizational change, an authority figure spends equal time answering questions from employees of various ethnic backgrounds, perceptions of interactional justice should be positive, holding other factors constant.

In addition to organizational justice theory, fairness heuristic theory provides strong rationale for diversity in the workplace. Fairness heuristic theory suggests that people use a fairness heuristic, developed from general perceptions of fairness in the workplace, to guide whether their efforts are focused on meeting self interests or others' interests (i.e., the interests of one's work group or organization) (Lind, 2001). When individuals hold positive fairness perceptions, the theory suggests such individuals will become more other-focused and more willing to cooperate with and help others. On the other hand, individuals with negative fairness perceptions are anticipated to be concerned more with fulfilling self work needs and less concerned with the interests of others.

Finally, the Interactional Model of Cultural Diversity (IMCD) developed from research, consulting, and teaching experience (Cox, 1994) (see Figure 1) was used to develop and design the diversity climate items. The IMCD posits that individual career outcomes (affective and achievement outcomes) mediate the relationship between diversity climate (individual, group, and organizational level factors) and organizational effectiveness. In addition to the indirect effects of diversity climate, certain aspects of the diversity climate such as cultural differences, structural integration, and information integration directly influence dimensions of organizational effectiveness. Therefore, it should be noted that the IMCD proposes that organizational effectiveness is an interaction between the individual and the work environment. This view is contrary to some previous work that has emphasized the relationship between an employee and co-workers or an employee and an occupation (Cox, 1994).



**Figure 1. Interactional Model of the Impact of Diversity on Individual Career Outcomes and Organizational Effectiveness**

## **2. Defining the Construct**

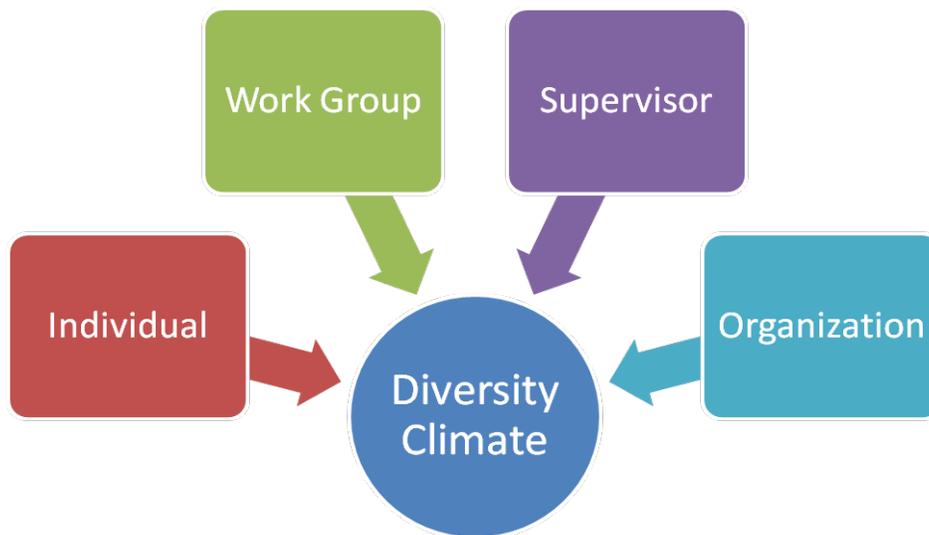
Prior to crafting any items for the DEOMI Diversity Climate Scale (DDCS), the author reviewed existing literature, pulsed members of the DoD (Department of Defense) diversity working groups (i.e., Army, Navy, DEOMI, DoD), and analyzed the strengths and weaknesses of previous definitions of diversity climate.

Diversity climate is typically appraised in terms of individuals' evaluations of and techniques for dealing with workplace diversity (Knippenberg & Schippers, 2007). An early model by Kosssek and Zonia (1993) examined perceptions of diversity climate among academic faculty. They argue that diversity climate is influenced by organizational policies on equal opportunity, access to resources and opportunities in the organization, and perceptions of underrepresented groups. Further, perceptions of diversity climate are affected by the individual's level in the organizational hierarchy, gender, and ethnicity. According to their model, women and minorities were more supportive of diversity than males and Whites. One limitation of their model is that the researchers neglected to examine any organizational effectiveness outcomes (Hicks-Clarke & Iles, 2000).

On the other hand, Cox (1993) presented an expanded model (IMCD) for all sectors that showed diversity climate to be a function of individual-level factors (identity, prejudice, stereotyping, and personality), group factors (cultural differences, ethnocentrism, and intergroup conflict), and organizational-level

factors (acculturation, structural integration, informal integration, and institutional bias). In the model, diversity climate was linked to individual affective outcomes (job satisfaction, organizational identification, and job involvement), and individual achievement outcomes (job performance ratings, compensation, promotion, and mobility rates). Further, diversity climate produced first-level organizational effectiveness outcomes (attendance, turnover, productivity, work quality, recruiting success, creativity, problem solving, and workgroup cohesiveness), as well as second-level organizational outcomes (market share, profitability, and achievement of organizational goals).

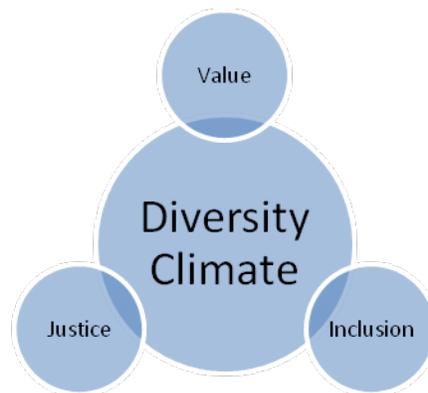
Based on a synthesis of research, theory and practice, the author defined diversity climate in terms of the individual (i.e., psychological climate), work-group and organization (i.e., organizational climate) (Dickson, Resick, & Hanges, 2006) (see Figure 2).



**Figure 2. Focus of DDCS Items**

As previously discussed, the focus of diversity climate was on the individual, his or her work group, supervisor and organization. Moreover, the scale was proposed to consist of three dimensions: justice, inclusion, and value:

*Individuals, groups, supervisors, and organizations who utilize fair personnel practices (justice) and integrate the attributes of the workforce (inclusion) into the work environment so all can reach their full potential while working towards mission effectiveness. This is accomplished at all levels of the organization through valuing diversity (value) and implementing policies (justice) that demonstrate a commitment to diversity management (inclusion). (Cox, 1994; Parks, 2008) (see Figure 3).*



**Figure 3. Dimensions of the Diversity Scale**

### **1. Designing the scale**

The author generated an item pool of over fifty items. The response choice for the scale was a 5-point Likert Scale that ranged from “totally agree” to “totally disagree.” This format was chosen because it is frequently used in the DEOMI Climate Scale.

The items measured all aspects of the author’s definition for diversity management; including fairness, discrimination, value, policies, identification and application of talent, and commitment to diversity. The initial set of items was critiqued by military and civilian personnel at DEOMI and The National Security Agency (NSA). The scale was revised based on the respondent’s feedback prior to the initial pilot.

### **2. Piloting of items**

The four pilots will be discussed in the subsequent sections of this document.

### **3. Items analysis/validation**

A psychometric strategy was implemented to determine if the DDCS was both reliable and valid. To achieve this, statistical analyses such as coefficient alpha and factor analysis were applied to the data. Additionally, convergent and discriminant construct validity of the scale was investigated utilizing the nomological network. The nomological network was examined through the relationship among the DDCS and opposing constructs (racist behaviors and differential command behaviors) along with the comparison of the correlations between DDCS and related factors (pre-existing diversity scale, organizational commitment, trust, job satisfaction and positive equal opportunity).

The use of correlations is common in scale development, since the purpose of this step is to demonstrate construct and/or criterion validity of the scale

(Spector, 1992; Hammer, Kossesk, Yragui, Bodner & Hanson, 2007; Matsumoto, Yoo, Hirayama, & Petrova, 2005). Advance statistics such as structural equation modeling and regression analysis are not considered until the final scale has been piloted. Therefore, advance statics were not employed until pilot study four (Pilot IV).

In spite of this, some researchers have used differential item function (DIF) (formerly known as: test bias) which is grounded in item response theory (IRT). DIF refers to when “individuals from different groups who have the same standing on the attribute assess by the item have different probabilities of answering them correctly or have different expected raw scores on the items (Raju & Ellis, 2002).” IRT is a “measurement model that describes the relationship between an individual’s performance on a test item and their standing on a continuous latent trait (Reise & Waller, 2002).” Historically, DIF has been used when studying cultural differences on cognitive ability test since it may be assumed that some test items were biased moreso against one race than the other. Using this methodology, such items were identified and removed. Today, DIF has been replaced with social desirability scales such as the Marlowe and Crowne Social Desirability Scale. This scale is commonly used to detect bias in attitude and value measures and was incorporated into some of the pilots. DIF was not utilized.

#### **4. Norming the scale**

It is inappropriate to norm the data of the previous three pilot studies since the purpose of the pilots was to examine the psychometric properties of the items. The distributional characteristics of various populations were calculated for Pilot 4 only since the final set of DDC items had been released.

### III. Pilot I

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#### **Participants**

Nine thousand five hundred and twenty-four military, civilian, and contracting personnel completed the DEOMI Climate Scale along with the new diversity climate survey. The majority of the participants were white males aged 22-42 who worked for the Navy. The demographics of the respondents paralleled the current United States Military and Civilian demographic statistics (Active Duty Master and Civilian Master).

<b>Demographic Percentages – Pilot I</b>	
Demographic	%
<b>Sex</b>	
Men	81
Women	19
<b>Age</b>	
18-21	12
22-30	42
31-40	29
41-50	13
≥51	5
<b>Type of Employment</b>	
Military Officer	12
Warrant Officer	1
Enlisted Member	76
Federal DoD Civilian	8
Federal non-DoD Civilian	<1
Other	3
<b>Ethnicity</b>	
Hispanic	12
American Indian	3
Asian	5
Black	16
Native Hawaiian	2
White	67
<b>Branch</b>	
Air Force	2
Army	28
Coast Guard	2
Marines	10

## Measures

### DDCS

Over fifty items were generated to measure diversity climate (see Appendix A). The items were framed in relation to the respondent, their team, supervisor, and organization as a whole. The content of the items measured all aspects of a diverse climate as defined by the author and Cox 1994 including career opportunities, communication, work-life balance, access to tools, mentoring, and lack of discrimination.

Since the piloted items were added at the end of the DEOMI Organizational Climate Scale (DEOCS), ten items were piloted at one time to eliminate content redundancy and exhaustion. The piloted items included a cross-section of the item pool found in Appendix A.

<b>Pilot I Items</b>
1. Diverse viewpoints add to mission effectiveness.
2. Diversity in my organization improves mission performance.
3. My organization features content on diversity issues in publications such as newsletters, magazines, external and/or internal websites.
4. Everyone in my work unit is treated fairly.
5. My supervisor deals proactively with discrimination.
6. My work unit is valued for the different perspectives that we bring to the organization.
<b>7. *I am well informed about available career enhancement/educational opportunities.</b>
8. I listen to all of my colleagues with an open mind.
9. My supervisor fairly enforces policies and procedures.
10. My supervisor has a visible strategy for achieving diversity.
11. I always try to practice what I preach. <i>Social Desirability Item (SDI) (Marlowe &amp;-Crowne, 1960)</i>

\* Removed due to significant correlation with item 11

### DEOCS

The DEOCS evolved from the Military Equal Opportunity Climate Survey (MEOCS) (Dansby & Landis, 1991). A new version of the DEOCS, version 3.3, was implemented in beta test form in October 2007. The DEOCS (v. 3.3) was designed to measure dimensions associated with military and civilian equal

opportunity (EO) and equal employment opportunity (EEO), as well as organizational effectiveness (OE) factors. According to the Directorate of

Research at the Defense Equal Opportunity Management Institute (DEOMI) the DEOCS is

*...a climate assessment instrument...designed to assess the “shared perceptions” of respondents about formal or informal policies, practices, and procedures likely to occur in the organization. It is not intended as a direct measure of EO/EEO attitudes. Through a statistical technique known as factor analysis, items that measure the same perceptual domain are combined into scales...[measuring] eight EO/EEO and six OE factors ...on a five-point scale.*

([http://www.deocs.net/DocDownloads/Talker\\_DEOCS.pdf](http://www.deocs.net/DocDownloads/Talker_DEOCS.pdf)).

The DEOCS (v. 3.3) contains 66 items which are traditionally combined into 13 distinct scales, seven of which address EO/EEO, and six address organizational effectiveness (OE) issues. The items in the DEOCS require respondents to use a 5-point scale (very high chance, reasonably high chance, moderate chance, small chance, and almost no chance). Previous factor analytic analysis conducted on the DEOCS (Truhon, 2003) and its predecessor, the Military Equal Opportunity Climate Survey (MEOCS) provided support for the scale’s internal consistency and factor structure (Estrada et al., 2007; Landis, Fisher, & Dansby, 1988).

## **Procedure**

Due to sampling restrictions, ten items were added to the DEOMI Climate Scale in May 2008. The items were administered in conjunction with the DEOCS for approximately one month. The DEOCS is deployed at the request of a military unit commander. The survey is available in both traditional pencil-and-paper and web-based versions. The pencil-and-paper version is almost exclusively utilized for units that are deployed, whereas the online version is used to obtain data from non-deployed units. Previous research has found the paper-and-pencil and online versions of the DEOCS to be comparable (Truhon, 2005). Both versions require 25 minutes to complete.

## **Analysis and Results**

Prior to any data analysis the data were screened and cleaned for missing responses. Sixty respondents were removed from the data set because they did not respond to half of the piloted items. The remaining respondents completed all of the items. An item analysis method using multiple criteria was conducted to evaluate the items. Items that had significant correlations with the Marlowe and

Crowne Social Desirability scale were removed, while items that had means near the center of the scale, skew and kurtosis between +/-2, standard deviations

around 1.00, and a Cronbach's alpha that would not increase notably if the item were removed were retained.

The piloted items were examined against the Marlowe and Crowne Social Desirability Scale which is commonly used to detect social desirability bias (SDB), conceptualized as an individual's need for approval. Only one social desirability item from the Marlowe and-Crowne Social Desirability scale was utilized due to sampling restrictions. A statistically significant relationship between the SD item and any of the diversity climate items is an indication of bias. It was revealed that item 7 (*I am well informed about available career enhancement/educational opportunities*) was significantly correlated with the social desirability item ( $r = .3, p < .05$ ). This relationship signified that participants felt social pressure to respond in a favorable manner. As a result, item 7 was removed from all future analysis.

Means, standard deviations, skew and kurtosis, and scale reliabilities were also computed (see Appendix B for frequencies). A low mean score was desired, since this would indicate total agreement with the statement. Overall, all but three items had means of 2.0 or less. The items had an acceptable alpha of .87. The corrected item-total correlations were all above (.53), while the inter-item correlations were acceptable, as these correlations ranged from (.31-.74).

Item Level Means - Pilot I									
	Q1	Q2	Q3	Q4	Q5	Q6	Q8	Q9	Q10
N	9524	9524	9524	9524	9524	9524	9524	9524	9524
Mean	1.92	2.02	<b>2.53</b>	<b>2.40</b>	2.15	2.26	1.81	2.08	<b>2.39</b>
SD	.981	1.009	1.057	1.278	1.098	1.073	.897	1.129	1.061
Skewness	.852	.732	.275	.569	.590	.531	1.006	.873	.339
Kurtosis	.249	.059	-.159	-.730	-.301	-.250	.767	.041	-.253
<i>All items were measured on a 5-Point Likert Scale.            A lower score is desired.            The highest mean scores are bolded.</i>									

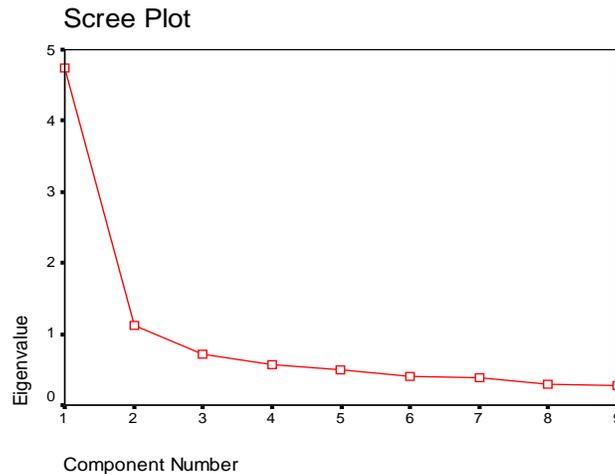
## Factor Analysis

The (.8) Kaiser-Meyer Olkin score indicated that the distribution of the variables was adequate for conducting a factor analysis, while the significant Bartlett test of Sphericity (chi square = 41147, df= 36, p= .00) signified that the data had multivariate normality and were acceptable for factor analysis. Therefore, a

principal component analysis (PCA) was conducted to identify the smallest number of factors that together account for the variance in the correlation matrix

of the original variables. A varimax rotation was utilized. Two factors emerged as shown in the scree plot, which accounted for 53% of the variance. Based on the Comrey and Lee (1992) rule of thumb, all of the loadings except for two (items 3 and 8) were considered good or excellent, since the loadings were above .55.

The two factors that emerged have been labeled intra and inter diversity climate, since the intra items measured the respondents' perceptions while the inter items asked the respondents to respond in terms of their work group or supervisor. Out of the nine items, two items (Item 3) and (item 8) had the lowest factor loadings (<.6). Although these loadings were the lowest, these items were retained for subsequent analysis purposes since the loadings were close to the good range as outlined by Comrey and Lee (1992)



	Factors <sup>1</sup>	
	1	2
<u>BQ8</u>	<u>.416</u>	<u>.545</u>
BQ9	.822	
BQ10	.784	
BQ1		.888
BQ2		.876
<u>BQ3</u>	<u>.441</u>	<u>.457</u>
BQ4	.782	
BQ5	.773	
BQ6	.716	

<sup>1</sup>Extraction Method: Principal Component Analysis.  
Rotation Method: Varimax with Kaiser Normalization.

### Report Results

Rotation converged in 3 iterations.  
**BQ8 and BQ3 are underlined since they had the lowest factor loadings.**

<b>Items</b>	
<b>Intra</b>	Diverse viewpoints add to mission effectiveness. Item 1 Diversity in my organization improves mission performance. Item 2 <u>My organization features content on diversity issues in publications such as newsletters, magazines, external and/or internal websites</u> Item 3 <u>I listen to all of my colleagues with an open mind.</u> Item 8
<b>Inter</b>	Everyone in my work unit is treated fairly. Item 4 My supervisor deals proactively with discrimination. Item 5 My work unit is valued for the different perspectives that we bring to the organization. Item 6 My supervisor fairly enforces policies and procedures. Item 9 My supervisor has a visible strategy for achieving diversity. Item 10

## **Summary**

Overall, the process implemented for this pilot provided an excellent starting point. The nine diversity items that were retained to form the diversity climate scale score exhibited a strong coefficient alpha and satisfactory factor loadings, along with divergent and convergent validity.

Nonetheless, out of the nine items, two items, 3 and 8, had the lowest factor loadings and will be revised or removed, leaving seven acceptable diversity climate items. These seven items (1, 2, 4, 5, 6, 9, & 10) will be compared against the remaining items from the subsequent second and third pilots. After the comparisons have been made, a final set of items will be decided upon and administered in conjunction with the DEOCS to establish construct validity, and criterion validity, along with conducting a confirmatory factor analysis.

## IV. Pilot II

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### Participants

Eight thousand eight hundred and sixty-six military, civilian, and contracting personnel completed the survey. The majority of the participants were white males aged 22-42 who worked for the Navy. The demographic breakdown is almost identical to that of Pilot I.

<b>Demographic Percentages - Pilot II</b>	
Demographic	%
<b>Sex</b>	
Men	81
Women	19
<b>Age</b>	
18-21	14
22-30	43
31-40	26
41-50	12
≥51	6
<b>Type of Employment</b>	
Military Officer	8
Warrant Officer	1
Enlisted Member	76
Federal DoD Civilian	12
Federal non-DoD Civilian	<1
Other	2
<b>Ethnicity</b>	
Hispanic	14
American Indian	4
Asian	6
Black	17
Native Hawaiian	2
White	64
<b>Branch</b>	
Air Force	6
Army	25
Coast Guard	<1
Marines	13
Navy	42

## **Measures**

### **DDCS**

The items were framed in relation to the respondent, his or her team, supervisor, and organization as a whole. The content of the items measured all aspects of a diverse climate as defined by the author and Cox (1994) including career opportunities, communication, work-life balance, access to tools, mentoring, and lack of discrimination.

Since the piloted items were added at the end of the DEOMI Climate Scale, ten items were piloted at a time to eliminate content redundancy and exhaustion. The piloted items represented a cross-section of the pool of diversity items outlined in Appendix A.

<b>Pilot II Items</b>
1. Diverse viewpoints are linked to mission success.
2. A diverse workforce increases creativity.
3. My organization's mentoring program increases opportunities for junior personnel.
4. My organization's commitment to diversity encourages me to continue serving in my present capacity.
5. My work unit is committed to diverse talents, perspectives, and contributions.
6. I am confident I will be promoted as high as my abilities warrant.
7. My supervisor is committed to diverse talents, perspectives, and contributions.
8. My supervisor utilizes a fair employment system for all employees.
9. My supervisor's commitment to diversity encourages me to continue serving in my present capacity.

## **Procedure**

Due to sampling restrictions, only ten of the fifty available items were added to the DEOMI Diversity Scale in June 2008. The items ran in conjunction with the DEOCS for approximately two weeks.

## Analysis and Results

Prior to data analysis the data were screened and cleaned for missing information. Fortunately, no responses were missing. Next, an item analysis method using multiple criteria was conducted to evaluate the items. Items that had means near the center of the scale, skew and kurtosis between +/-2, standard deviations around 1.00, and a Cronbach's alpha that would not increase notably if the item was removed were retained.

Means, standard deviations, skew and kurtosis, and scale reliabilities were also computed (see Appendix C for frequencies). A low mean score was desired since this would indicate total agreement with the statement. Overall, all but four items had means of 2.0 or less. This was not cause for concern since the standard deviations for these items were around 1.0. On the whole, the items had an acceptable alpha of .91. Corrected item-total correlations were all above (.53), while the inter-item correlations were acceptable, ranging from (.33 - .79).

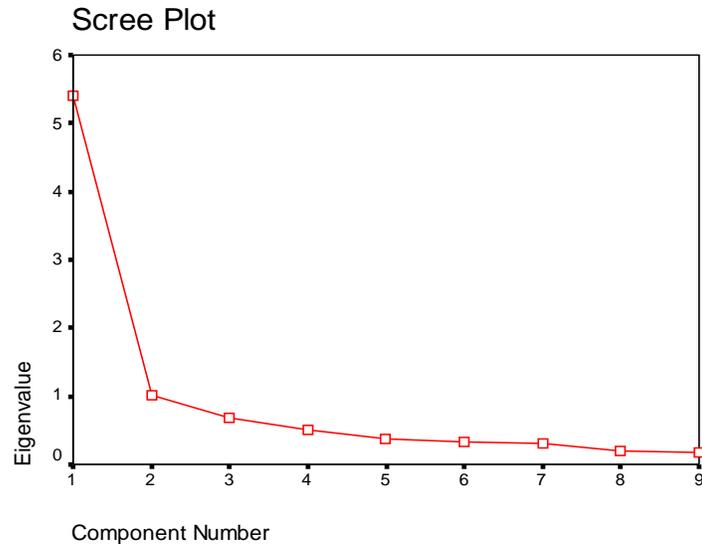
Item Level Means - Pilot II									
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
N	8866	8866	8866	8866	8866	8866	8866	8866	8866
Mean	2.05	1.87	<b>2.63</b>	<b>2.50</b>	2.29	<b>2.41</b>	2.23	2.18	<b>2.37</b>
SD	1.0	.970	1.18	1.09	1.07	1.30	1.10	1.14	1.12
Skewness	.686	.732	.275	.569	.590	.531	1.006	.873	.339
Kurtosis	.001	.059	-.159	-.730	-.301	-.250	.767	.041	-.253
<i>All items were measured on a 5-Point Likert Scale.</i>									
<i>A lower score is desired.</i>									
<i>The highest mean scores are bolded.</i>									

## Factor Analysis

The obtained Kaiser-Meyer Olkin score of (.9) indicated that the distribution of the variables was adequate for conducting a factor analysis, while the results of a significant Bartlett test of Sphericity (chi square = 52675.3, df= 36, p= .00) signified that the data had multivariate normality and were acceptable for factor analysis. Therefore, a principal component analysis (PCA) was conducted to identify the smallest number of factors that together account for the variance in

the correlation matrix of the original variables. A varimax rotation was utilized. Two factors emerged as shown in the scree plot, which accounted for 71% of the

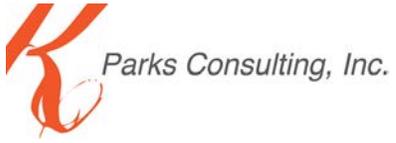
variance. Based on the Comrey and Lee (1992) rule of thumb, all of the loadings were considered excellent, since they were above (.7).



**Rotated Component Matrix (a) - Pilot II**

	Factors <sup>1</sup>	
	1	2
Q1		.865
Q2		.886
Q3	.713	
Q4	.735	
Q5	.741	
Q6	.725	
Q7	.838	
Q8	.827	
Q9	.839	

<sup>1</sup>Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.  
 Rotation converged in 3 iterations.



<b>Diversity Climate Factors - Pilot II</b>	
	<b>Items</b>
<b>Intra</b>	Diverse viewpoints are linked to mission success. Item 1
	A diverse workforce increases creativity. Item 2
<b>Inter</b>	My organization's [mentoring program increases opportunities for junior personnel.] Item 3
	My organization's [commitment to diversity encourages me to continue serving in my present capacity.] Item 4
	My work unit is committed to diverse talents, perspectives, and contributions. Item 5
	<b><i>I am confident I will be promoted as high as my abilities warrant.</i></b> <b>Item 6</b>
	My supervisor is committed to diverse talents, perspectives, and contributions. Item 7
	My supervisor utilizes a fair employment system for all employees. Item 8
	My supervisor's [commitment to diversity encourages me to continue serving in my present capacity.] Item 9

The two factors that emerged were assigned the same labels as in Pilot I. The themes that materialized were almost identical to those from Pilot I, with one small exception. Item 6 from Pilot II was framed as a “respondent” item and should have loaded on the intra factor. A possible explanation for this result may be that the items in the inter factor ask about ability, opportunity, and advancement which better aligned with the theme in item 6. Because of this, item 6 was more similar to the inter factor and loaded best on factor two.

## V. Pilot III

### Participants

Eighteen thousand two hundred and thirty-five military, civilian, and contracting personnel completed the survey. The majority of the participants were white males aged 22-42 who worked for the Marines. The demographic breakdown is almost identical to those of Pilots 1 and 2, except the majority of respondents served in the Marines, as opposed to the Navy as in the previous pilots. This change in demographic is not of concern considering the recent increase in DEOCS requests by the Marines.

<b>Demographic Percentages - Pilot III</b>	
Demographic	%
<b>Sex</b>	
Men	83
Women	17
<b>Age</b>	
18-21	18
22-30	40
31-40	21
41-50	12
≥51	9
<b>Type of Employment</b>	
Military Officer	8
Warrant Officer	1
Enlisted Member	70
Federal DoD Civilian	17
Federal non-DoD Civilian	<1
Other	3
<b>Ethnicity</b>	
Hispanic	13
American Indian	3
Asian	9
Black	13
Native Hawaiian	2
White	60
<b>*Branch</b>	
Air Force	1
Army	23
Coast Guard	<1
Marines	32
Navy	24

\*20% did not answer this item

## **Measures**

### DDCS

The items were framed in relation to my supervisor and organization as a whole. The content of the items measured all aspects of a diverse climate as defined by the author and Cox (1994) including career opportunities, communication, work-life balance, access to tools, mentoring, and lack of discrimination.

Since the piloted items were added at the end of the DEOMI Climate Scale, fourteen items were piloted to eliminate content redundancy and exhaustion. The piloted items represented a cross-section of diversity climate items.

<b>Pilot III Items</b>
1. In my organization, key assignments are determined by merit.
2. My organization implements policies that demonstrate a commitment to diversity.
3. My organization is able to identify my unique skills.
4. A diverse workforce leads to the creation of better processes and routines.
5. My organization utilizes my strengths to achieve missions.
6. My organization accommodates my Family care needs (e.g. children, spouse or parents).
7. My organization communicates the value of diversity in the workplace in publications or events such as brownbag events, newsletters, magazines, observations, external and/or internal websites.
8. My organization encourages individuals with different backgrounds, talents, training, work styles and personalities to work together.
9. My supervisor works effectively to help me balance work and family demands.
10. In my organization, promotions are based on merit.
11. My organization is able to recognize my strengths.
12. My supervisor has a strategy for achieving diversity.
13. My organization provides access to formal mentoring programs for all personnel.
14. My organization fosters an environment of mutual respect and integrity, which enhances critical thinking.

## Procedure

Due to sampling restrictions, only ten items out of the fifty available were added to the DEOMI Diversity Scale in July and August of 2008. The items ran in conjunction with the DEOCS for approximately four weeks.

## Analysis and Results

Prior to data analysis the data were screened and cleaned for missing information. Three respondents failed to complete the entire survey and were subsequently removed. Next, an item analysis method using multiple criteria was conducted to evaluate the items. Items that had means near the center of the scale, skew and kurtosis between +/-2, standard deviations around 1.00, and a Cronbach's alpha that would not increase notably if the item were removed were retained.

Means, standard deviations, skew and kurtosis, and scale reliabilities were also computed (see Appendix D for frequencies). A high mean score was desired since the items were reverse coded. Overall, the means for the items were above 3, while none of the means were above 4. This was not cause for concern since the standard deviations for these items were around 1.0. On the whole, the items had an acceptable alpha of .94. The corrected item-total correlations were all above (.53) while the inter item correlations were acceptable as the correlations ranged from (.34-.80).

Item Level Means-Pilot III									
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
N	18235	18235	18235	18235	18235	18235	18235	18235	18235
Mean	3.42	<b>3.71</b>	3.46	<b>3.94</b>	3.61	3.58	3.58	<b>3.84</b>	<b>3.70</b>
SD	1.10	1.01	1.16	1.00	1.14	1.15	1.07	1.05	1.14
Skewness	-.40	-.43	-.47	-.67	-.59	-.42	-.39	-.63	-.58
Kurtosis	-.31	-.13	-.47	-.01	-.29	-.43	-.22	-.08	-.30
<i>All items were measured on a 5-Point Likert Scale.            A higher score is desired.            The highest mean scores are bolded.</i>									

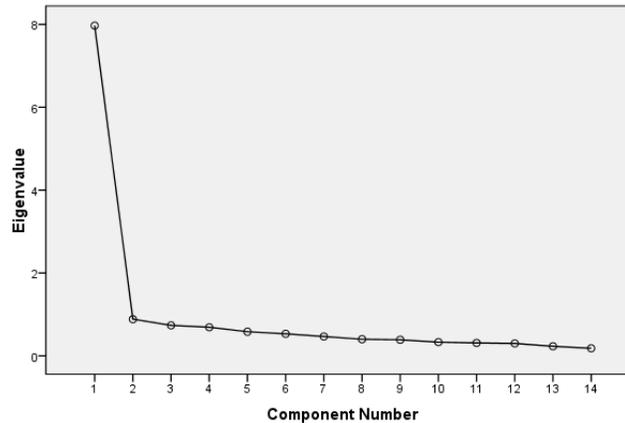
Item Level Means - Pilot III (continued)					
	Q10	Q11	Q12	Q13	Q14
N	18235	18235	18235	18235	18235
Mean	3.36	3.53	3.49	3.50	<b>3.60</b>
SD	1.20	1.13	1.02	1.12	1.12
Skewness	- .37	-.52	-.24	-.44	-.55
Kurtosis	-.60	-.35	-.06	-.41	-.40
<i>All items were measured on a 5-Point Likert Scale.            A higher score is desired.            The highest mean scores are bolded.</i>					

## Factor Analysis

The obtain Kaiser-Meyer Olkin score of (.9) indicated that the distribution of the variables was adequate for conducting a factor analysis, while the results of a significant Bartlett test of Sphericity (chi square = 167378.956, df= 91, p= .00) signified that the data had multivariate normality and were acceptable for factor analysis. Therefore, a principal component analysis (PCA) was conducted to identify the smallest number of factors that together account for the variance in the correlation matrix of the original variables. A varimax rotation was utilized. Only one factor emerged as shown in the scree plot, which accounted for 57% of the variance. Based on the Comrey and Lee (1992) rule of thumb, all of the loadings were considered excellent since they were above (.7). Based on the results of the factor analysis, all fourteen items were deemed accepted for the final pilot of the DEOMI Diversity Climate Scale.

	1 Factor
Q1	.718
Q2	.777
Q3	.818
Q4	.586
Q5	.808
Q6	.689
Q7	.748
Q8	.788
Q9	.719
Q10	.739
Q11	.835
Q12	.762
Q13	.714
Q14	.826

Scree Plot



### Factors - Pilot III

1. In my organization, key assignments are determined by merit.
2. My organization implements policies that demonstrate a commitment to diversity.
3. My organization is able to identify my unique skills.
4. A diverse workforce leads to the creation of better processes and routines.
5. My organization utilizes my strengths to achieve missions.
6. My organization accommodates my Family care needs (e.g. children, spouse or parents).
7. My organization communicates the value of diversity in the workplace in publications or events such as brownbag events, newsletters, magazines, observations, external and/or internal websites.
8. My organization encourages individuals with different backgrounds, talents, training, work styles and personalities to work together.
9. My supervisor works effectively to help me balance work and family demands.
10. In my organization, promotions are based on merit.
11. My organization is able to recognize my strengths.
12. My supervisor has a strategy for achieving diversity.
13. My organization provides access to formal mentoring programs for all personnel.
14. My organization fosters an environment of mutual respect and integrity, which enhances



## VI. Final Pilot-IV

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### Participants

Nine thousand three hundred and thirty-five military personnel completed the survey, but eleven individuals failed to complete the entire measure and were subsequently removed, leaving a final sample of nine thousand three hundred and twenty four. The majority of participants were white males aged 22-42 who worked for the Navy. The demographic breakdown is almost identical to that of Pilots I and II.

<b>Demographic Percentages- Pilot IV</b>	
Demographic	%
<b>Sex</b>	
Men	83
Women	17
<b>Age</b>	
18-21	13
22-30	41
31-40	32
41-50	12
≥51	2
<b>Type of Employment</b>	
Military Officer	13
Warrant Officer	3
Enlisted Member	84
<b>Ethnicity</b>	
Hispanic	13
American Indian	3
Asian	6
Black	16
Native Hawaiian	2
White	60
<b>Branch*</b>	
Air Force	3
Army	30
Coast Guard	2
Marines	10
Navy	55

\*Some respondents did not answer this item.

## **DDCS**

The items included in the final pilot were deemed the strongest based on the analysis of the previous pilot study data. Overall, the content of the DEOMI Diversity Climate Scale measured all aspects of a diverse climate as defined by the author and Cox (1994) including, but not limited to career opportunities, communication, work-life balance, access to tools, mentoring, and lack of discrimination.

## **Procedure**

Due to sampling restrictions, the Marlowe and-Crowne social desirability scale was excluded from this pilot. Nonetheless, the exclusion of the scale is not cause for concern. Past research has concluded through item response theory analyses that the concept of harassment and discrimination is similar for all ethnic groups and therefore, the responses of the participants are not a function of one's race or ethnicity (Truhon, 2008).

Thirty diversity climate items along with a pre-existing diversity climate scale (Avery, McKay, Wilson, & Tonidandel, 2007) ran in conjunction with the DEOCS for approximately three weeks in September of 2008.

## **Analysis and Results**

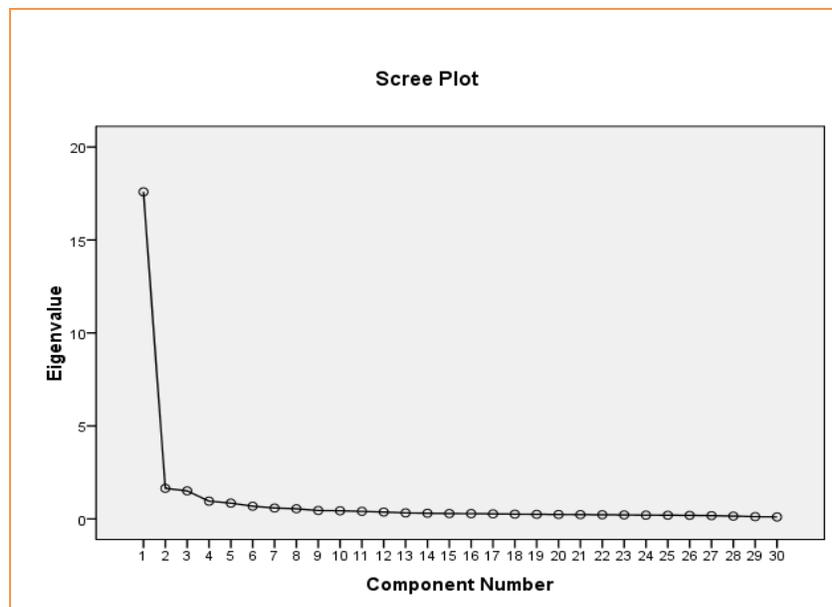
Prior to data analysis, the data were screened and cleaned for missing information. Next, an item analysis method using multiple criteria was conducted to evaluate the items. Items that had means near the center of the scale, skew and kurtosis between +/-2, standard deviations around 1.00, and a Cronbach's alpha that would not increase notably if the item were removed were retained.

Means, standard deviations, skew and kurtosis, and scale reliabilities were also computed (see Appendix E for item level frequencies and means). A high mean score was desired, since the items were reverse coded. Overall, the means for the items were above 3 while none of the means were above 4. This was not cause for concern since the standard deviations for these items were around 1.0. On the whole, the items had an acceptable alpha of .98. The corrected item-total correlations were all above (.53) while the inter item correlations were acceptable as the correlations ranged from (.34-.93).

## **Factor Analysis**

The obtained Kaiser-Meyer Olkin score of (.9) indicated that the distribution of the variables was adequate for conducting a factor analysis, while the results of a significant Bartlett test of Sphericity (chi square = 273184.0, df= 435, p= .00) signified that the data had multivariate normality and were acceptable for factor analysis. Therefore, a principal component analysis (PCA) was conducted to identify the smallest number of factors that together account for the variance in the correlation matrix of the original variables.

A varimax rotation was utilized. Three factors emerged as shown in the scree plot, which accounted for 60% of the variance. A three-factor solution emerged in which there was minimal cross loading of items (see items below).



<b>DDCS Pilot IV Items</b>	<b>Factor Loading</b>
<b><u>Inclusion</u> (<math>\alpha = .97</math>)</b>	
My immediate supervisor is able to recognize my strengths.	.78 q1cr
My immediate supervisor is able to identify my unique skills.	.78 q2cr
I can depend on my immediate supervisor to make it easier to balance work and family demands.	.66 q7cr
Everyone in my workgroup is treated fairly.	.59 q8cr
My immediate supervisor deals proactively with discrimination.	.57 q9cr
My immediate supervisor utilizes a fair employment system for all employees.	.67 q11cr
My immediate supervisor offers an environment in which I feel comfortable to share my ideas.	.77 q3
My immediate supervisor makes good use of my skills and abilities.	.79 q15cr
My immediate supervisor has communicated his/her commitment to individuals of different work styles and personalities.	.66 q4r
My immediate supervisor is committed to diverse talents, perspectives, and contributions.	.70 q5r
My immediate supervisor's commitment to diversity encourages me to continue serving in my present capacity.	.65 q10r
My immediate supervisor has a visible strategy for achieving diversity.	.55 q12 r
My immediate supervisor encourages individuals with different backgrounds, talents, training, work styles and personalities to work together.	.63 q13 r
My immediate supervisor gets active participation from all personnel in meetings.	.66 q13r
I can depend on my immediate supervisor to involve me in the decision making process.	.75 q14 r
I can depend on my immediate supervisor to consider my suggestions.	.77 q15r
<b><u>Justice</u> (<math>\alpha = .90</math>)</b>	
My organization provides access to formal mentoring programs for all personnel.	.77 q3cr
My organization's mentoring program increases opportunities for junior personnel.	.79 q4cr
I am well informed about career enhancement opportunities (education).	.66 q5cr
My organization accommodates my Family care needs (e.g., children, spouse or parents).	.61 q6cr
My organization fosters an environment of mutual respect and integrity.	.60 q10cr
In my organization, key assignments are determined by merit.	.65 q12rr
In my organization, promotions are based on merit.	.64 q13cr

<b>Value (<math>\alpha = .92</math>)</b>	
My organization implements policies that demonstrate a commitment to diversity.	.57 q1r
Diverse viewpoints add to mission success.	.81 q6r
My organization has a visible strategy for achieving diversity.	.52 q9r
My organization communicates the value of diversity in the workplace in publications such as brownbag events, newsletters, magazines, observations, external and/or internal websites.	.52 q2r
A workforce with different backgrounds and approaches leads to the creation of better processes and routines.	.84 q8r
My workgroup is valued for the different perspectives that we bring to the organization.	.52 q11r
An environment of mutual respect and integrity enhances critical thinking.	.82 q7r

## **Scale Scores**

All thirty diversity climate items were averaged into a scale score since the items demonstrated acceptable reliability. The means for the entire sample as well as for the services are outlined below. The average for the overall sample was 3.8 while the mean for all of the services was between 3.7 and 3.9 and because the scores were reversed coded, a higher score is more desirable. (The means and alpha coefficients for each of the three facets of value, justice, and inclusion are found in Appendix F).

<b>Descriptive Statistics - Overall</b>							
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
DDCS	9324	3.78	.850	-.448	.025	-.163	.051

*A higher score is desired.*

Descriptive Statistics- Service							
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Air Force	281	3.86	.829	-.588	.145	-.111	.290
Army	2785	3.80	.863	-.459	.046	-.265	.093
Coast Guard	219	3.95	.644	-.312	.164	-.841	.327
Marines	910	3.81	.830	-.307	.081	-.308	.162
Navy	5124	3.76	.854	-.449	.034	-.107	.068

*A higher score is desired.*

Descriptive Statistics - Gender							
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Men	7766	3.81	.849	-.474	.028	-.137	.056
Women	1558	3.66	.843	-.337	.062	-.214	.124

*A higher score is desired.*

Descriptive Statistics - Majority/Minority							
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Majority	6013	3.80	.850	-.470	.032	-.172	.063
Minority	3311	3.76	.849	-.409	.043	-.138	.085

*A higher score is desired.*

Descriptive Statistics - Rank							
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Military Officer	1224	4.12	.694	-.893	.070	.603	.140
Warrant Officer	306	4.15	.769	-.889	.139	.346	.278
Enlisted Member	7794	3.72	.860	-.358	.028	-.197	.055

*A higher score is desired.*

## **Confirmatory Factor Analysis**

The DDCS was assessed at the item level through confirmatory factor analysis (CFA). Through the use of CFA, unmeasured covariance between each possible pair of latent variables was tested, then analyzed through LISREL. The model was evaluated using goodness of fit statistics. Models were deemed to have

good fit or the ability to reproduce the correlation/covariance matrix if the fit statistics were in the acceptable ranges. There are three categories of fit indices:

absolute, comparative, and parsimonious. The fit of the models was examined through the use of fit statistics recommended by Hu and Bentler (1998): the chi-square fit test, Root Mean Square Residual (RMR), Root Mean squared error of approximation (RMSEA), Non-Normed Fit Index (NNFI or TLI) and Comparative Fit Index (CFI). A nonsignificant chi-square statistic is desired. The chi-square statistic is typically significant due to the high sample size requirement for SEM, thus giving the test a good deal of power (Kelloway, 1998). These factors make it difficult to obtain a nonsignificant finding.

The root mean square residual (RMR) index is “the square root of the means of the squared discrepancies between the implied and observed covariance matrices,” (Kelloway, p, 27, 1998) and is suggested to be less than .05. The root mean square error of approximation (RMSEA) is based on the analysis of residuals and the value should be below .10. The non-normed fit index (NNFI) and the comparative fit index (CFI) are both comparative fit indices. The indices compare a target model against a baseline or independent in which values more than .90 are indicative of good fit (Byrne, 1998; Hu & Bentler, 1998). A parsimonious fit index was also utilized. The Parsimony-adjusted goodness-of-fit index (PGFI) was examined to make sure the proposed model was parsimonious; a higher PGFI value indicated a more parsimonious fit.

The results of the analysis (as shown below) demonstrated acceptable support for the fit of the DDC model. As a result, construct and criterion validity analysis was performed.

<b>Confirmatory Factor Analysis</b>								
	$\chi^2$	<i>df</i>		RMSEA	NNFI	CFI	PGFI	
DDSC item level	1345622.82**	435		.16	.93	.94	.51	
Recommended Statistics	ns	--		<0.10	≥0.90	≥0.90	Higher better	
* $p < .05$ ** $p < .01$								

## **Construct and Criterion Validity**

Construct validity was explored by correlating military personnel's scores on their DDCCS to their corresponding scores on the DEOCS racist behaviors and differential command behavior scales to determine divergent validity. This also included a comparison of military personnel's scores on the DDCCS with their corresponding scores on the DEOCS positive equal opportunity behaviors as well as a pre-existing diversity scale (Avery, McKay, Wilson, & Tonidandel, 2007) to show convergent validity. Moreover, criterion validity was established using regression analysis to determine if DDCCS predicted organizational commitment, trust and job satisfaction.

### **Measures**

In this pilot, seven scales were used to demonstrate construct and criterion validity. Of those scales, two were used to show support for divergent validity (racist behaviors and differential command behaviors), and two were used to demonstrate convergent validity (pre-existing diversity scale and positive equal opportunity behaviors). Finally, three organizational effectiveness measures were included to demonstrate criterion validity (organizational commitment, trust and job satisfaction). Alpha levels for all scales were acceptable and above  $\alpha = .80$ .

*Racist Behaviors.* The DEOCS scale is composed of three items and reflects perceptions of racist behaviors such as racial name-calling and telling racist jokes. A sample item included: "A person told several jokes about a particular race/ethnicity."

*Differential Command Behavior.* This DEOCS scale measures perceptions of differential treatment on the basis of race/ethnicity and is comprised of four items. A sample item included: "A member was assigned less desirable office space because of their race/ethnicity."

*Pre-Existing Diversity Scale.* This scale was developed to assess employees' perceptions of their organization's value of diversity. The scale consists of a single factor with an average coefficient alpha of .89 (Avery, McKay, Wilson, & Tonidandel, 2007).

<p><b>Valid Pre-existing Diversity Climate Scale</b> (Avery, McKay, Wilson, &amp; Tonidandel, 2007)</p>
<p><b>Items</b></p>

5-Point Likert Scale: Strongly Agree → Strongly Disagree

1. I am aware of my company's efforts to create diversity in the workplace.
2. The head of my company or organization is committed to diversity at my workplace.
3. I believe that my company is adequate striving for diversity in the workplace.
4. I trust senior management of my organization to deal with issues concerning equal treatment at my workplace.

*Positive Equal Opportunity Behavior.* The DEOCS scale measures how well majority and minority members get along in the unit, and are integrated in the unit's functioning. The scale is comprised of four items and a sample item included, "Members from different racial or ethnic groups were seen socializing together."

*Organizational Commitment.* The DEOCS scale consists of five items assessing respondents' "bonding" to the organization. A sample item included, "I am proud to tell others that I am part of this organization."

*Trust in the organization.* The DEOCS scale is an indicator of how people perceive the organization as a place where people trust and care for each other. The scale is comprised of three items and a sample item included, "This organization is loyal to its members."

*Job Satisfaction.* The DEOCS scale is composed of five items that indicated the degree of satisfaction the respondent had with their current job. This scale is measured by five items and a sample included, "I am satisfied with my job as a whole."

## **Outcomes**

Overall, the results demonstrated support for a nomological network since significant correlations emerged among DDSCS and racist behaviors ( $r = -.40$ ) and differential command behavior ( $r = -.38$ ). Further, convergent validity was supported because the DDSCS had strong significant correlations among the pre-existing diversity scale ( $r = .85$ ) as well as positive equal opportunity behaviors ( $r = .30$ ).

Addressing criterion-related validity, correlation and regression analysis was conducted on the DDSCS and three organizational effectiveness factors. The DDSCS had significant correlations with all three organizational effectiveness factors and the strongest correlation was between DDSCS and jobs satisfaction ( $r = .66$ ). The DDSCS successfully predicted trust, job satisfaction and organizational commitment. Of the three factors, the DDSCS accounted for the highest amount of variance in job satisfaction ( $R^2 = .44$ ) (see below).

**Correlations for DDCS**

	1	2	3	4	5	6	7	8
	DDC	RB	DC	PDC	OC	TIO	JSR	PEO
1 DEOMI Diversity Climate	1.0	--	--	--	--	--	--	--
2 Racist Behaviors	-.40**	1.0	--	--	--	--	--	--
3 Differential Command Behaviors	-.38**	.55**	1.0	--	--	--	--	--
4 Pre-existing Diversity Scale	.85**	-.41**	-.36**	1.0	--	--	--	--
5 Organizational Commitment	.61**	-.42**	-.38**	.60**	1.0	--	--	--
6 Trust in the Organization	.64**	-.37**	-.33**	.63**	.71**	1.0	--	--
7 Job Satisfaction	.66**	-.33**	-.33**	.60**	.62**	.64	1.0	--
8 Positive Equal Opportunity	.30**	-.04**	-.27**	.26**	.26**	.25**	.28**	1.0

p<0.05,\*\* p<0.01

**Regression Analyses Predicting Job Satisfaction, Organizational Commitment, and Trust in the Organization.**

Variable	<u>Job Satisfaction</u>		<u>OC</u>		<u>Trust in the Org.</u>	
	<i>B</i>	<i>R</i> <sup>2</sup>	<i>B</i>	<i>R</i> <sup>2</sup>	<i>B</i>	<i>R</i> <sup>2</sup>
Diversity Climate	.66**	.44	.61**	.38	.64**	.41

p<0.05,\*\* p<0.01

## VII. Recommendations and Conclusion

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In summary, across four pilot studies substantial support was found for the reliability and validity of the DEOMI Diversity Climate Scale consisting of three dimensions: justice, value, and inclusion. It is the author's recommendation to offer three versions of this scale to further understanding of diversity climate in the Department of Defense:

1. The overall DDCS could be administered using paper, or both approaches online (items are listed below). Each commander would receive a report similar to the current DEOCS report. The main benefit of this approach is that such a measure would provide commanders with a robust overview of perceptions of diversity climate in their command.
2. Each dimension could be offered as a separate online and/or paper/pencil survey. Commanders could be offered the option to add one or all three of the dimensions to their DEOCS purchase. The strength of this approach is twofold. First, it allows each commander the flexibility of choice and secondly, the diversity climate results could be integrated and linked to the existing DEOCS findings.
3. Lastly, keeping with the structure of the DEOCS, three to five DEOMI Diversity Climate items could be added as an additional dimension to the current DEOCS. A list of the strongest items is below. The main benefit of this approach is that it is time and cost efficient.

<b>DDCS</b>
<b><u>Inclusion</u></b>
My immediate supervisor is able to recognize my strengths.
My immediate supervisor is able to identify my unique skills.
I can depend on my immediate supervisor to make it easier to balance work and family demands.
Everyone in my workgroup is treated fairly.
My immediate supervisor deals proactively with discrimination.
My immediate supervisor utilizes a fair employment system for all employees.
My immediate supervisor offers an environment in which I feel comfortable to share my ideas.
My immediate supervisor makes good use of my skills and abilities.
My immediate supervisor has communicated his/her commitment to individuals of different work styles and personalities.
My immediate supervisor is committed to diverse talents, perspectives, and contributions.
My immediate supervisor's commitment to diversity encourages me to continue serving in my present capacity.
My immediate supervisor has a visible strategy for achieving diversity.

My immediate supervisor encourages individuals with different backgrounds, talents, training, work styles and personalities to work together.
My immediate supervisor gets active participation from all personnel in meetings.
I can depend on my immediate supervisor to involve me in the decision-making process.
I can depend on my immediate supervisor to consider my suggestions.
<b><u>Justice</u></b>
My organization provides access to formal mentoring programs for all personnel.
My organization's mentoring program increases opportunities for junior personnel.
I am well informed about career enhancement opportunities (education).
My organization accommodates my Family care needs (e.g. children, spouse or parents).
My organization fosters an environment of mutual respect and integrity.
In my organization, key assignments are determined by merit.
In my organization, promotions are based on merit.
<b><u>Value</u></b>
My organization implements policies that demonstrate a commitment to diversity.
Diverse viewpoints add to mission success.
My organization has a visible strategy for achieving diversity.
My organization communicates the value of diversity in the workplace in publications such as brownbag events, newsletters, magazines, observations, external and/or internal websites.
A workforce with different backgrounds and approaches leads to the creation of better processes and routines.
My workgroup is valued for the different perspectives that we bring to the organization.
An environment of mutual respect and integrity enhances critical thinking.

<b>Items Suggested for DEOCS</b>
Inclusion
My immediate supervisor is able to recognize my strengths.
My immediate supervisor makes good use of my skills and abilities.
I can depend on my immediate supervisor to consider my suggestions.
Justice
My organization provides access to formal mentoring programs for all personnel.
In my organization, key assignments are determined by merit
Value
A workforce with different backgrounds and approaches leads to the creation of better processes and routines.
Diverse viewpoints add to mission success.

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## IX. Appendix A - Pool of Diversity Climate Items

Diverse viewpoints add to mission effectiveness.  
Diversity in my organization improves mission performance.  
Diverse viewpoints are linked to mission success.  
A diverse workforce increases creativity.

In my organization, promotions are based on merit.  
My organization provides effective diversity training/education.  
In my organization, key assignments are determined by merit.  
My organization implements policies that demonstrate a commitment to diversity.  
My organization values my strengths.  
My organization features content on diversity issues in publications such as newsletters, magazines, external and/or internal websites.  
My organization's mentoring program increases opportunities for junior personnel.  
My organization's commitment to diversity encourages me to continue serving as a Soldier or Civilian.  
Everyone in my work unit is treated fairly.  
My supervisor deals proactively with acts of discrimination.  
My work unit is valued for the different perspectives that we bring to the organization.  
My work unit is committed to diverse talents, perspectives, and contributions.  
My work unit's commitment to diversity encourages me to continue serving as a Soldier or Civilian.  
I am confident I will be promoted as high as my abilities warrant.  
I am well informed about available career enhancement opportunities (education).  
I listen to all of my colleagues with an open mind.  
I can reach my fullest potential in this organization.  
My supervisor fairly enforces policies and procedures.  
My supervisor is committed to diverse talents, perspectives, and contributions.  
My supervisor has a strategy for achieving diversity.  
My supervisor utilizes a fair employment system for all employees.  
My supervisor's commitment to diversity encourages me to continue serving as a Soldier or Civilian.  
My organization is able to identify my unique skills.  
My organization is able to recognize my strengths.  
My organization utilizes my strengths to achieve missions.  
My organization offers sufficient career enhancement opportunities (education).  
I have the tools necessary to succeed in this organization.  
My organization recognizes that diversity management is a strategic imperative.  
My organization tracks progress in achieving diversity.



I am valued for the different perspectives that I bring to the organization.

My organization provides diversity awareness within the workplace  
I have utilized career enhancement opportunities (education) offered by this organization.

My organization encourages individuals with different backgrounds, talents, training, work styles and personalities to work together.

My organization communicates the value of diversity in brown bags, newsletters, magazines, external and/or internal websites.

My organization offers access to formal mentoring programs.

My organization accommodates my Family care needs (e.g. children, spouse or parents).

My leader provides accommodations for any personal needs.

My supervisor asks for suggestions to make it easier to balance work and family demands.

My organization achieves mission effectiveness through people with different backgrounds and approaches.

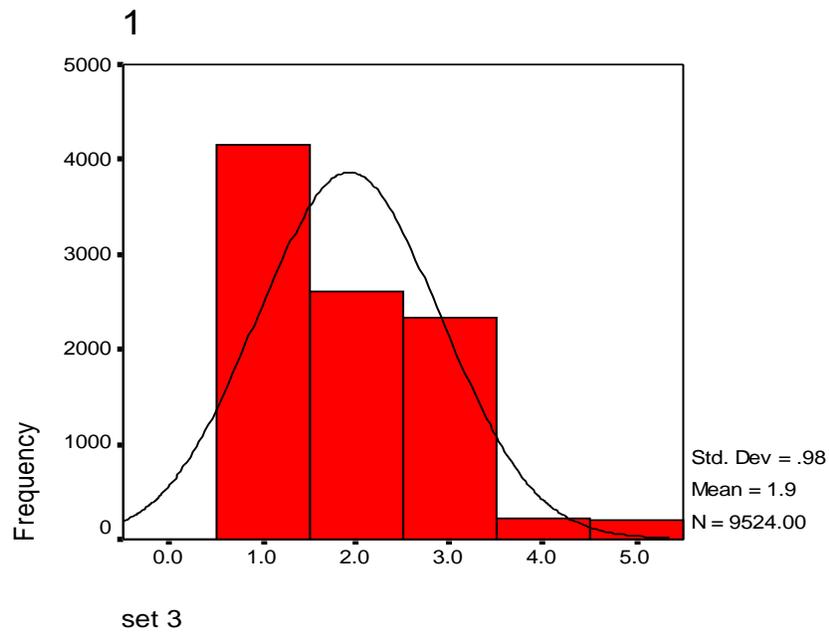
A diverse workforce leads to the creation of better processes and routines.

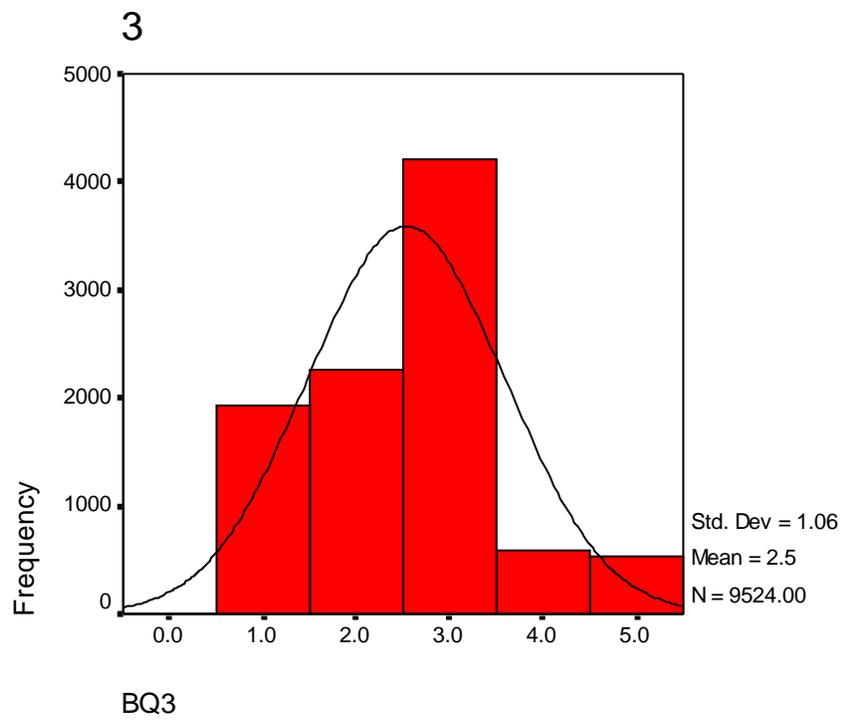
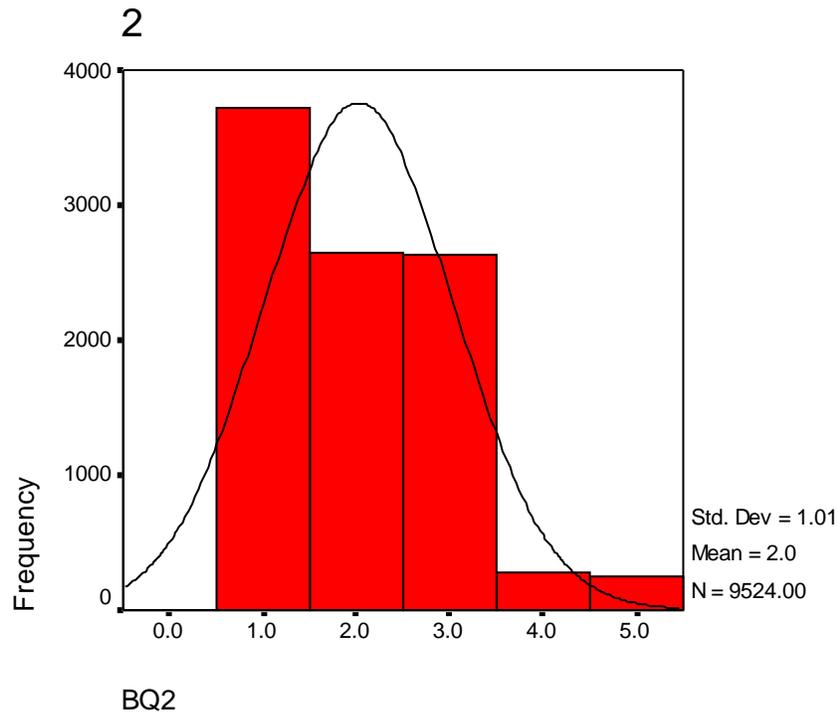
My supervisor works effectively to help me balance work and family demands.

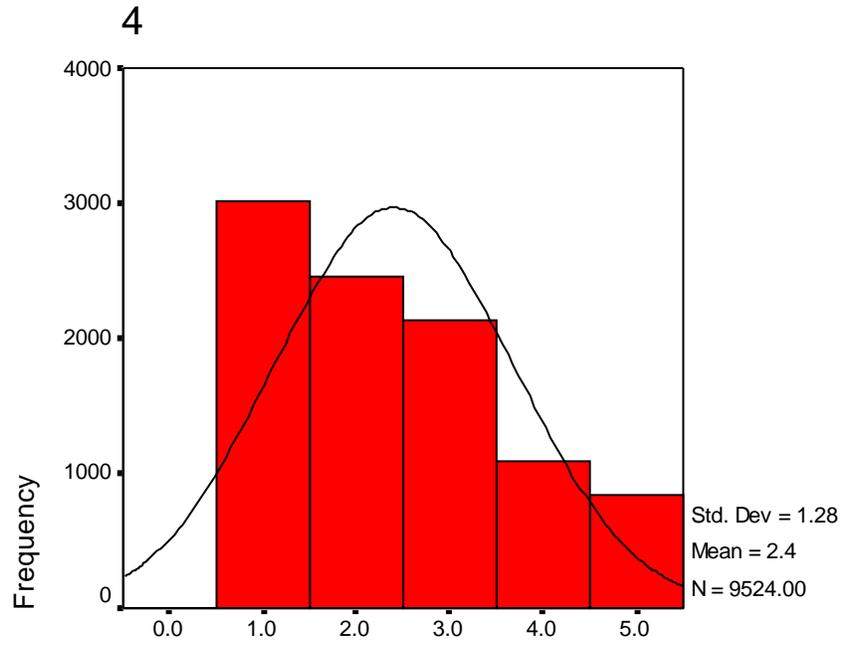
My organization fosters an environment of mutual respect and integrity, which enhances critical thinking.

## X. Appendix B - Frequencies of DDC Scale for Pilot I

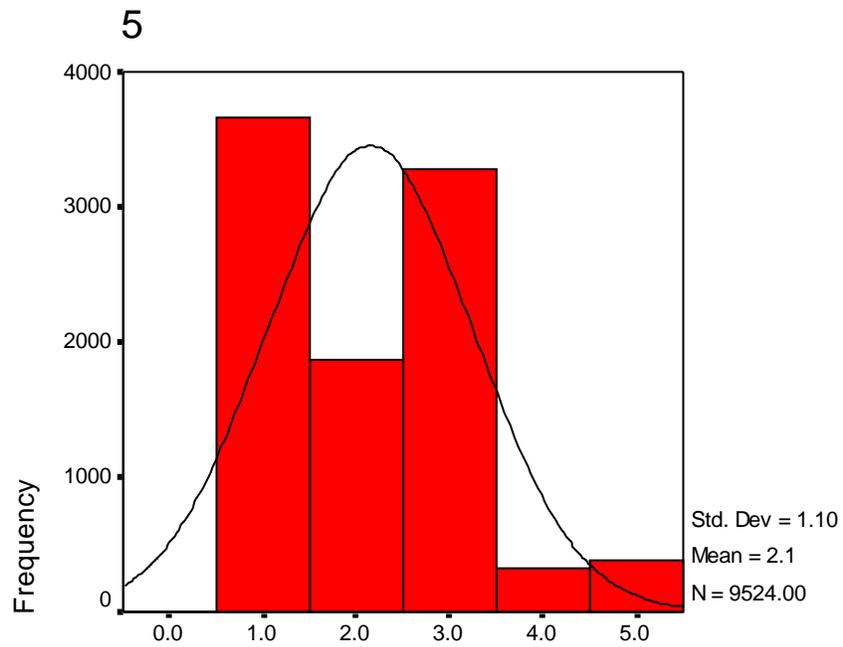
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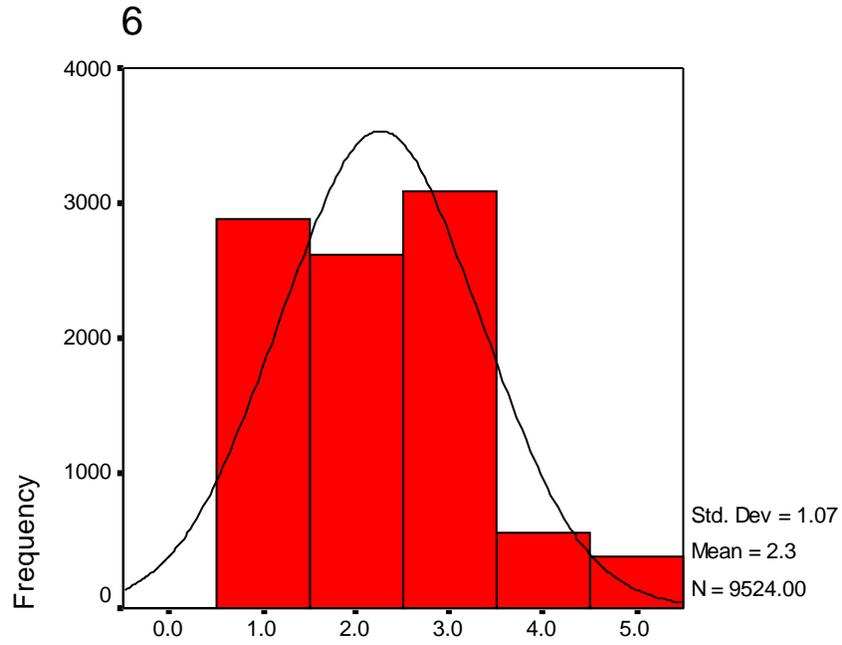




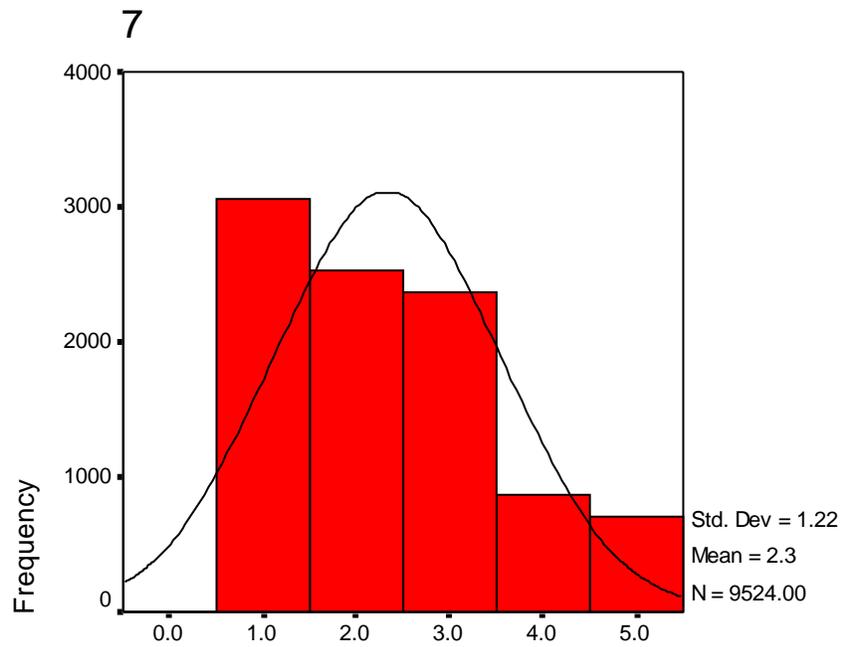
BQ4



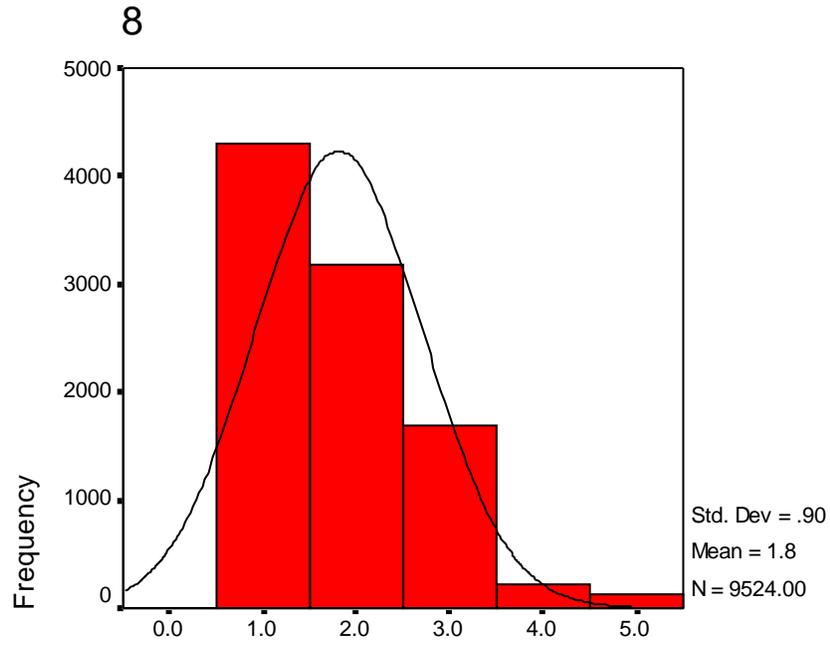
BQ5



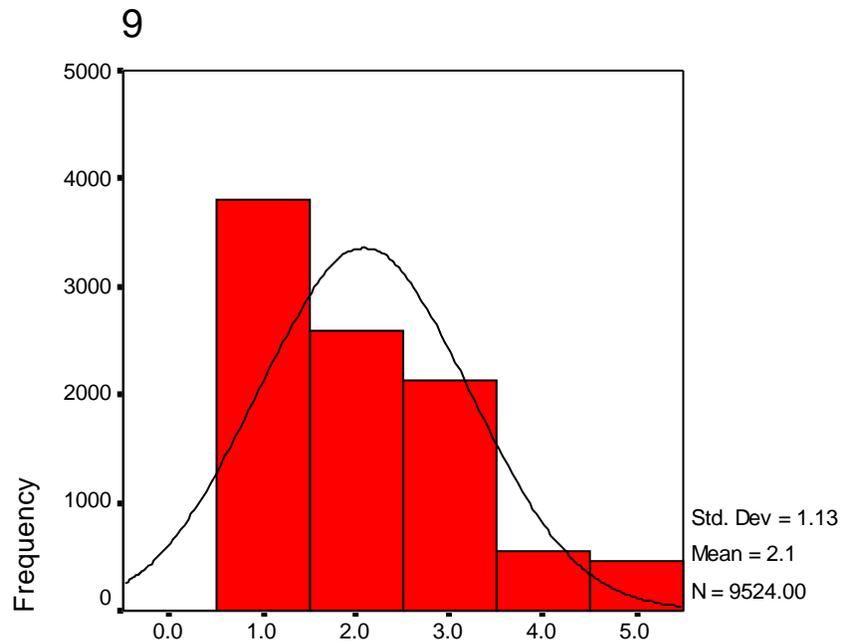
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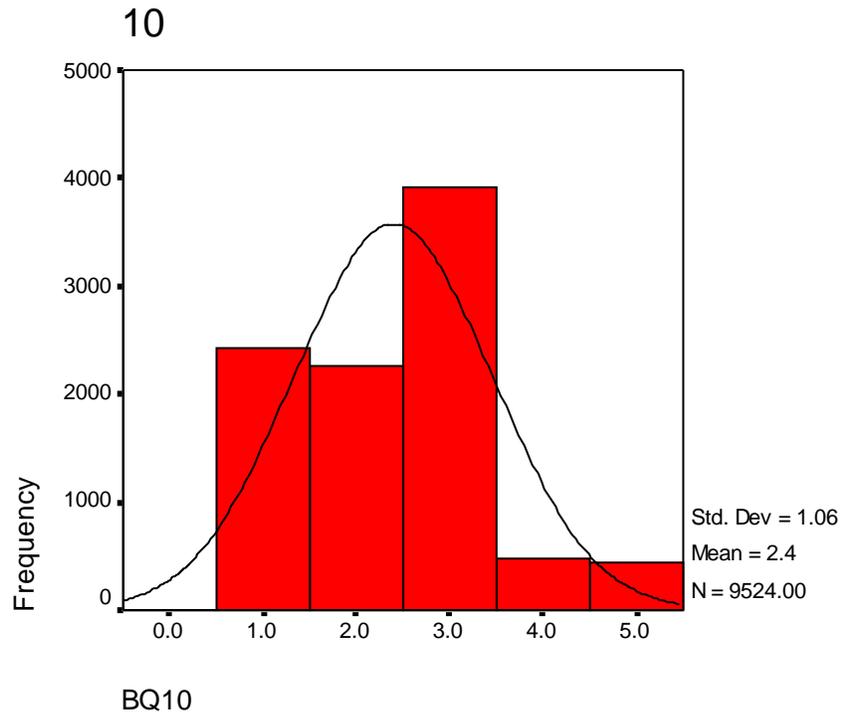
BQ7



BQ8

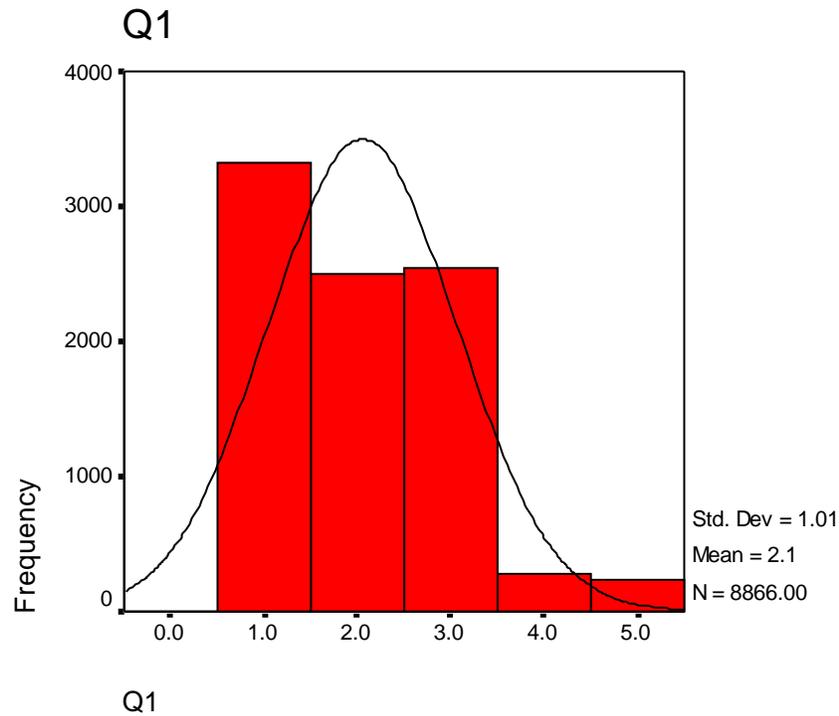


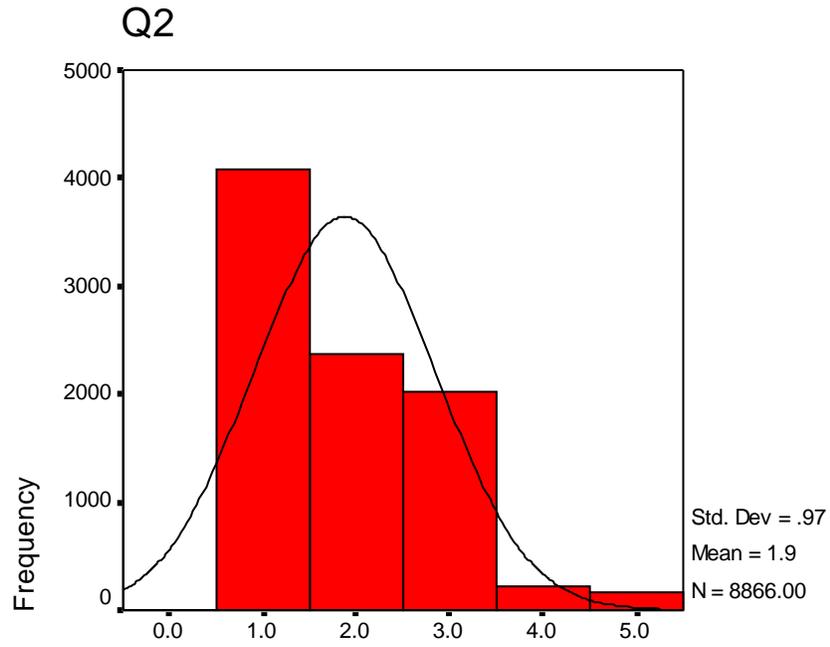
BQ9



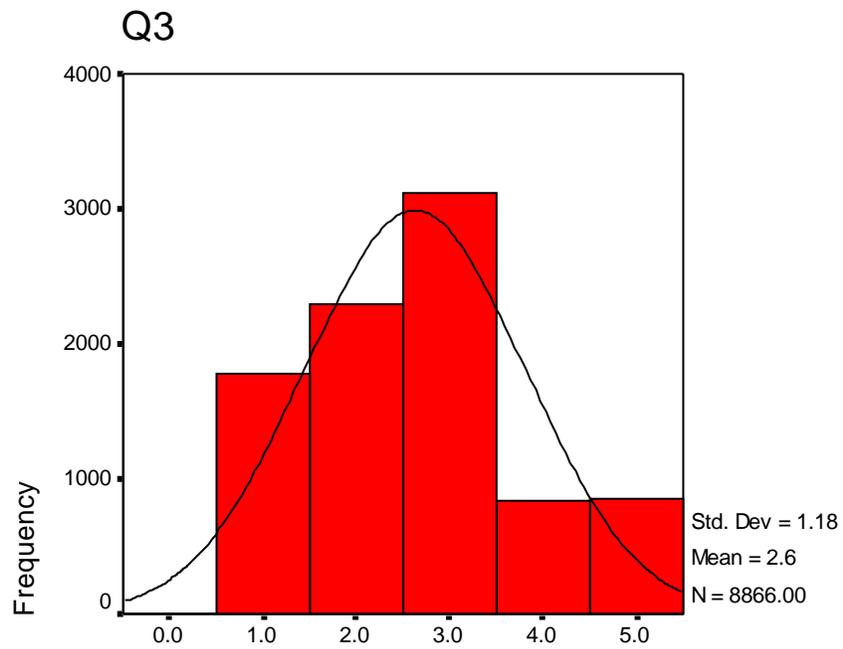
## XI. Appendix C: Frequencies of DDC Scale for Pilot II

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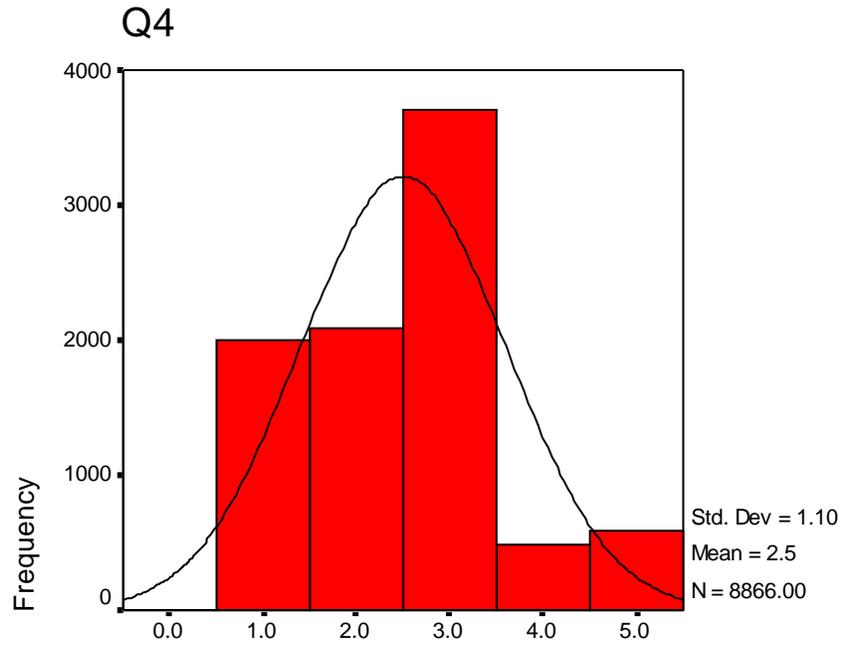




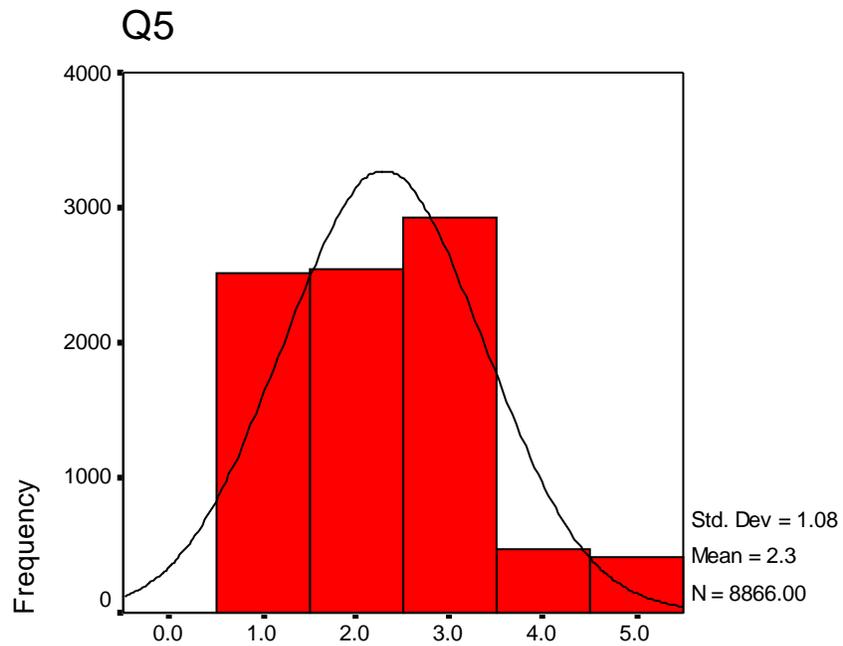
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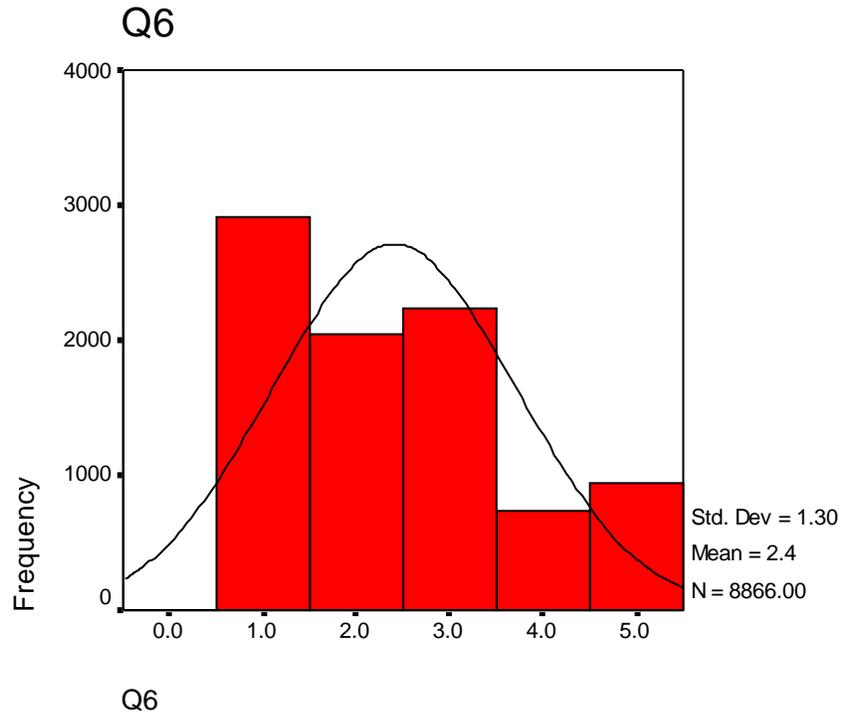
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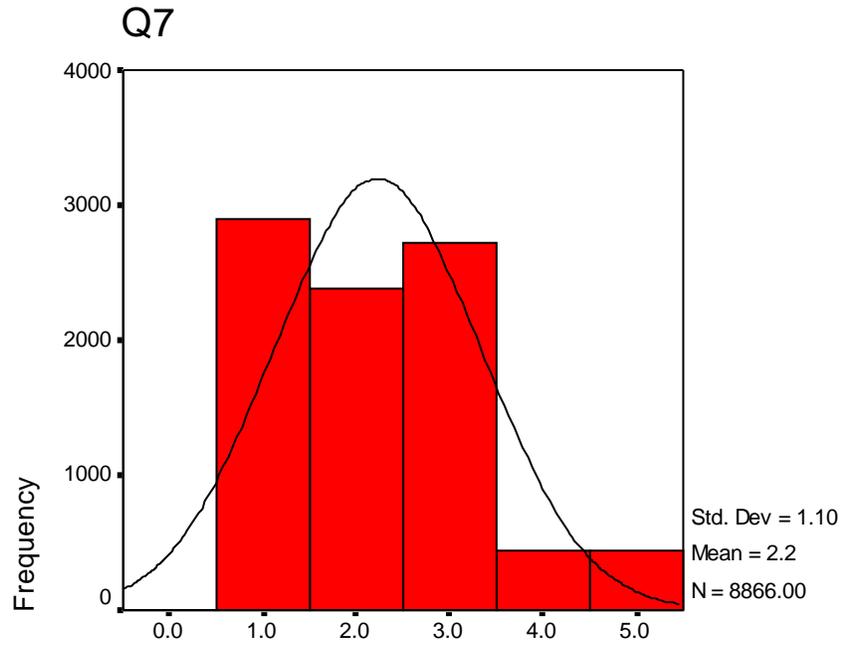


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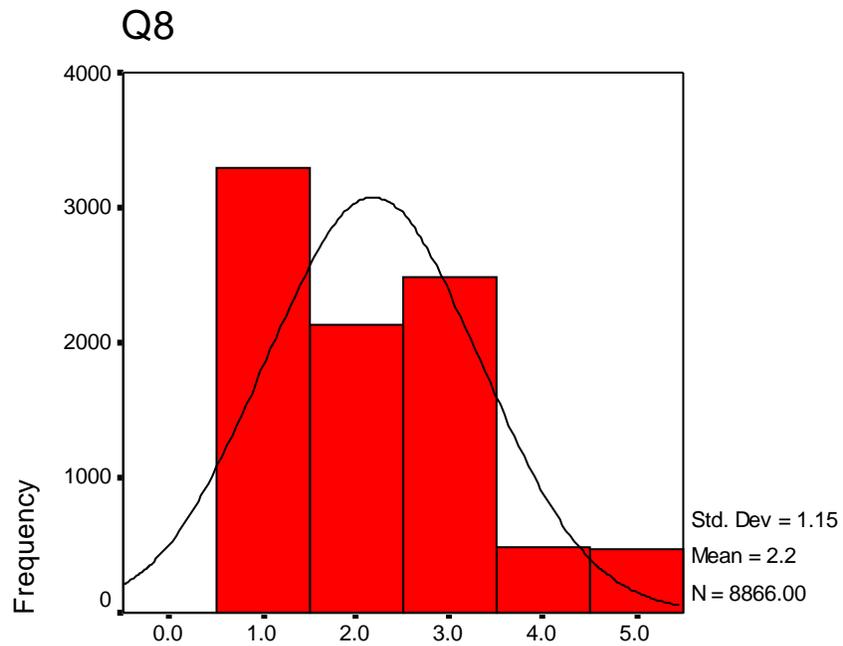


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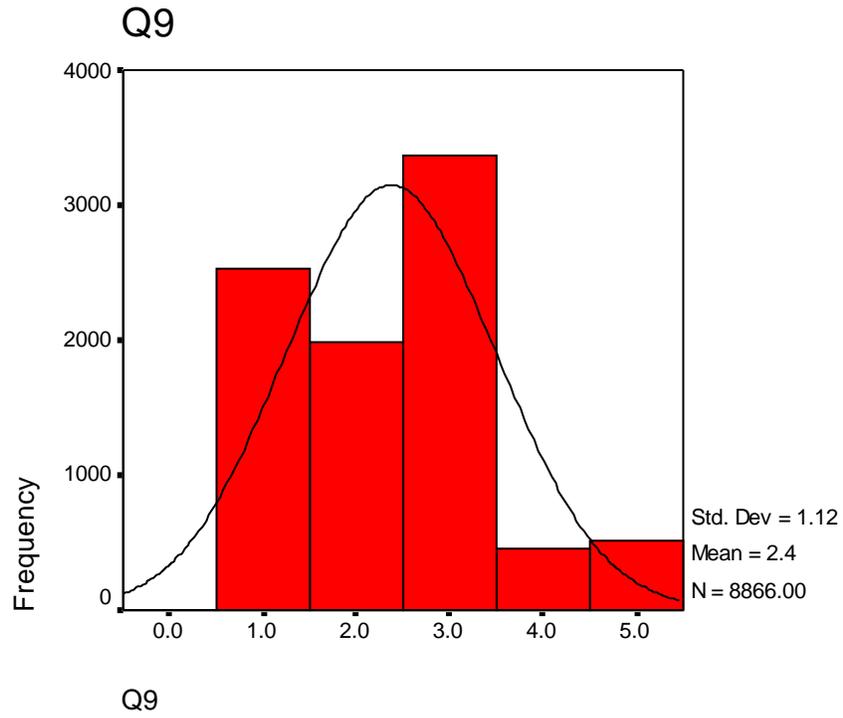




Q7

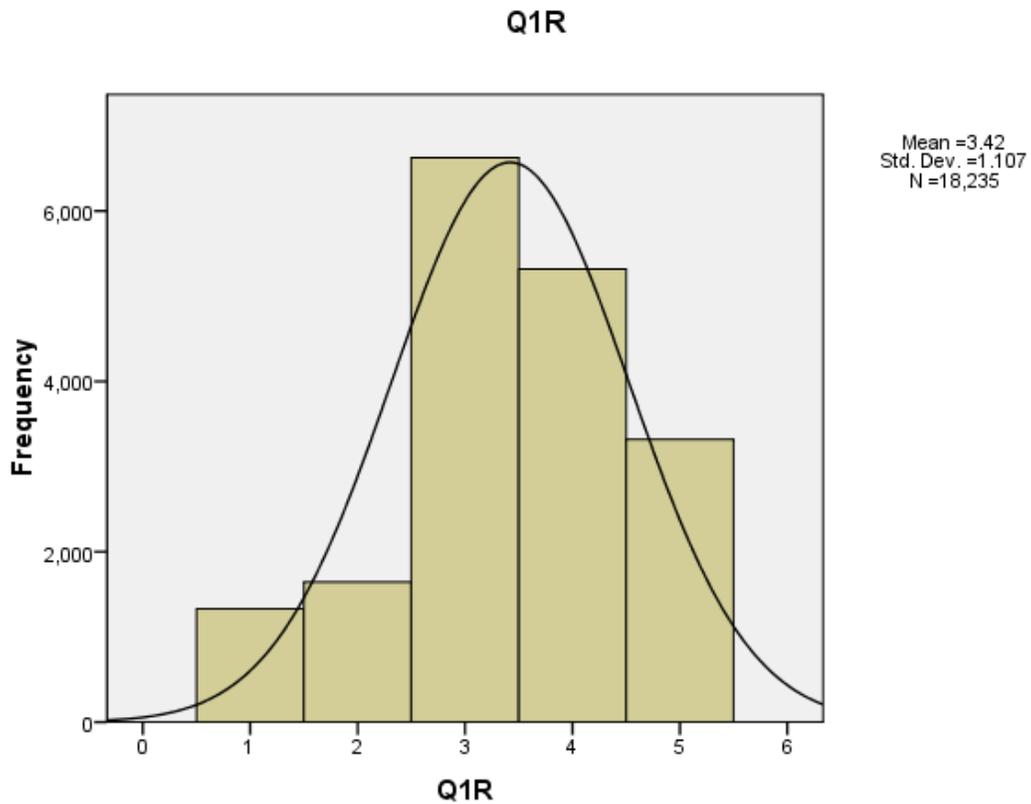


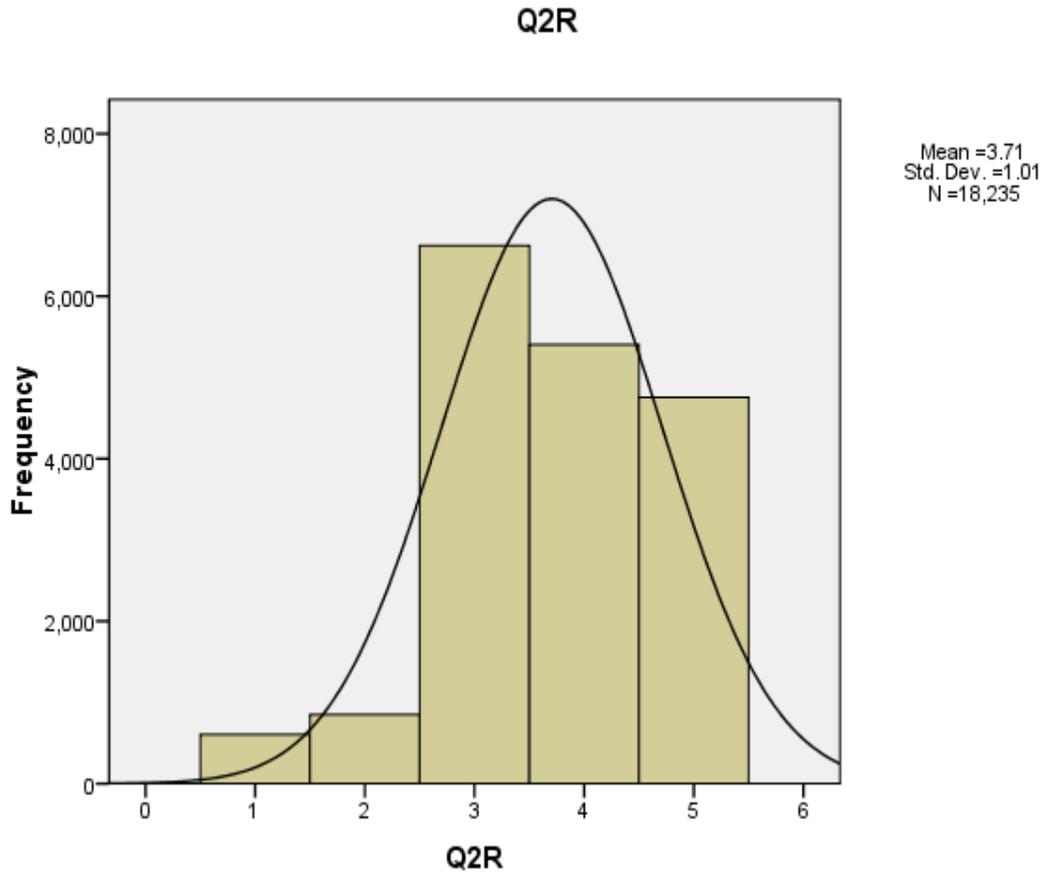
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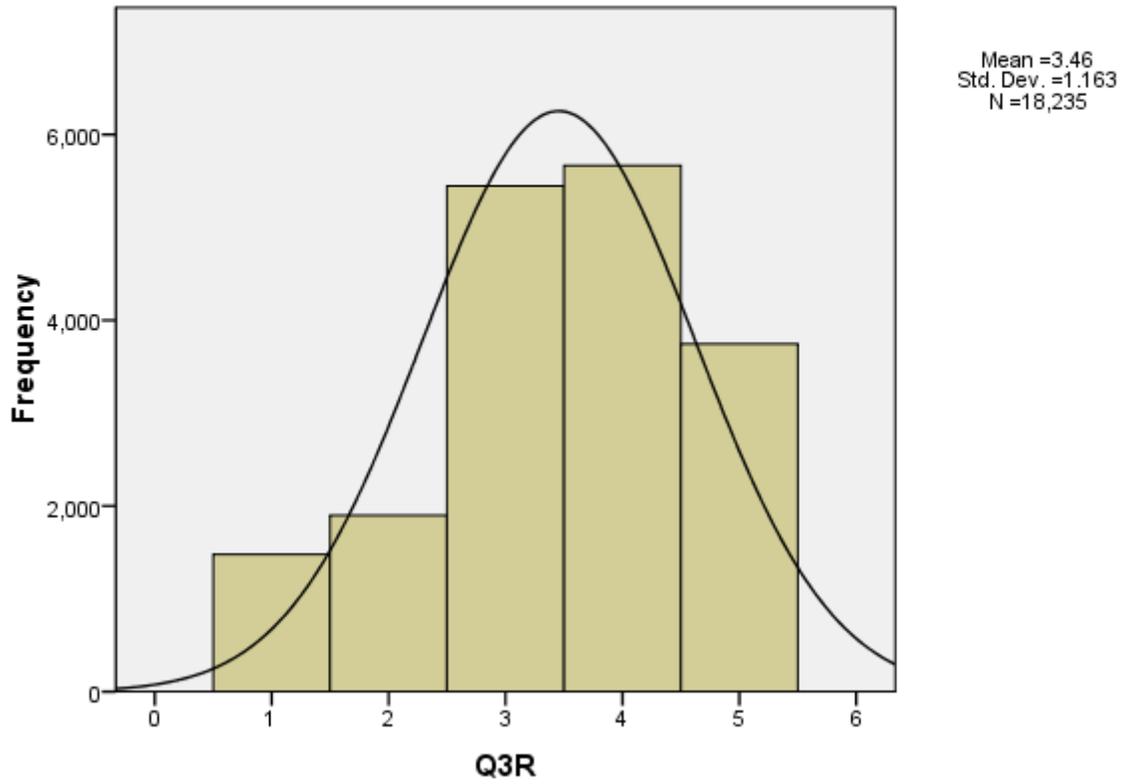
## XII. Appendix D - Frequencies of DDC Scale for Pilot III

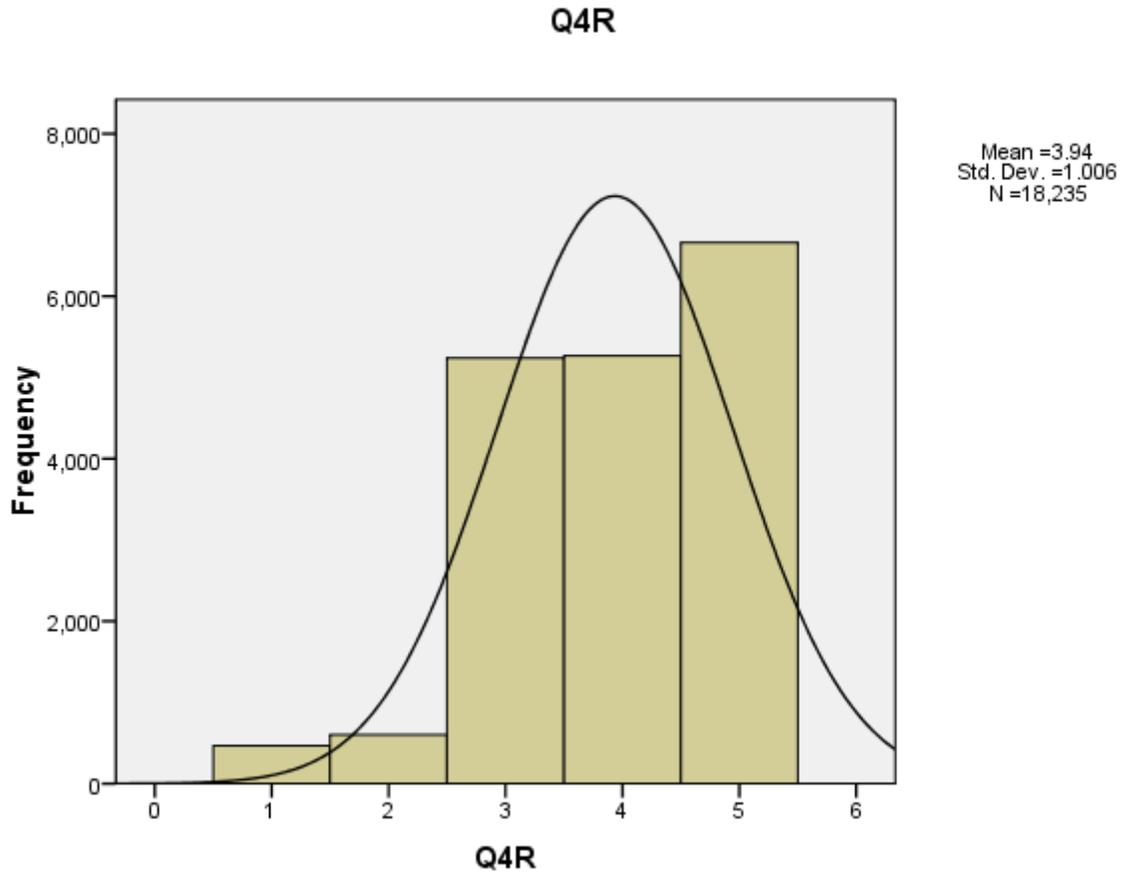
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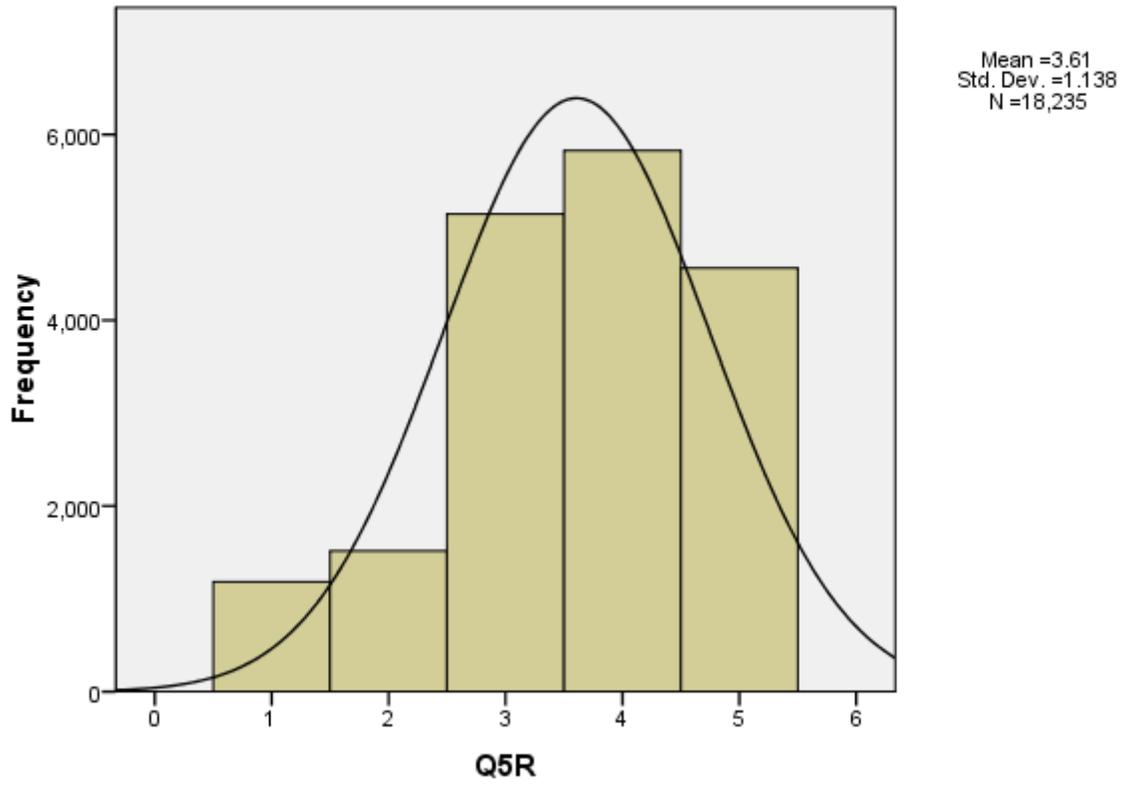


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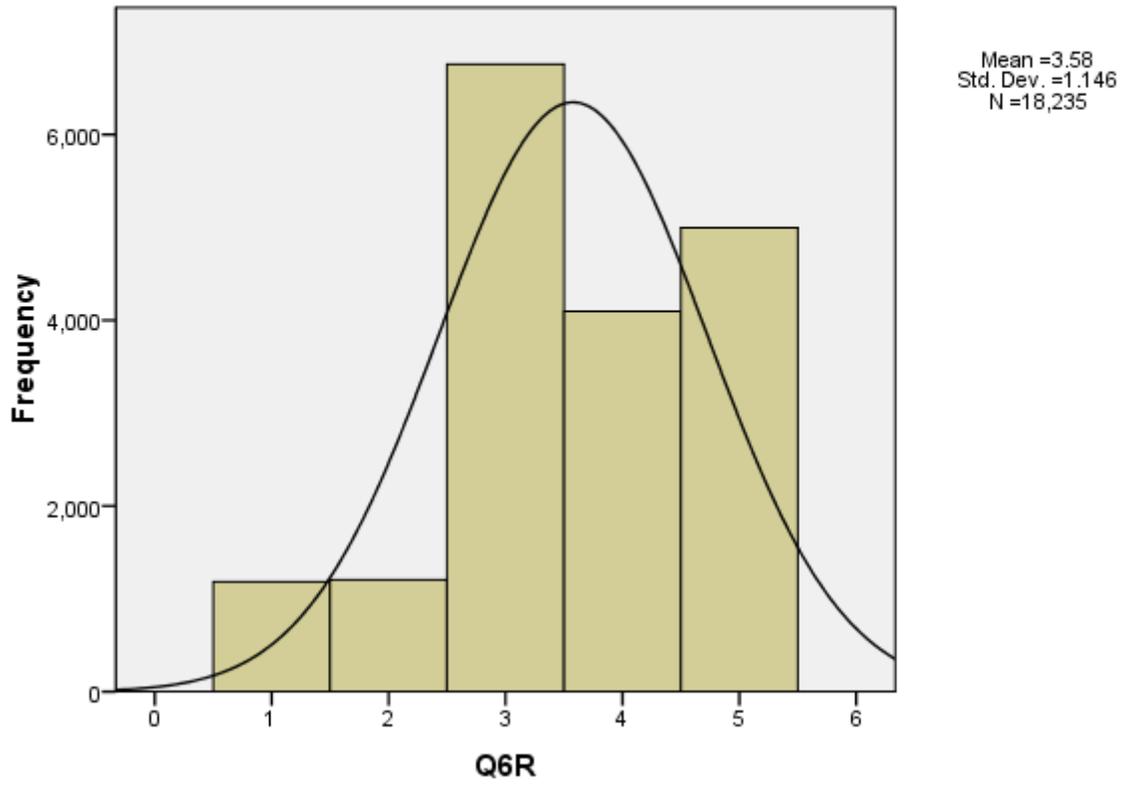




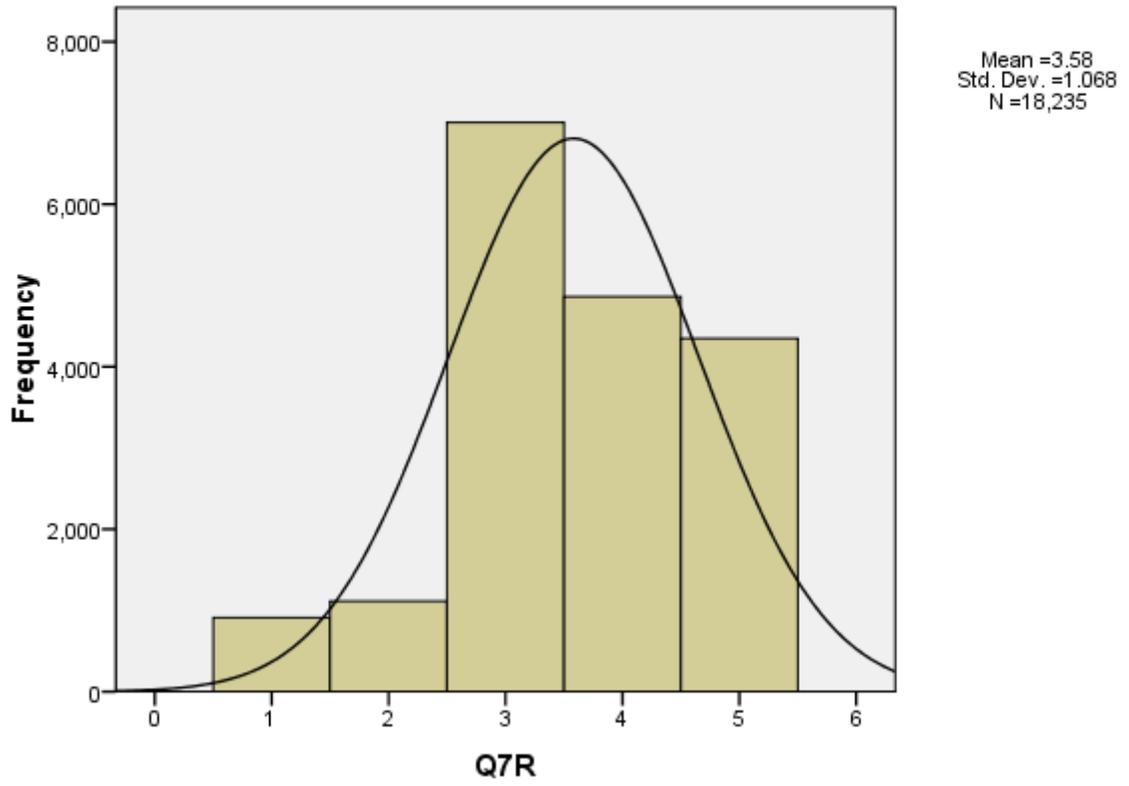
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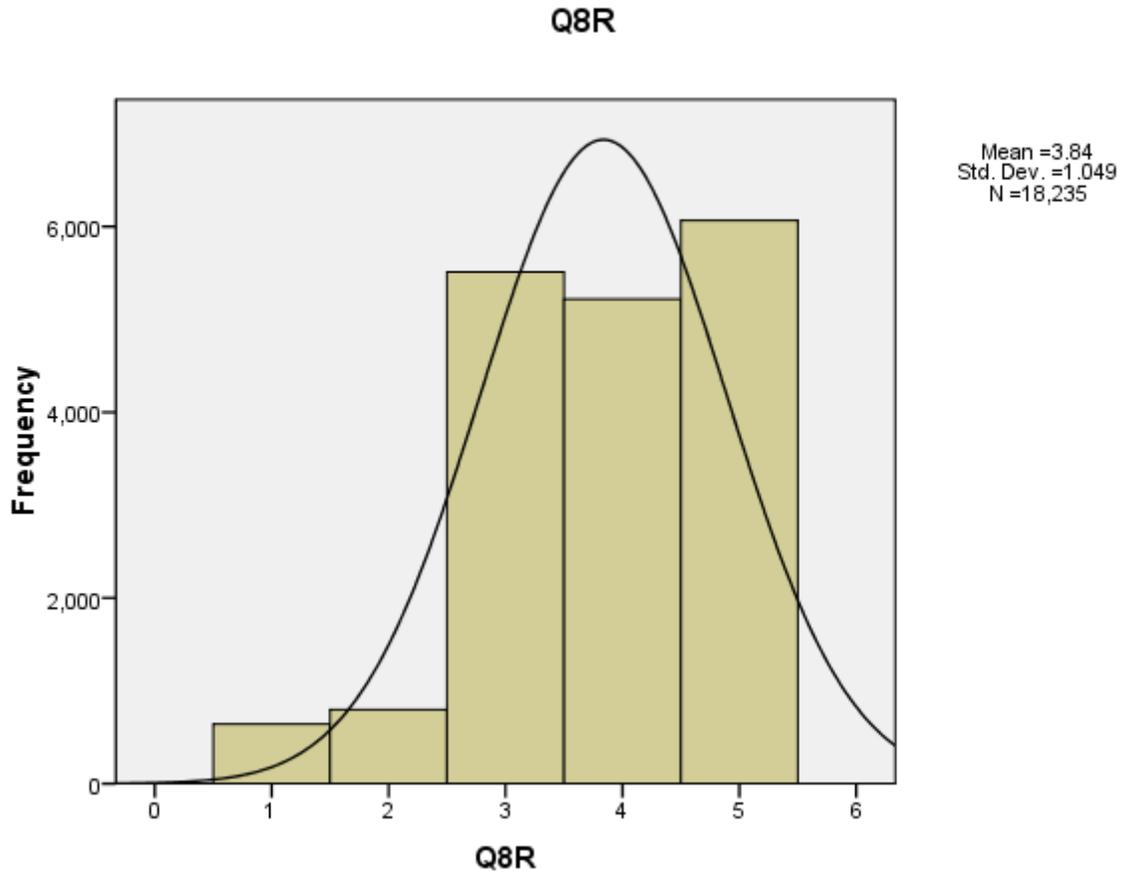


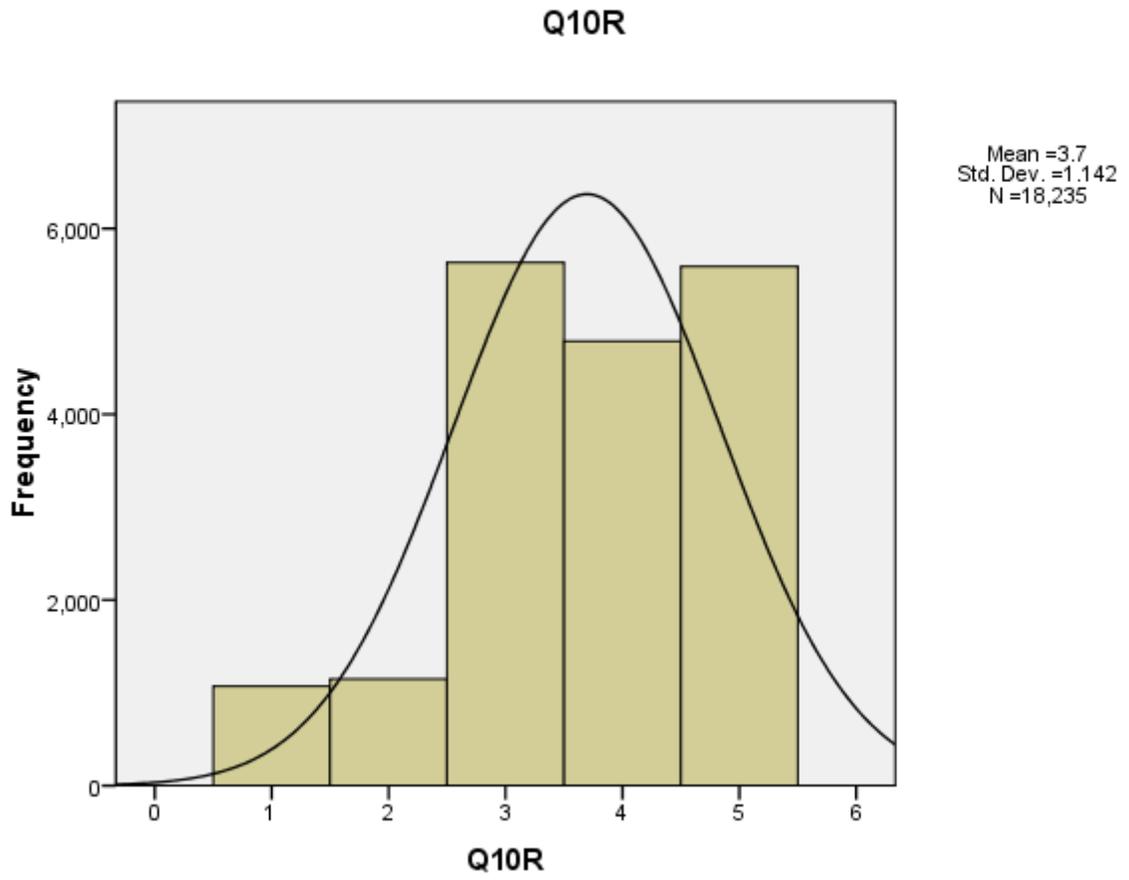
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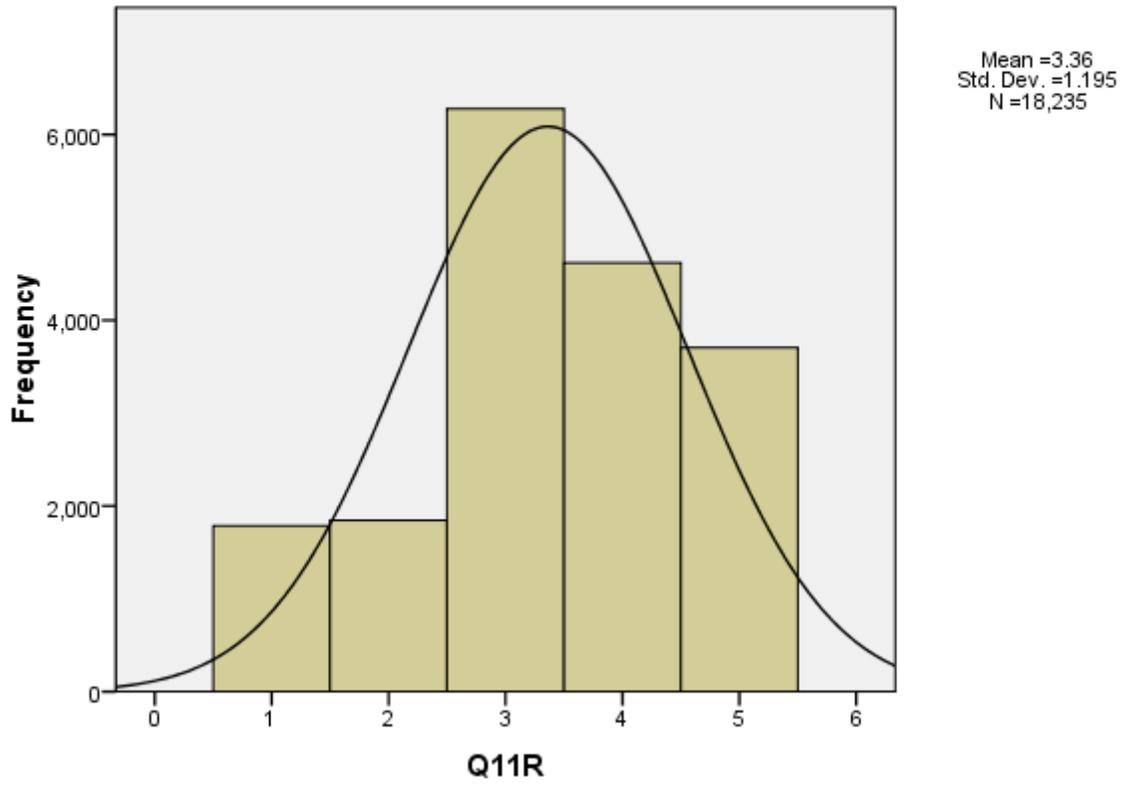
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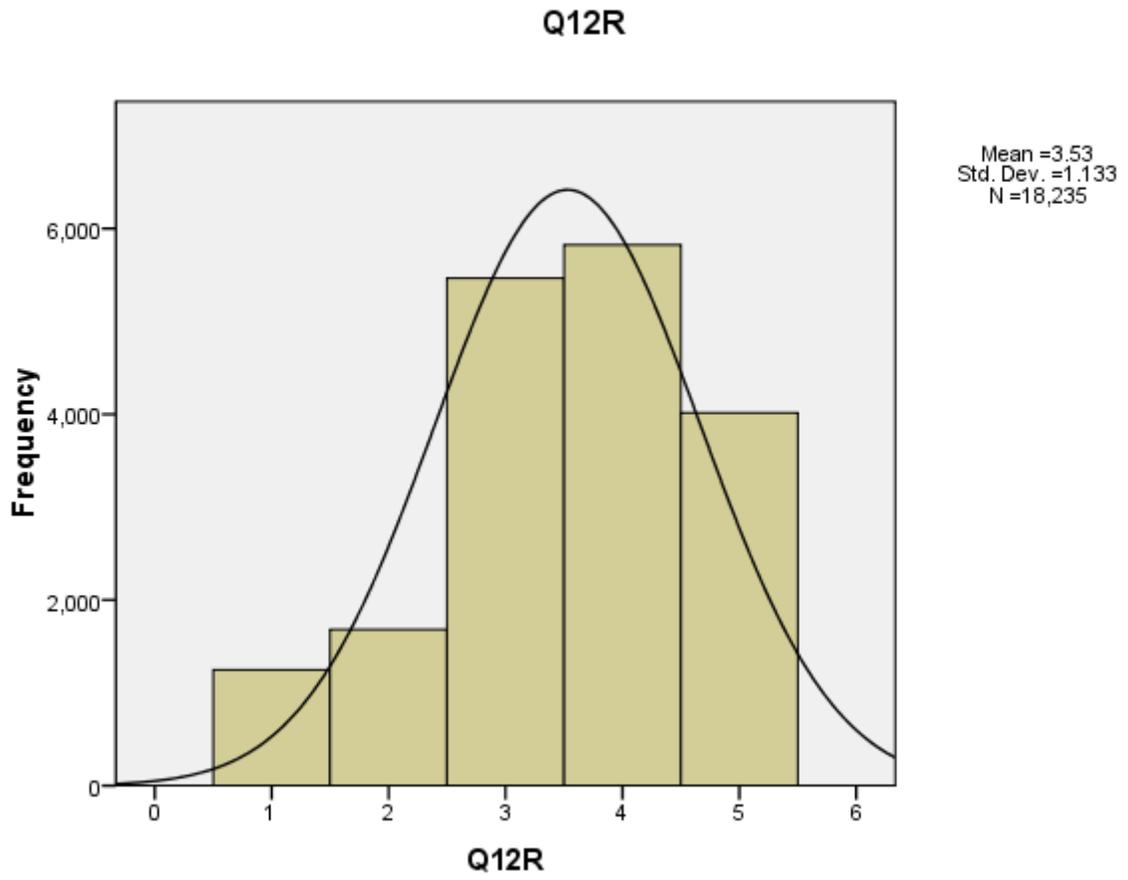


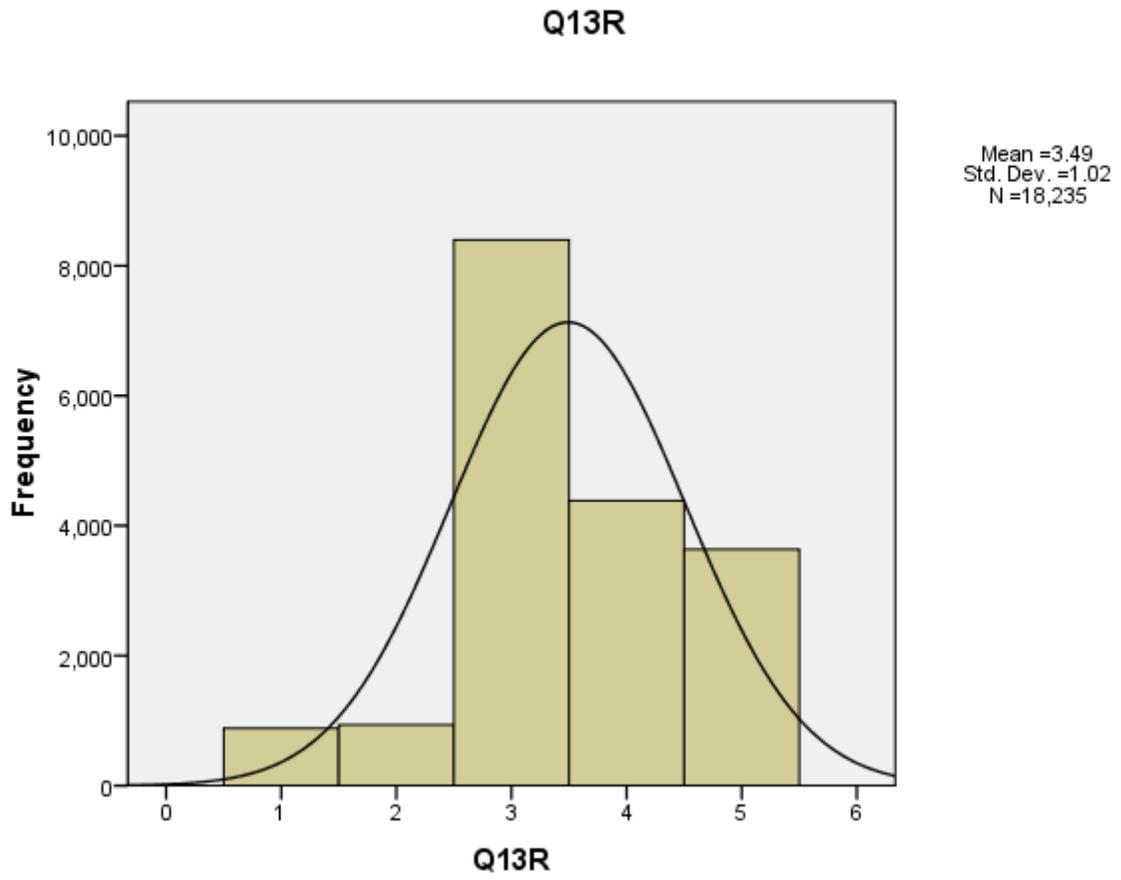




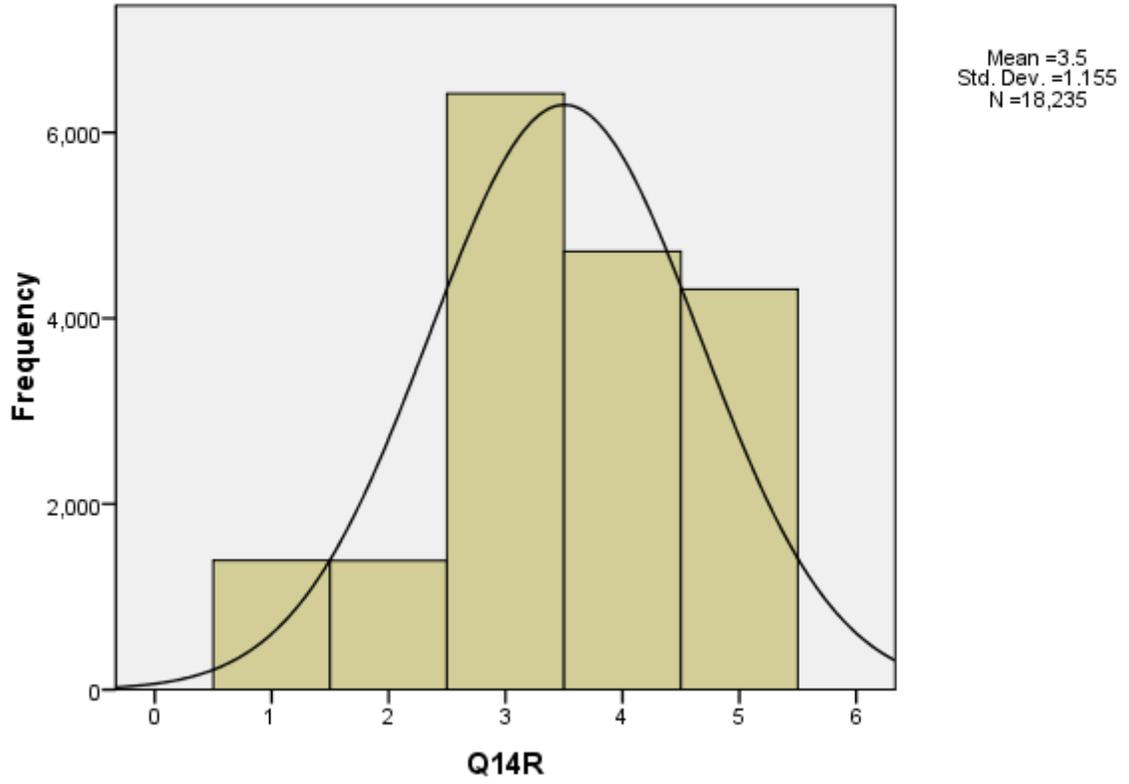
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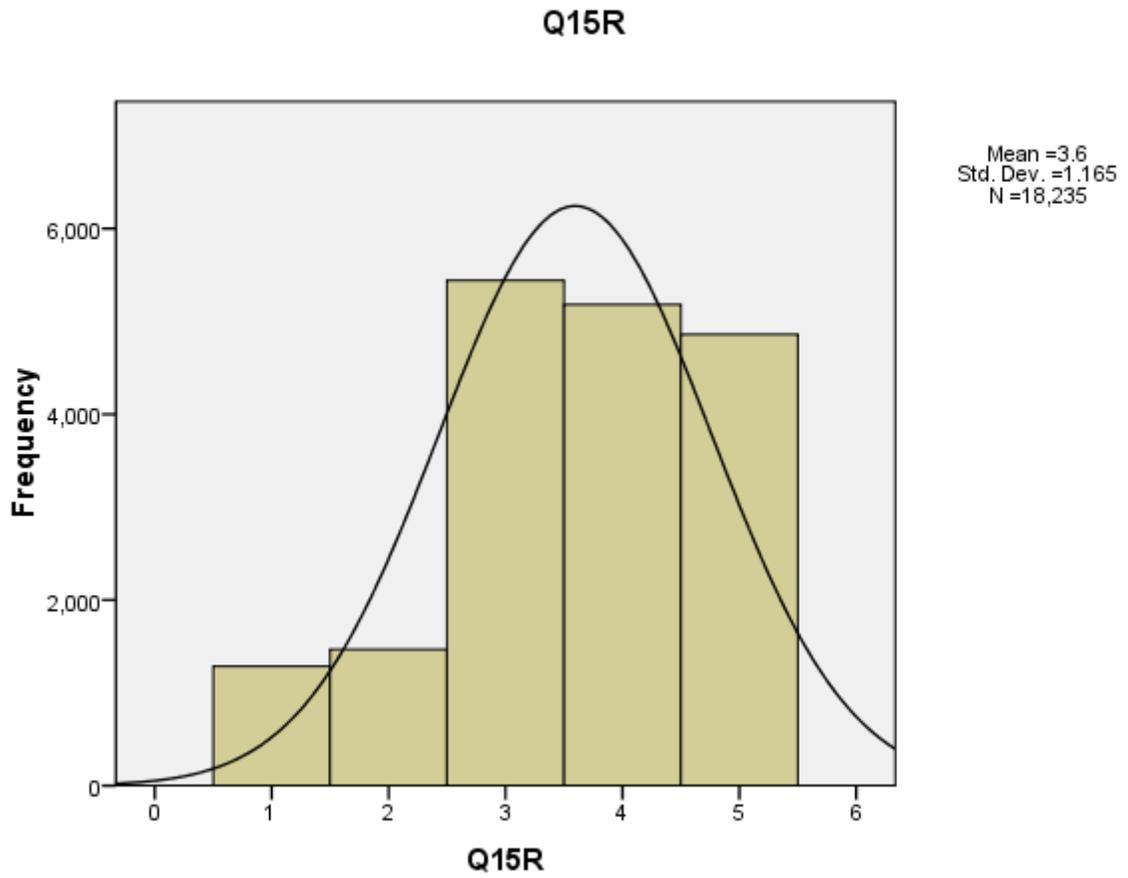






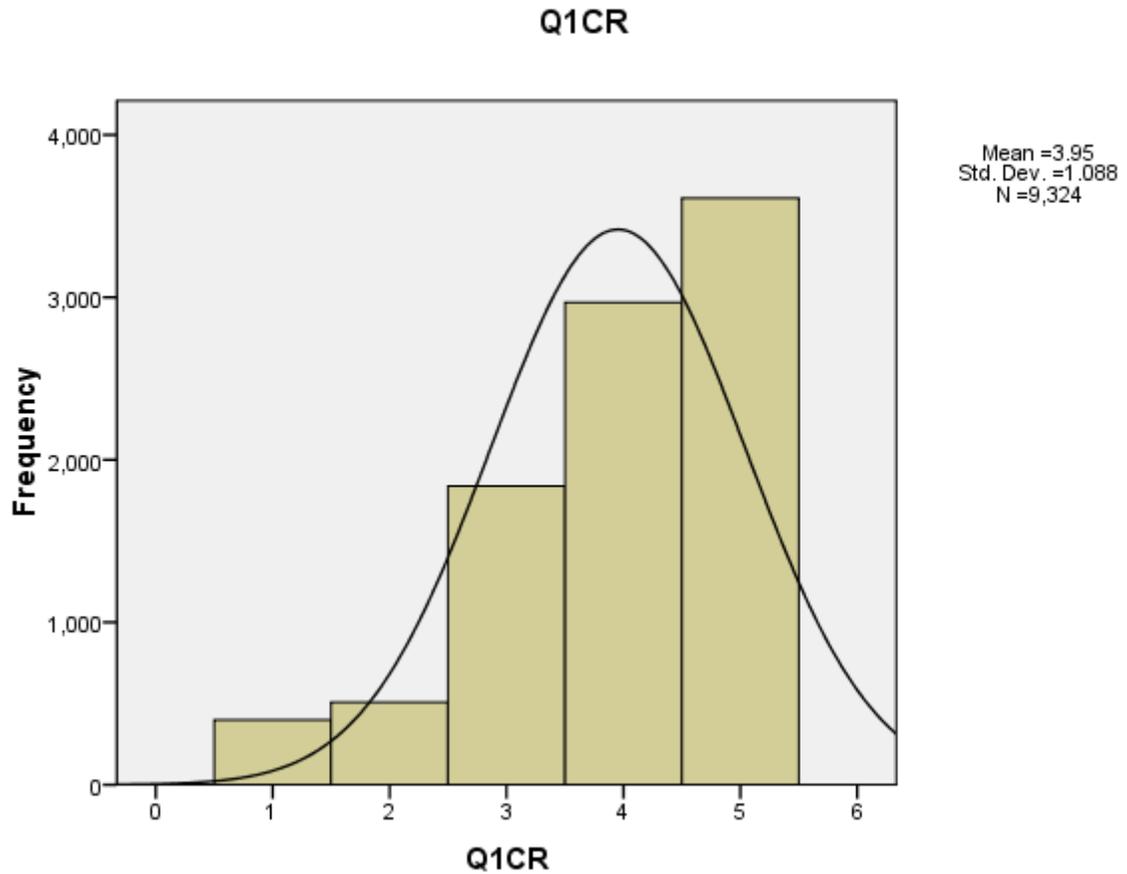
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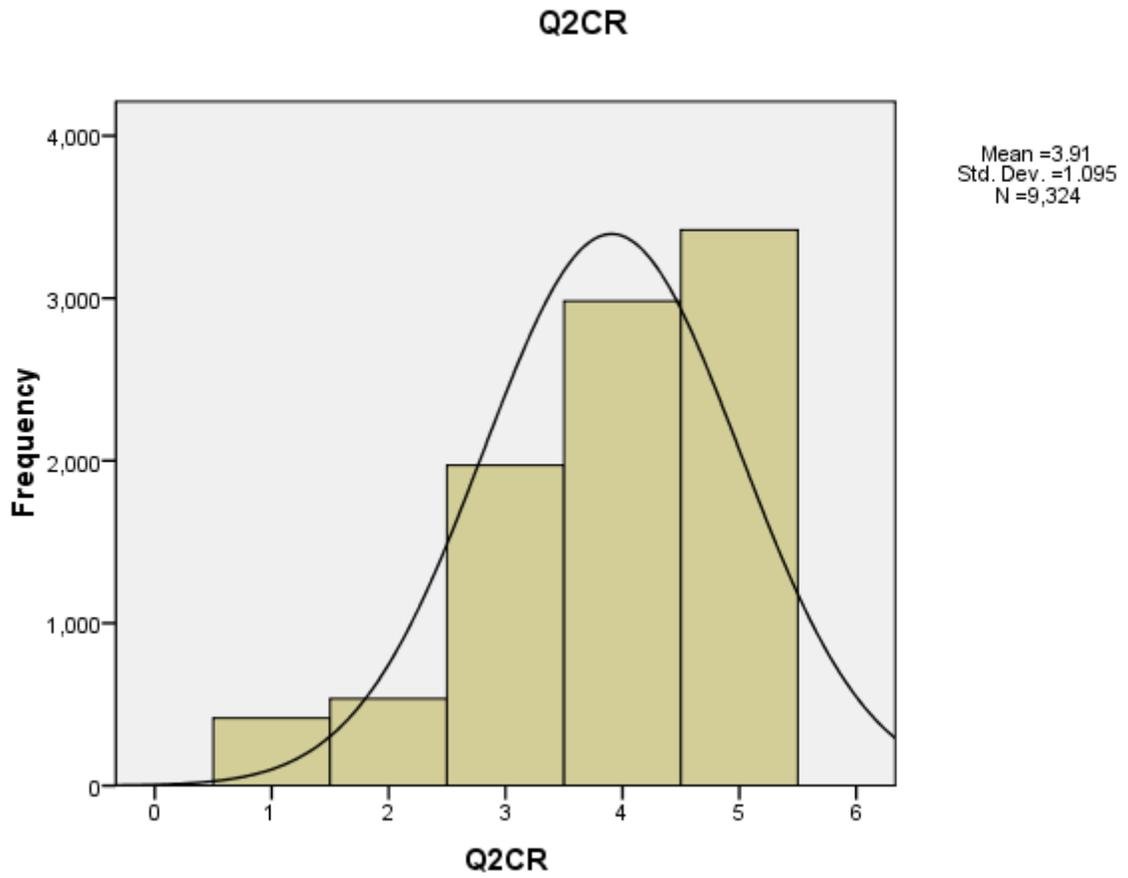


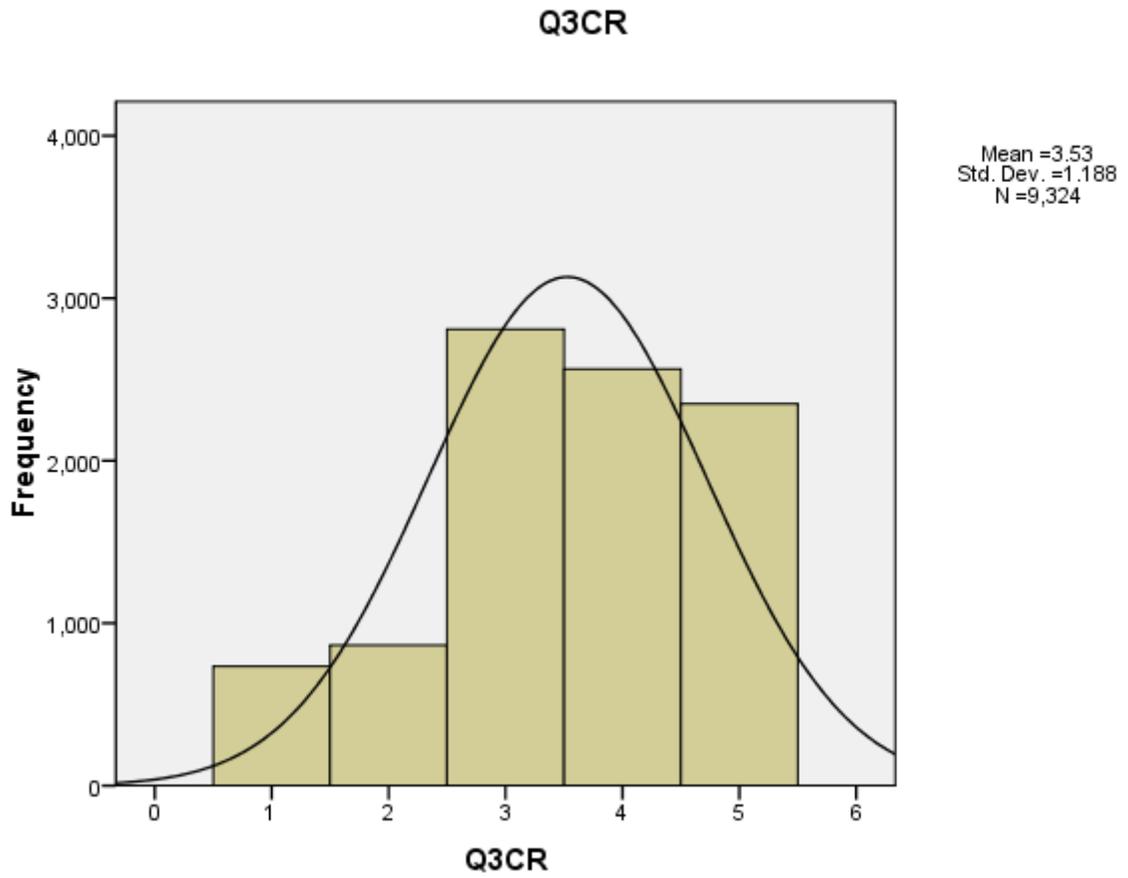


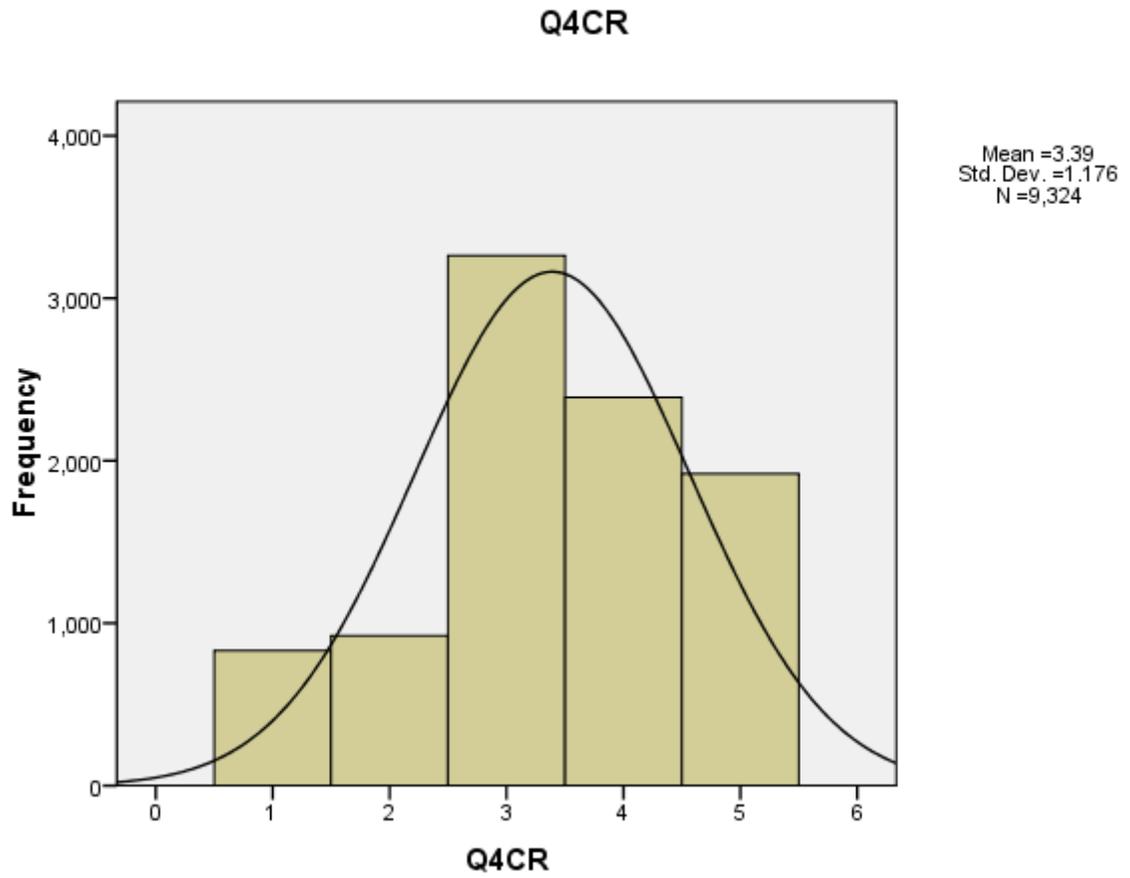
### XIII. Appendix E - Frequencies and Means of DDC Items for Pilot IV

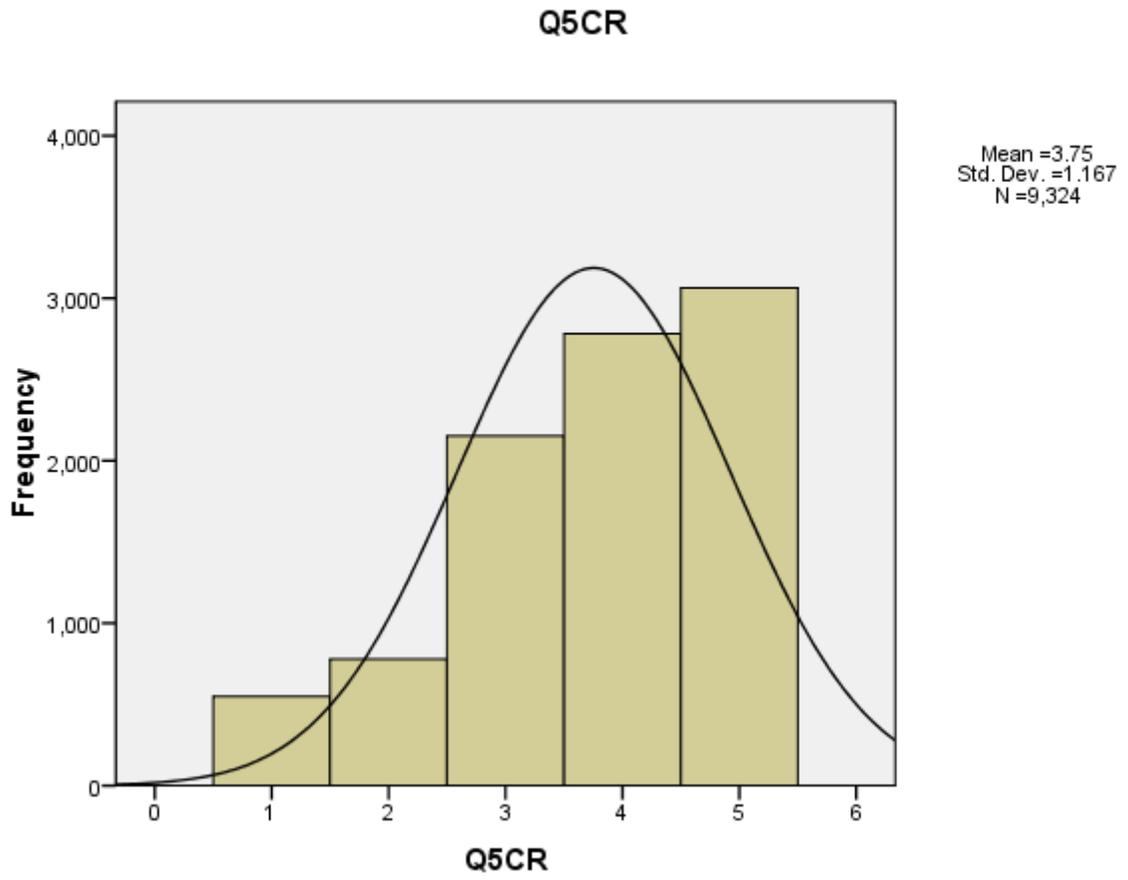
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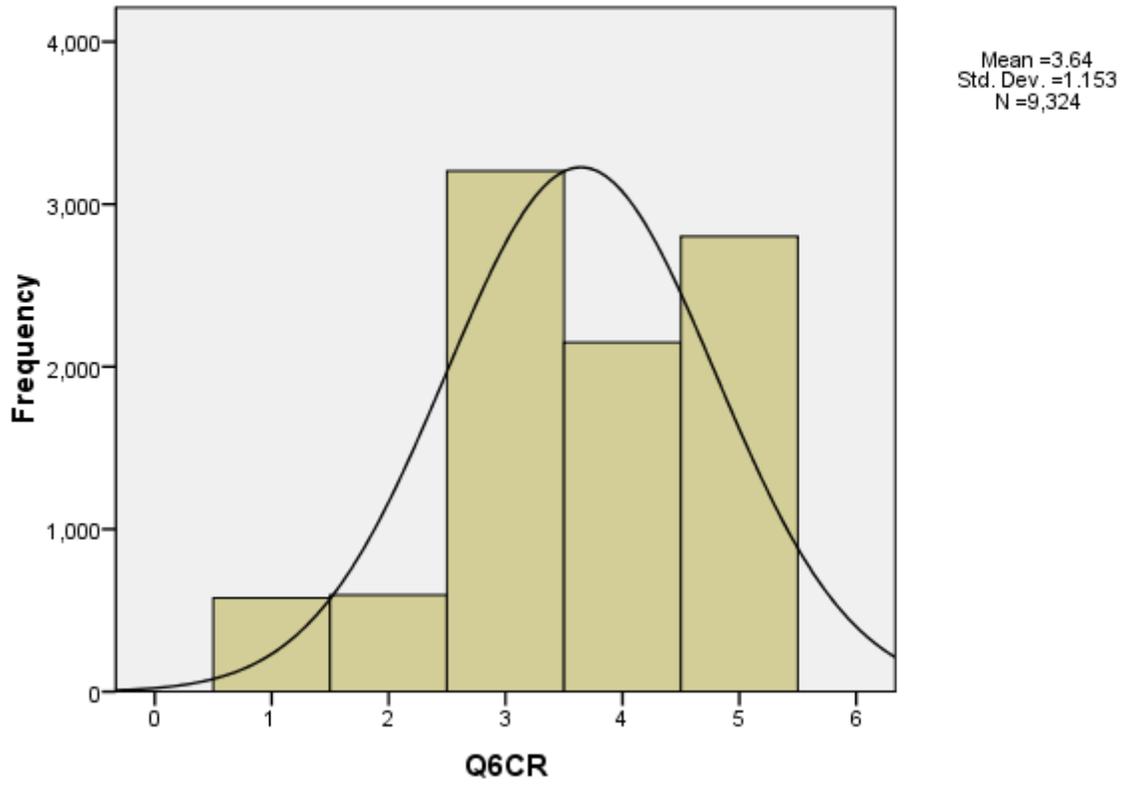




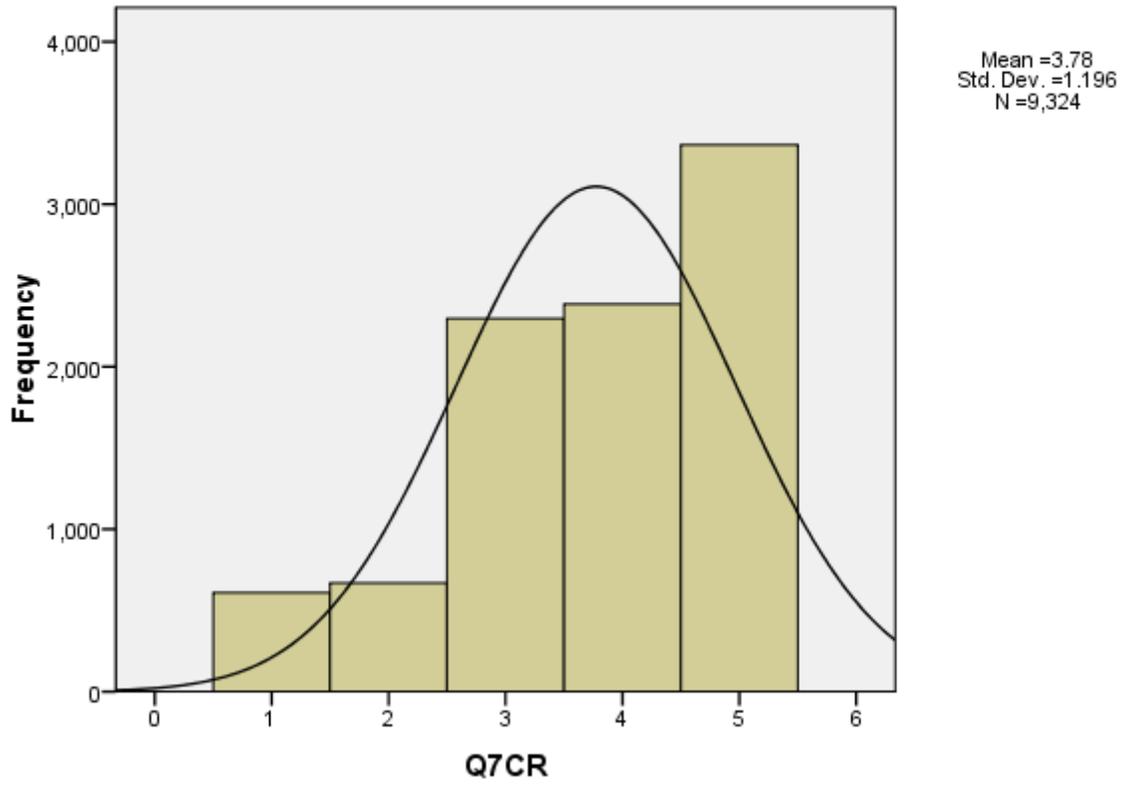


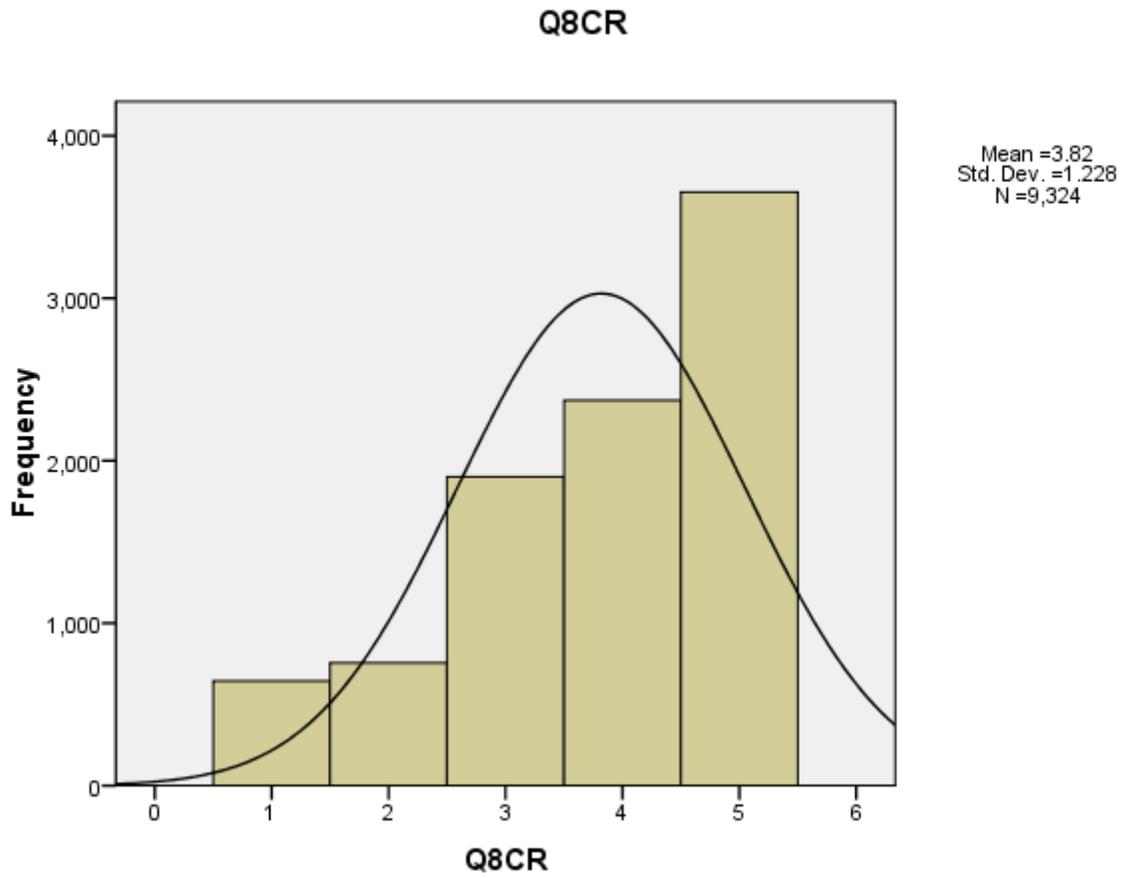


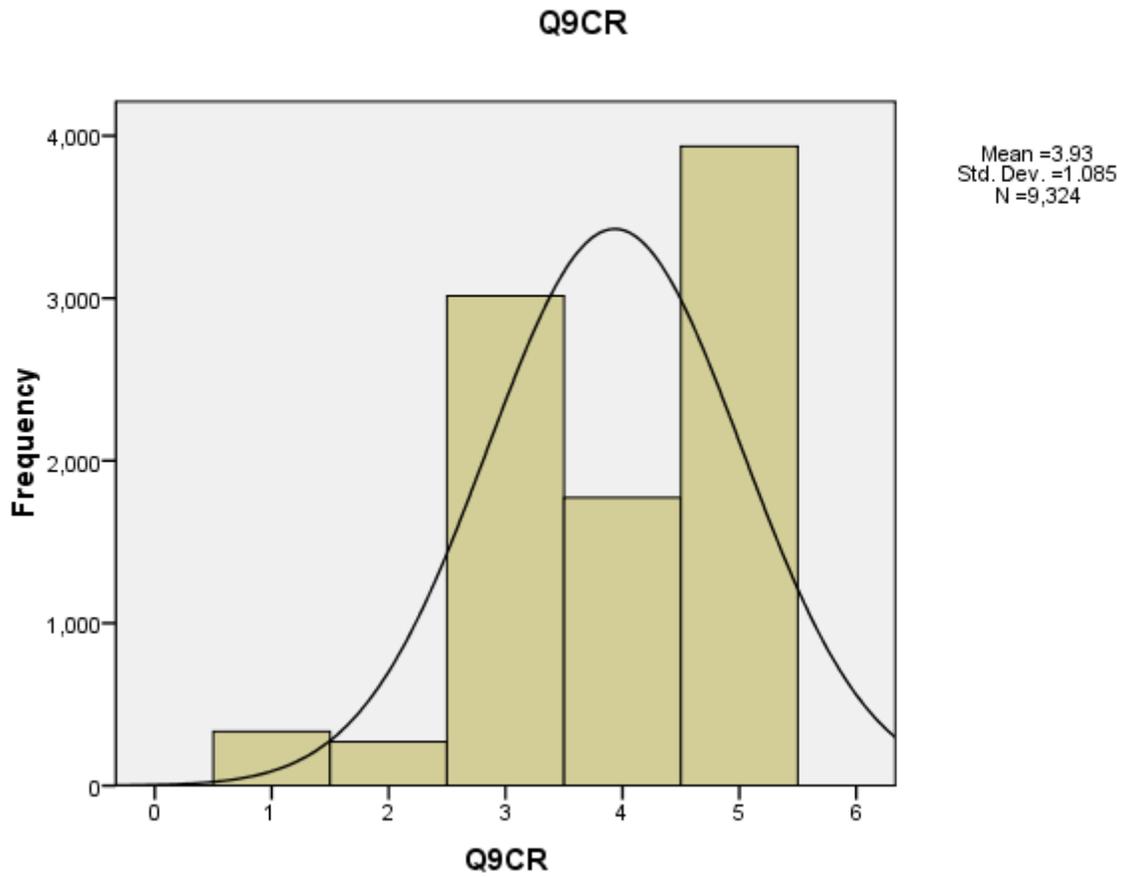
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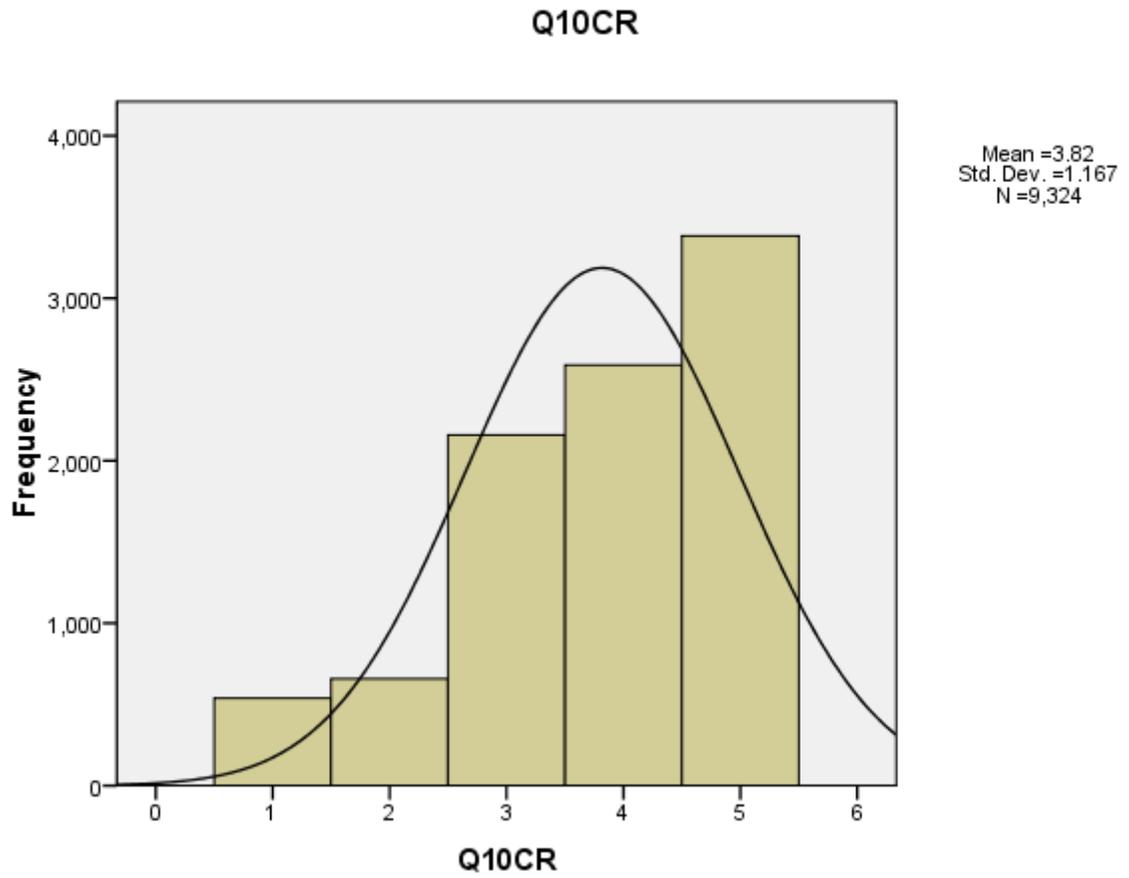


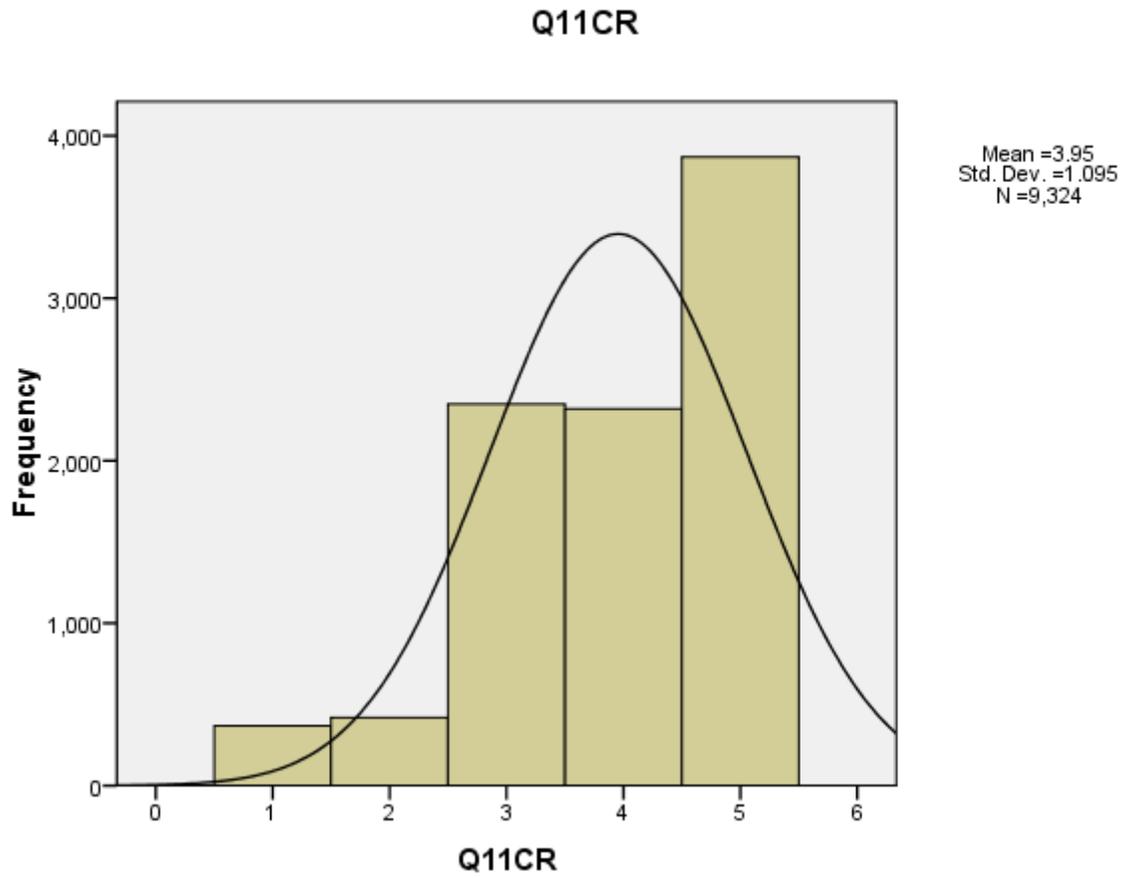
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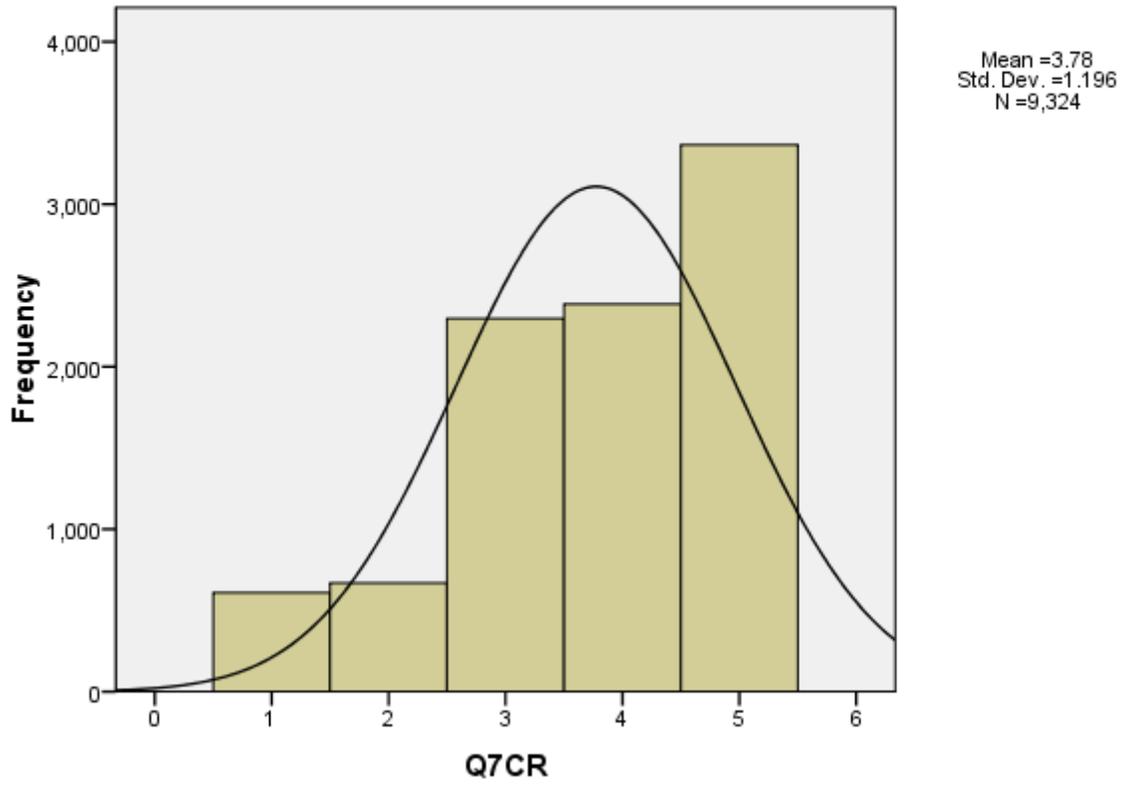


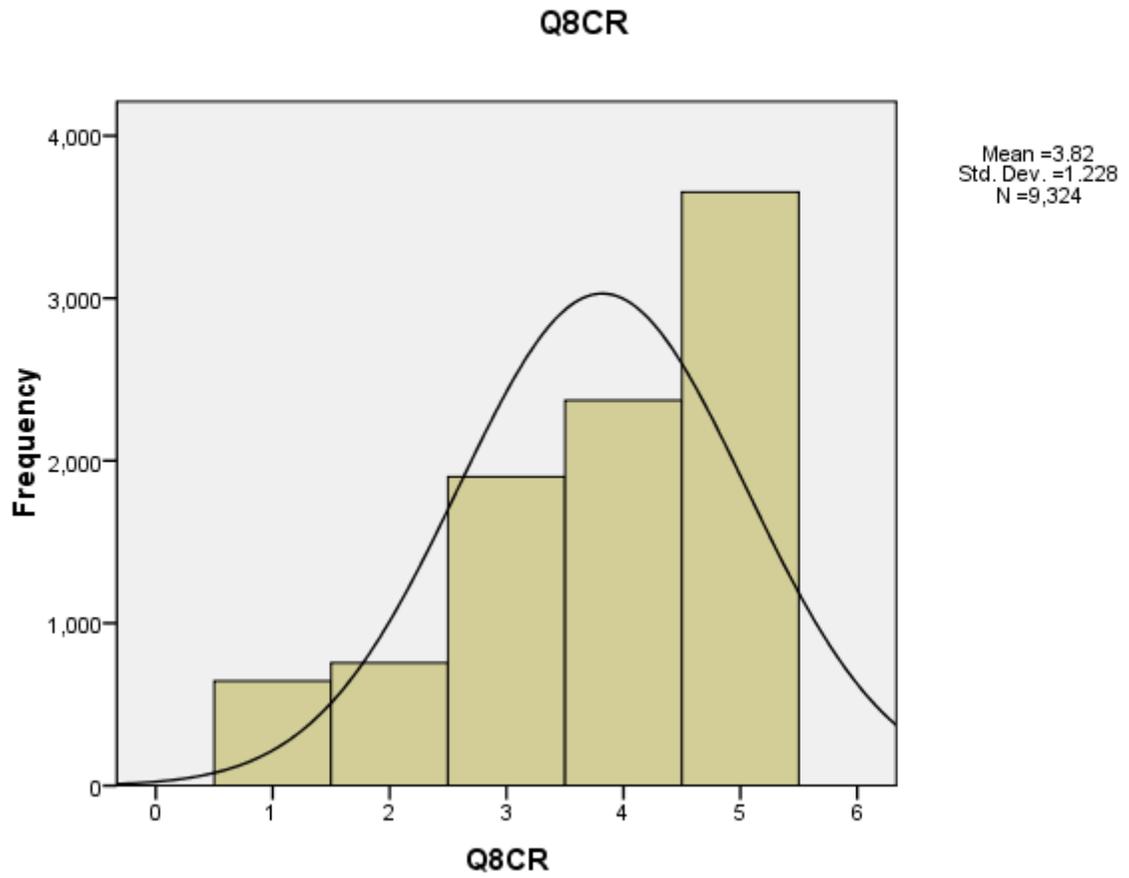


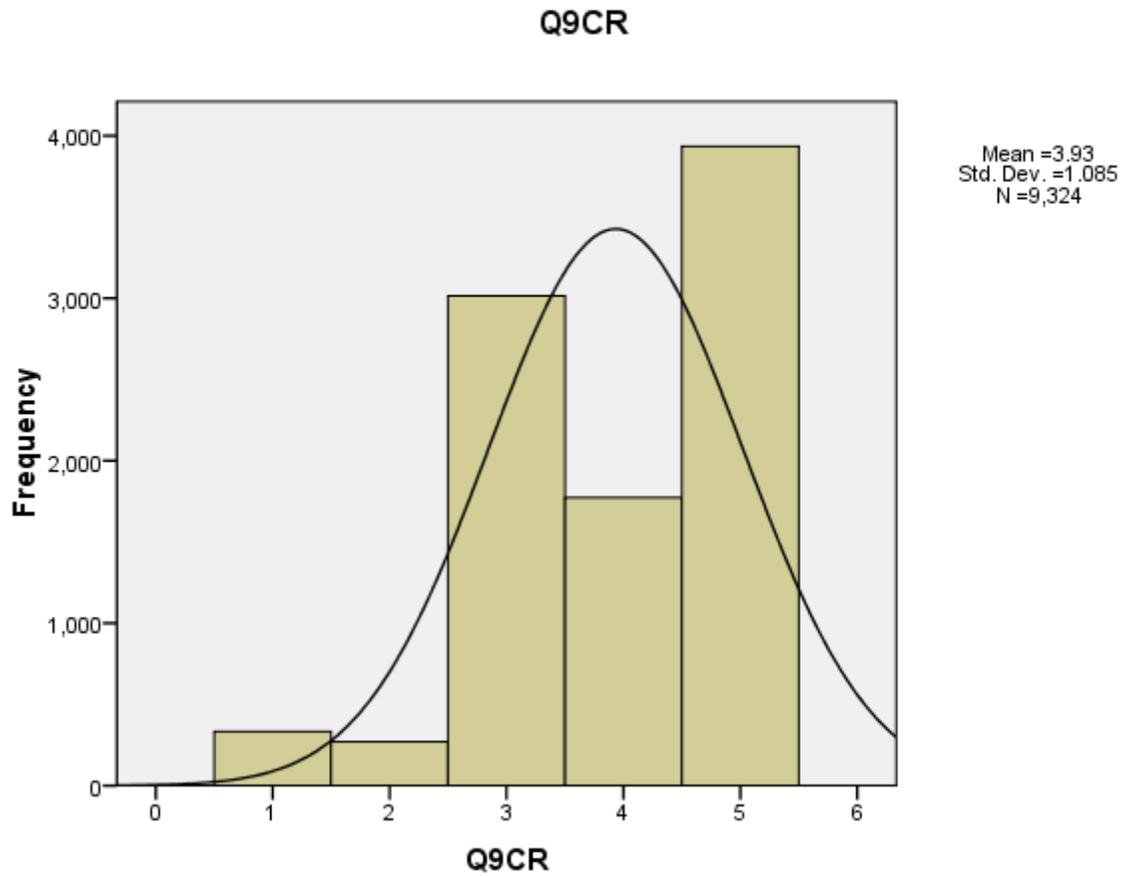


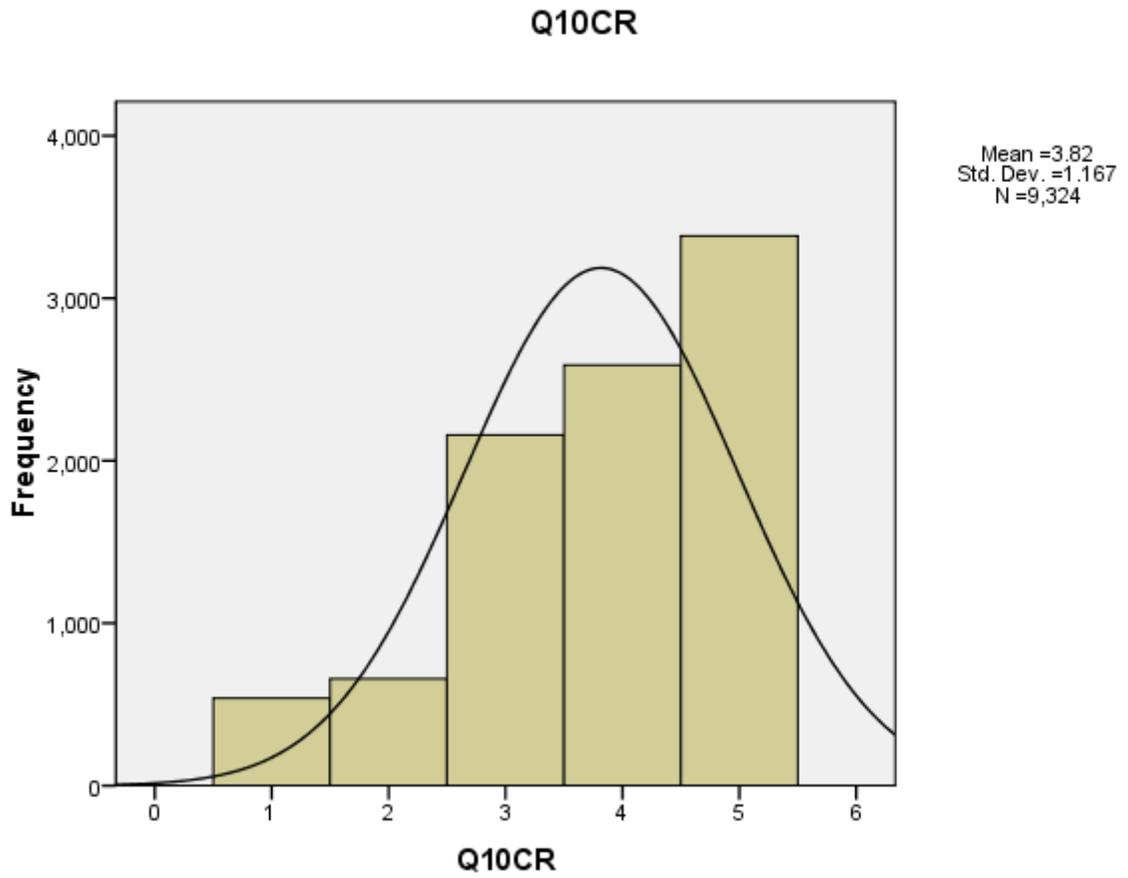


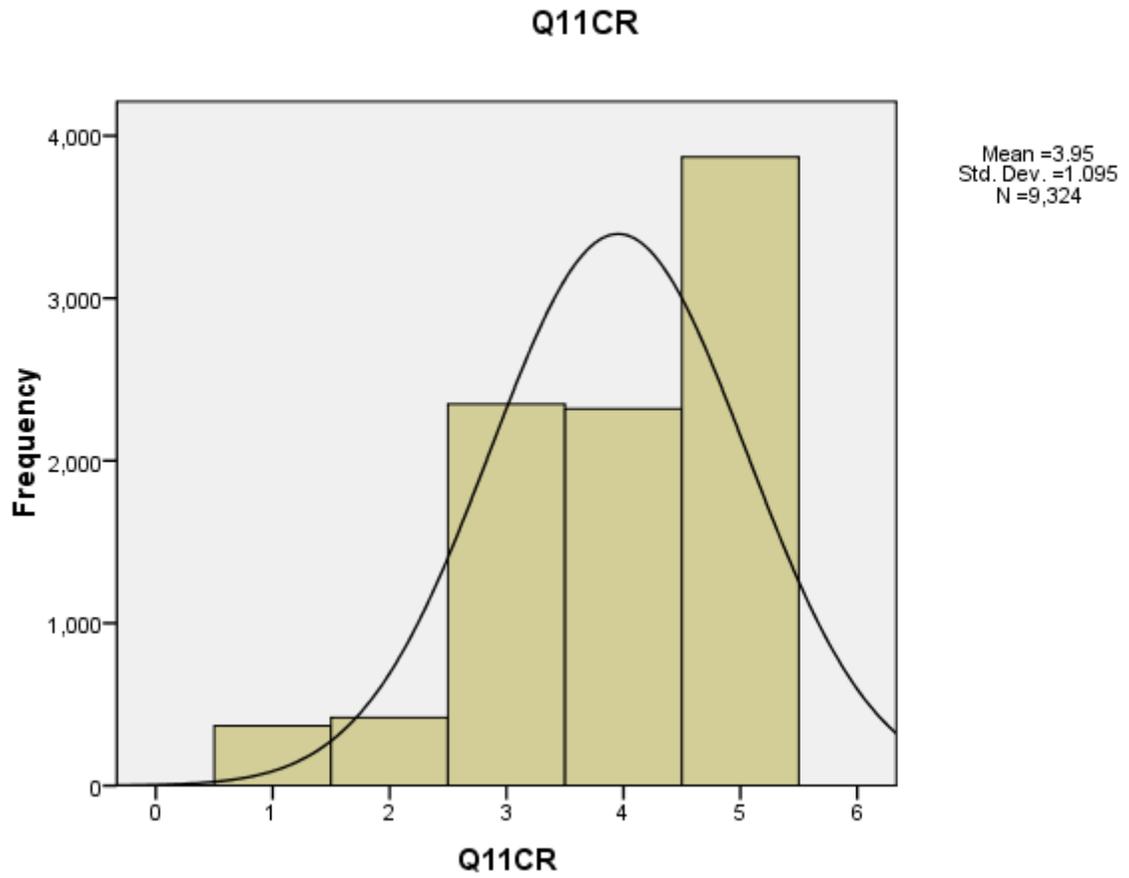
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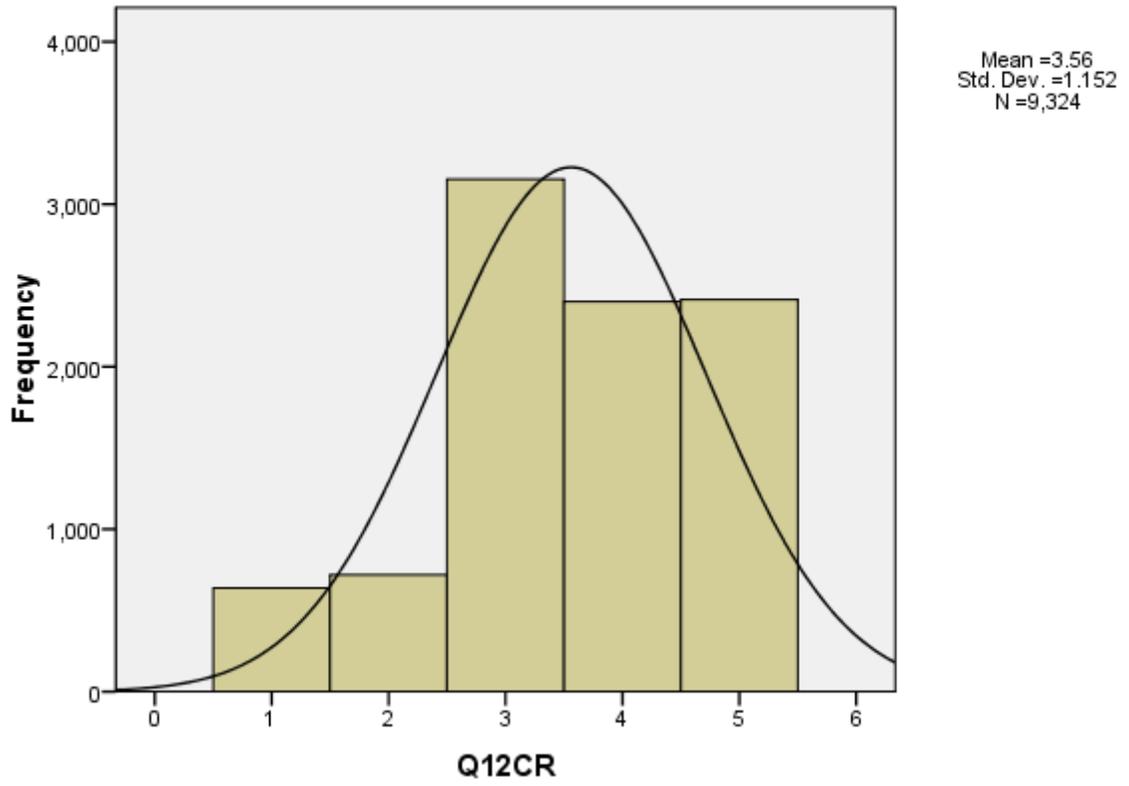




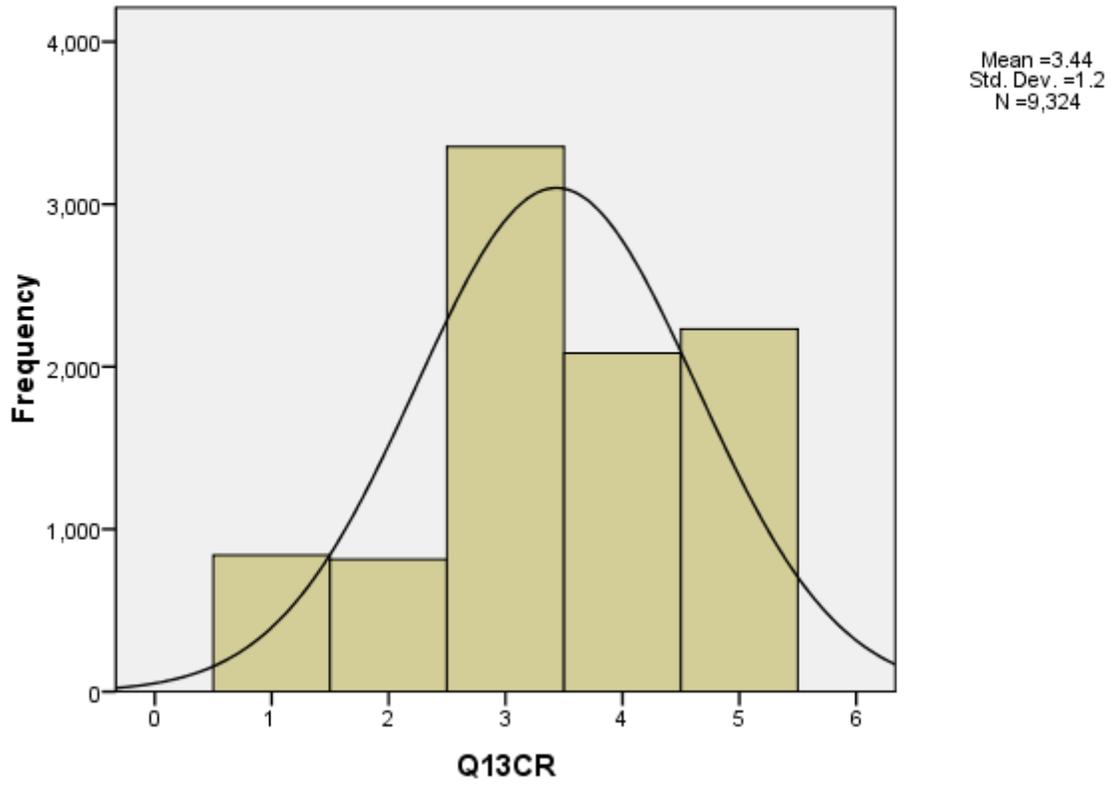




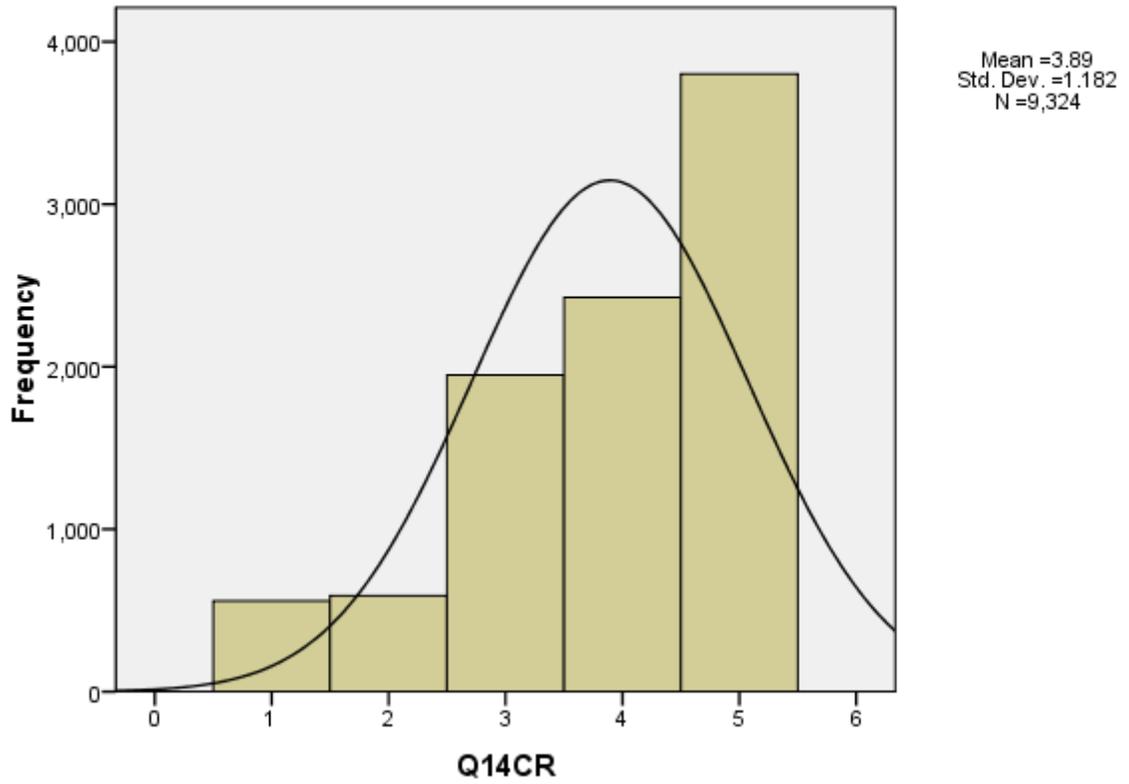
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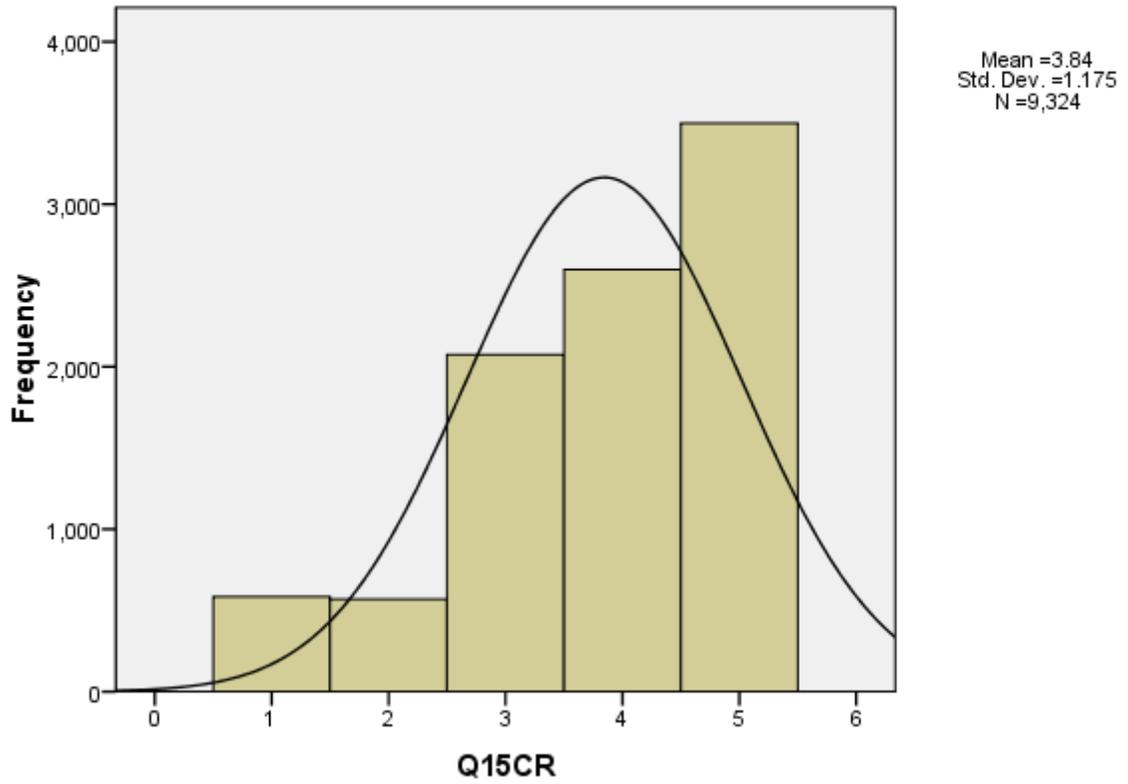
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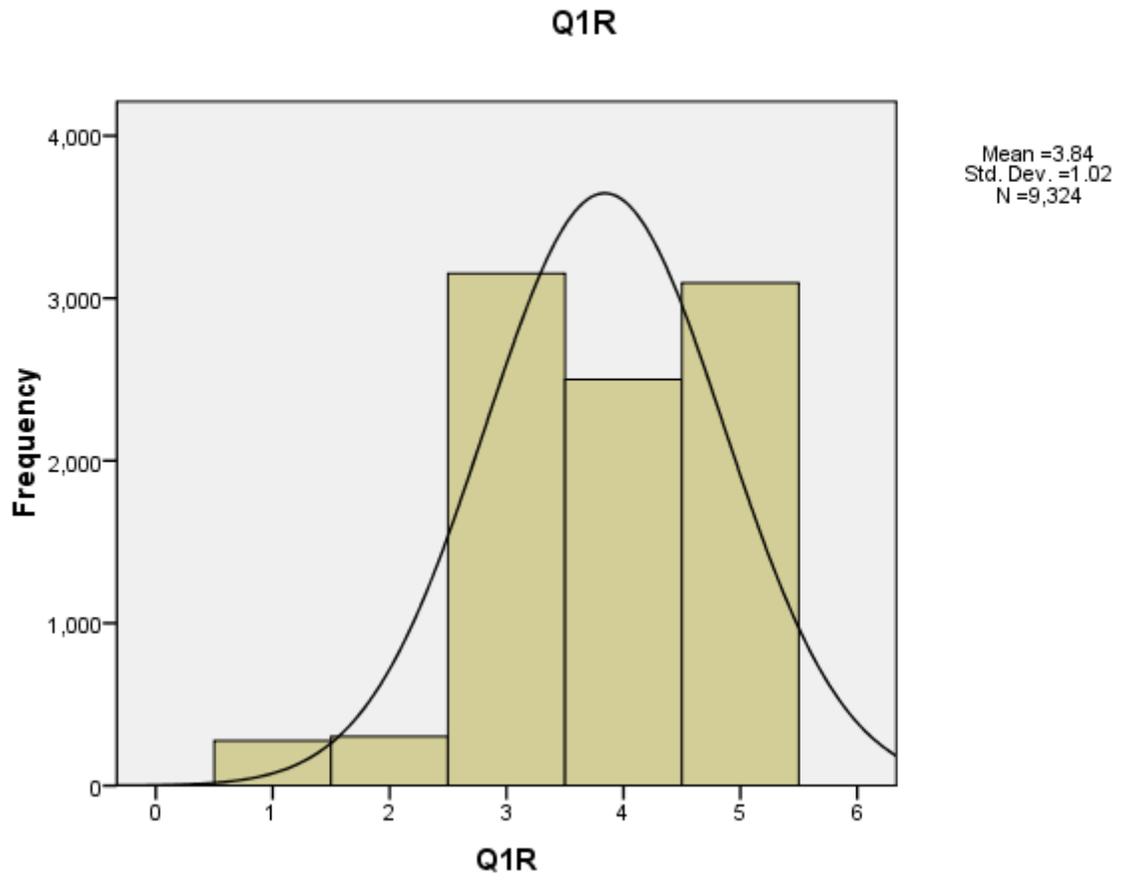


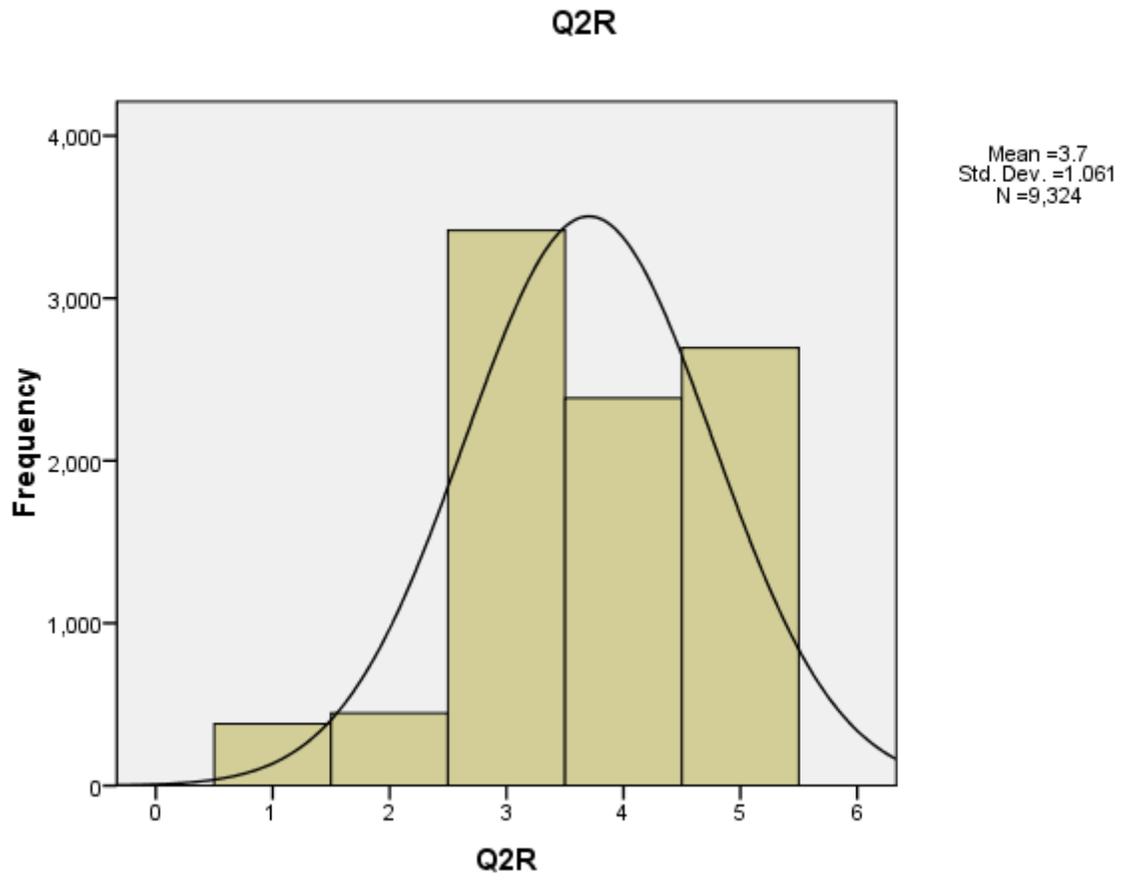
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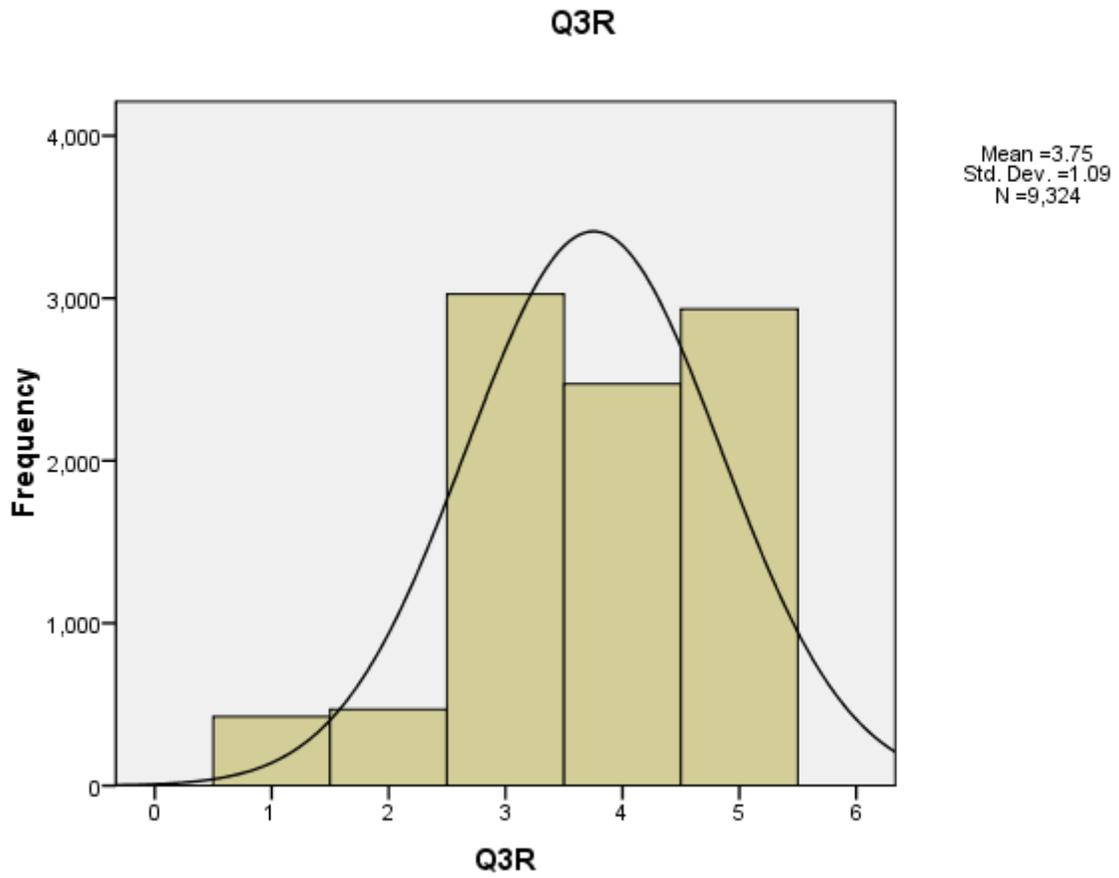


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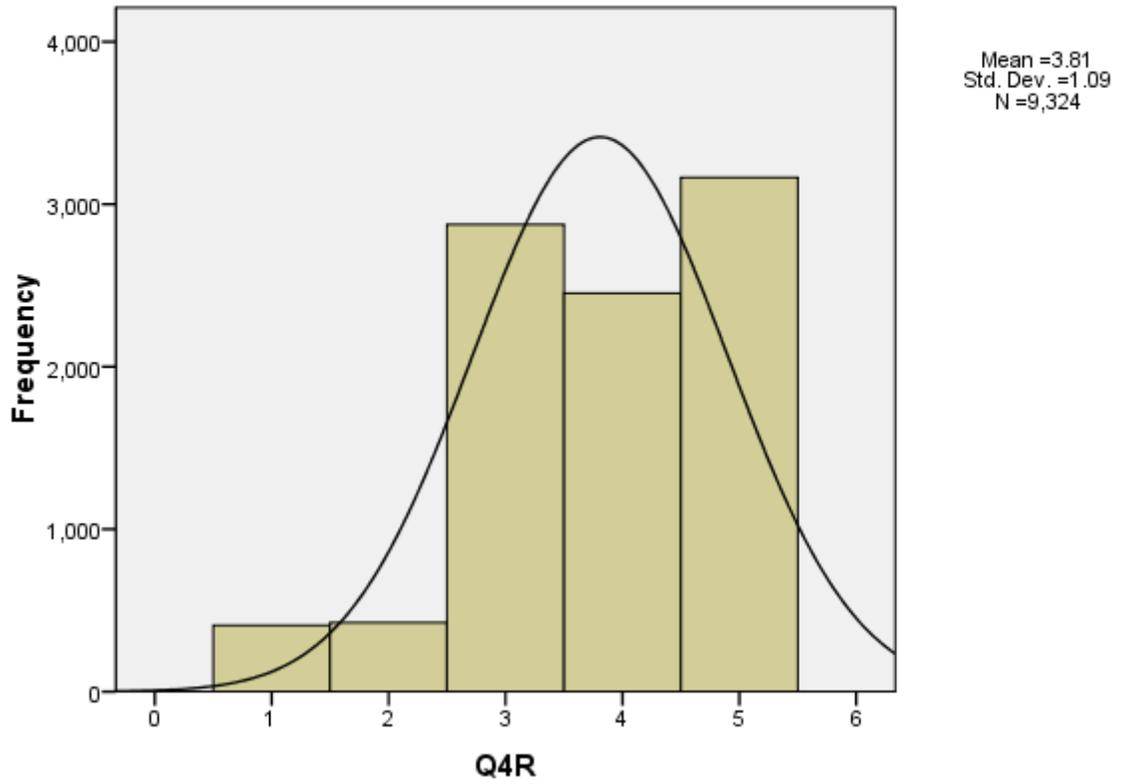


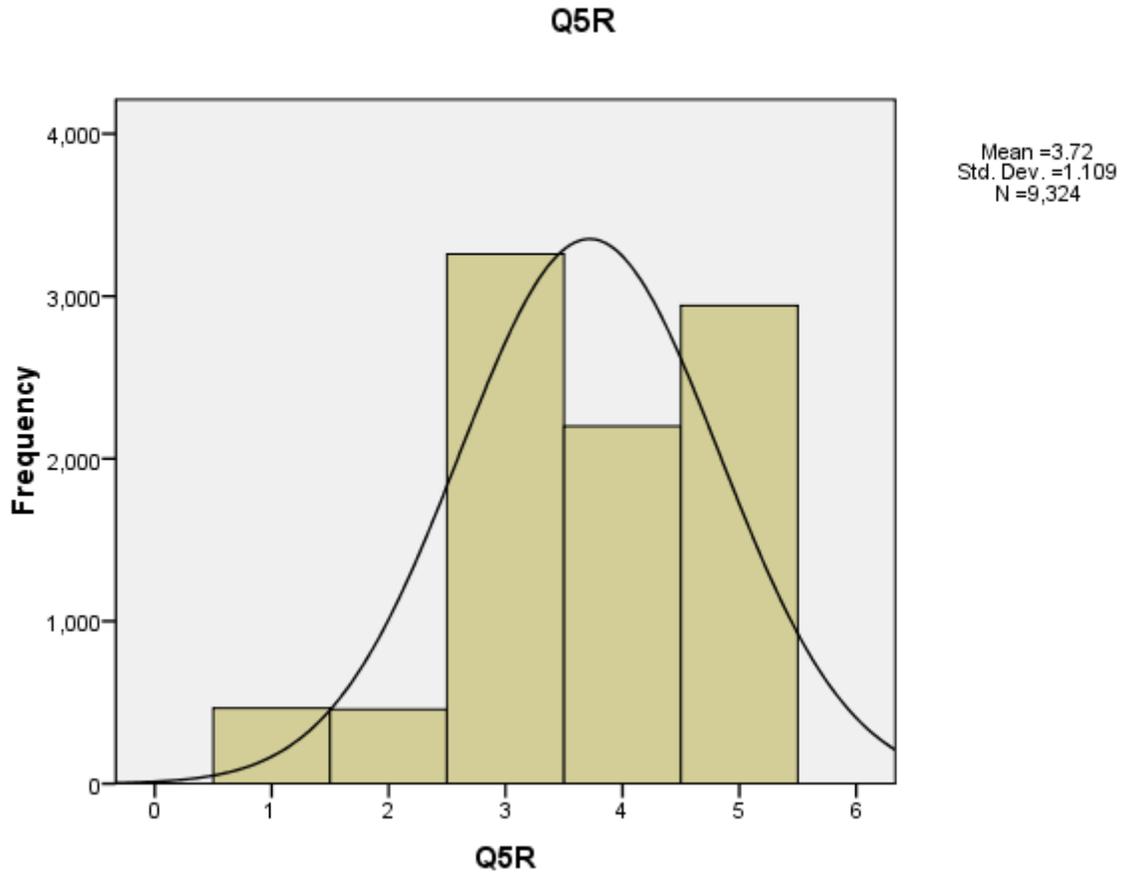


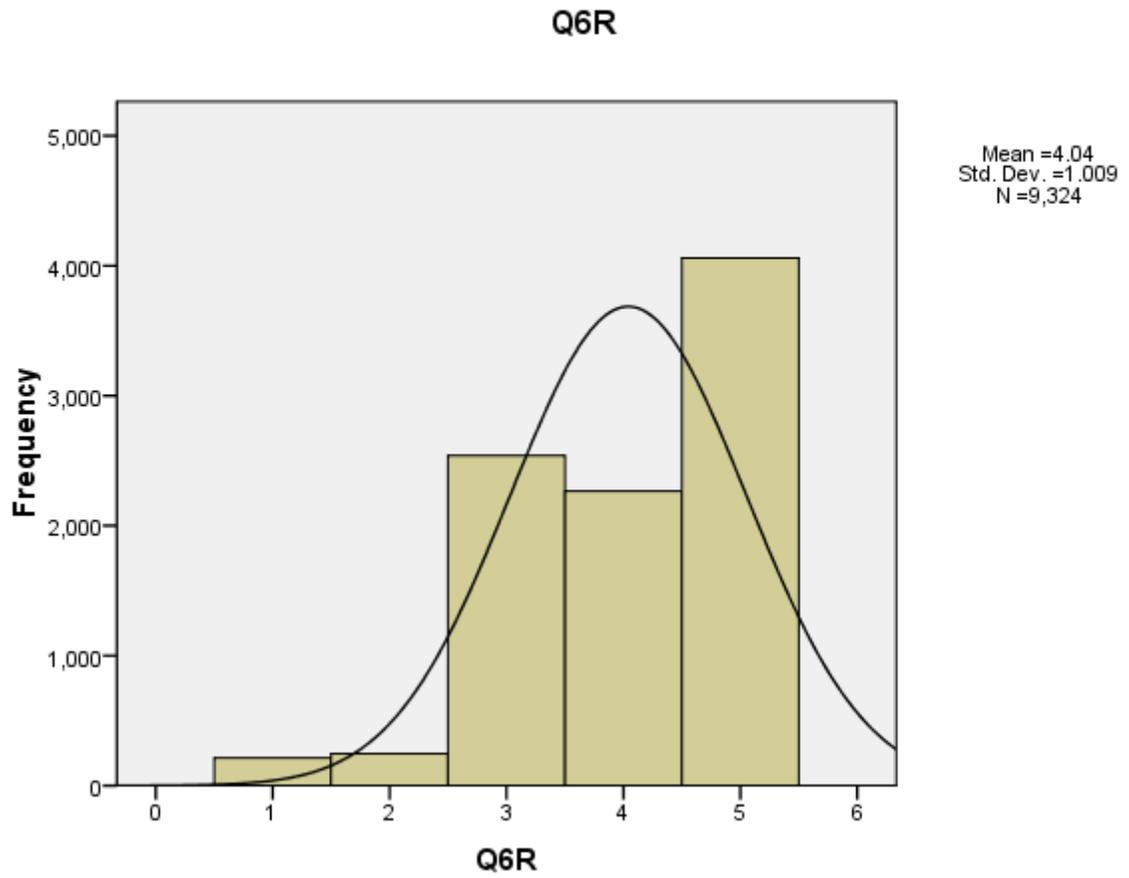


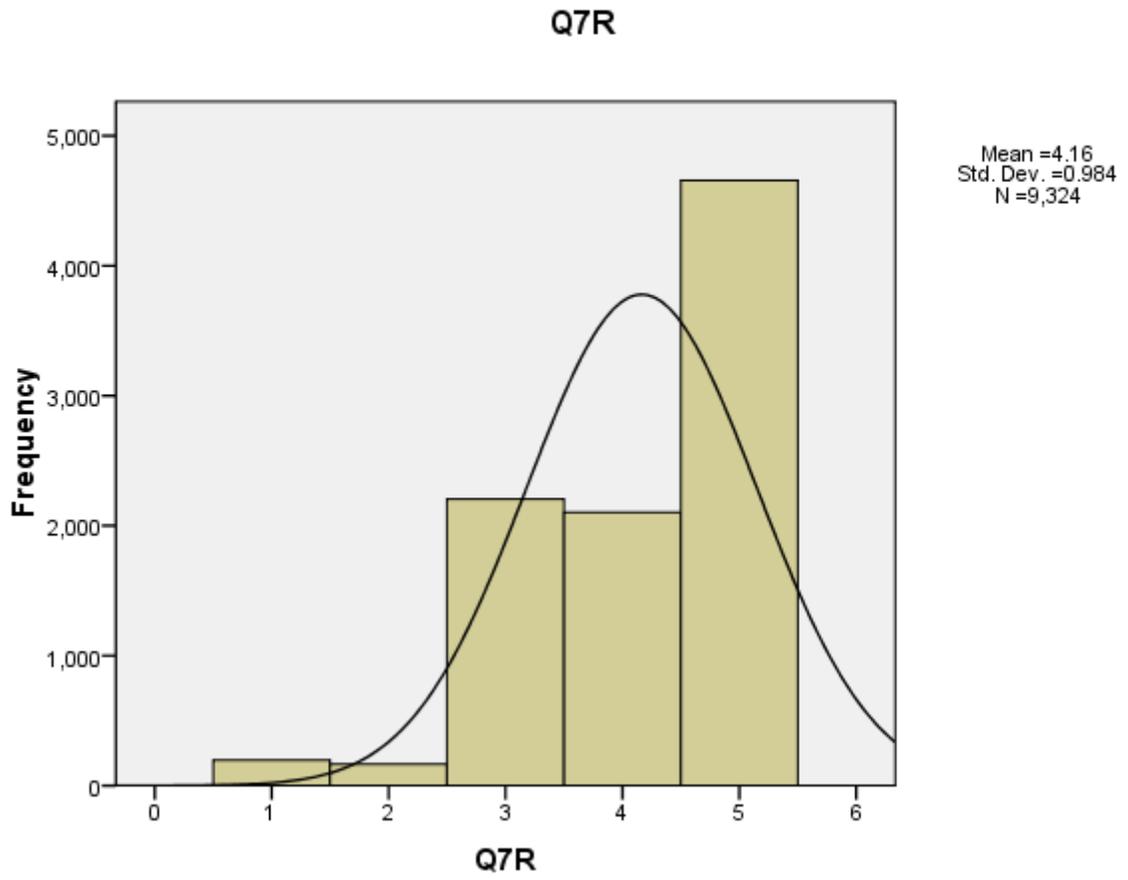


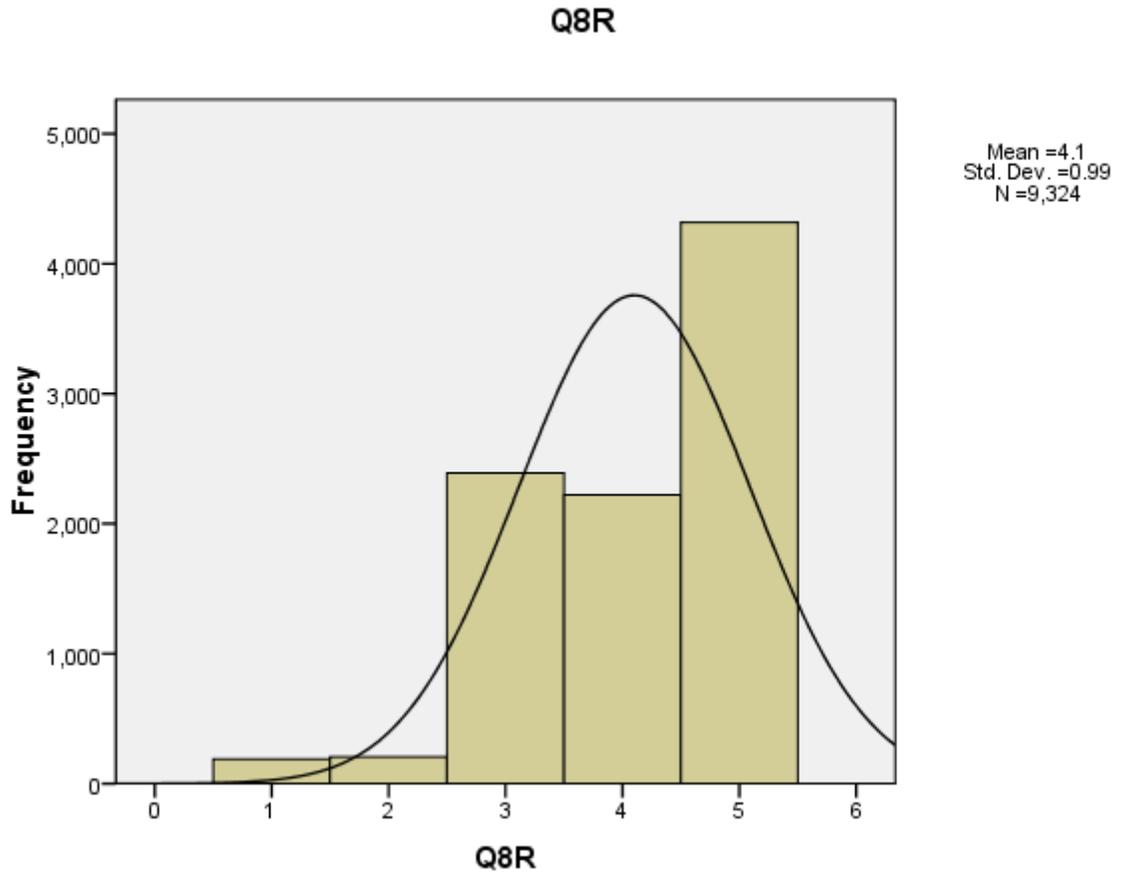
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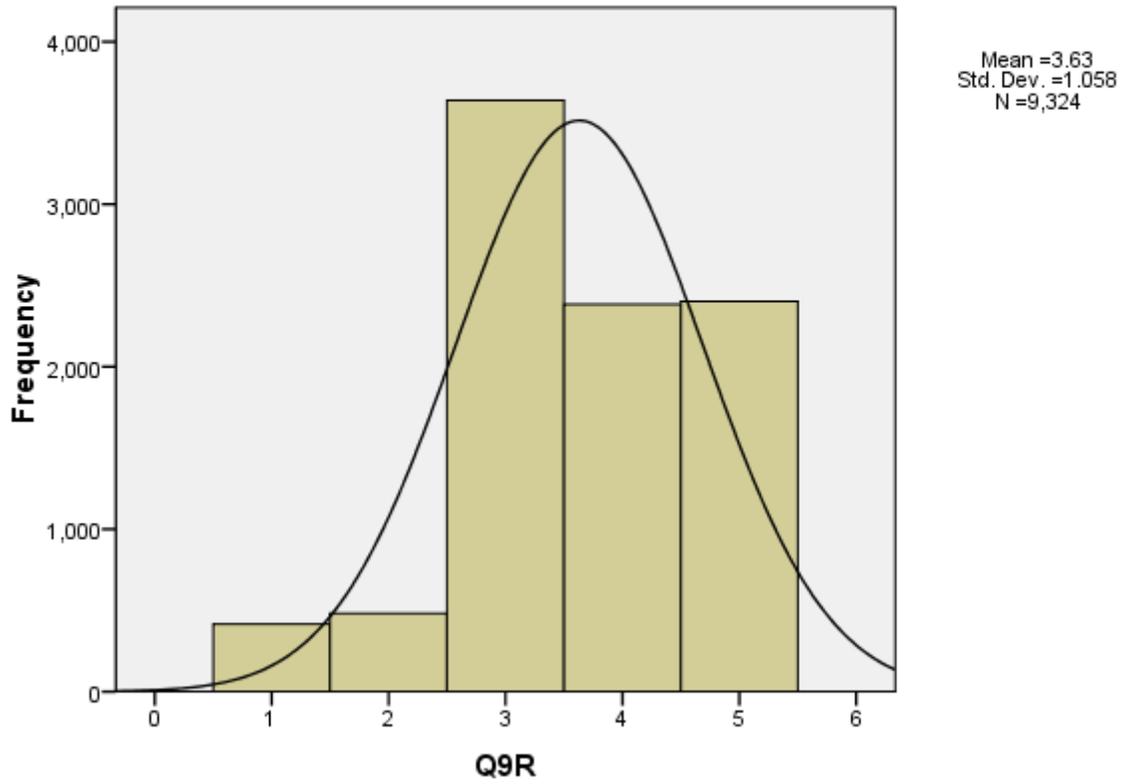


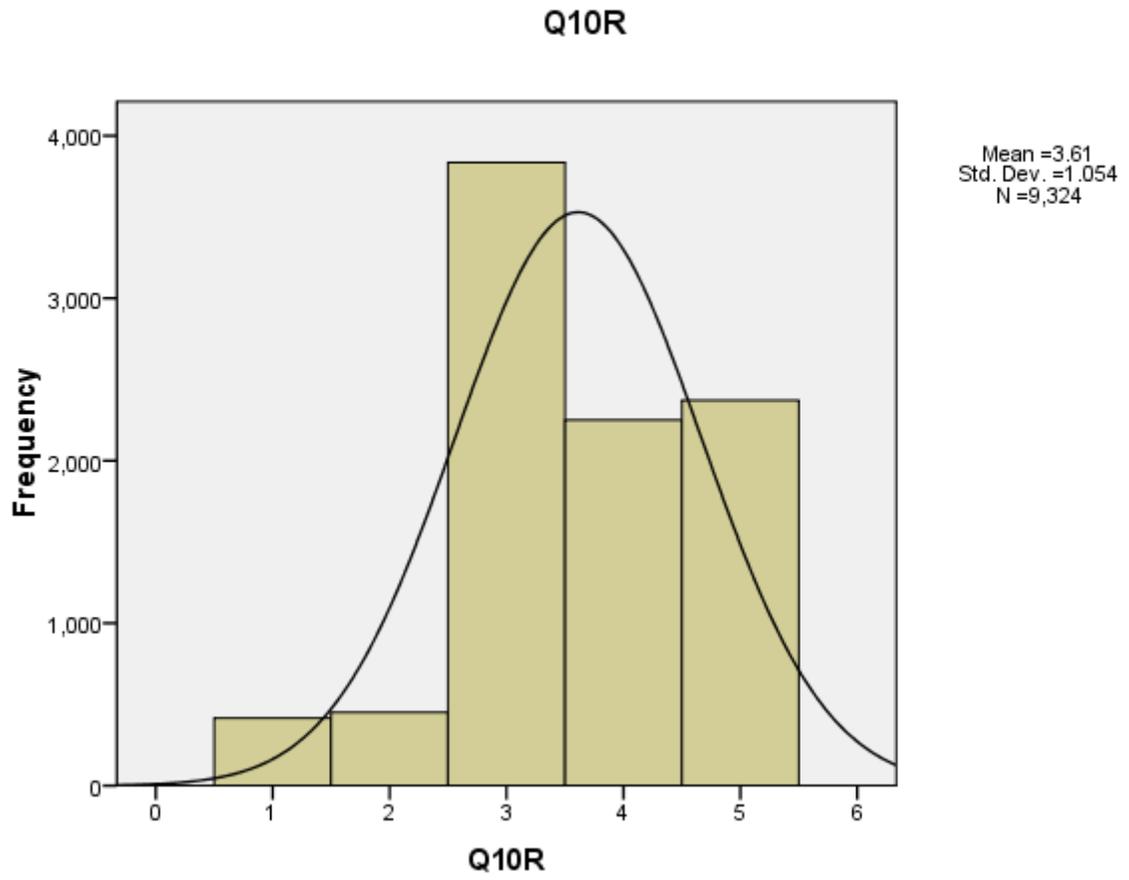


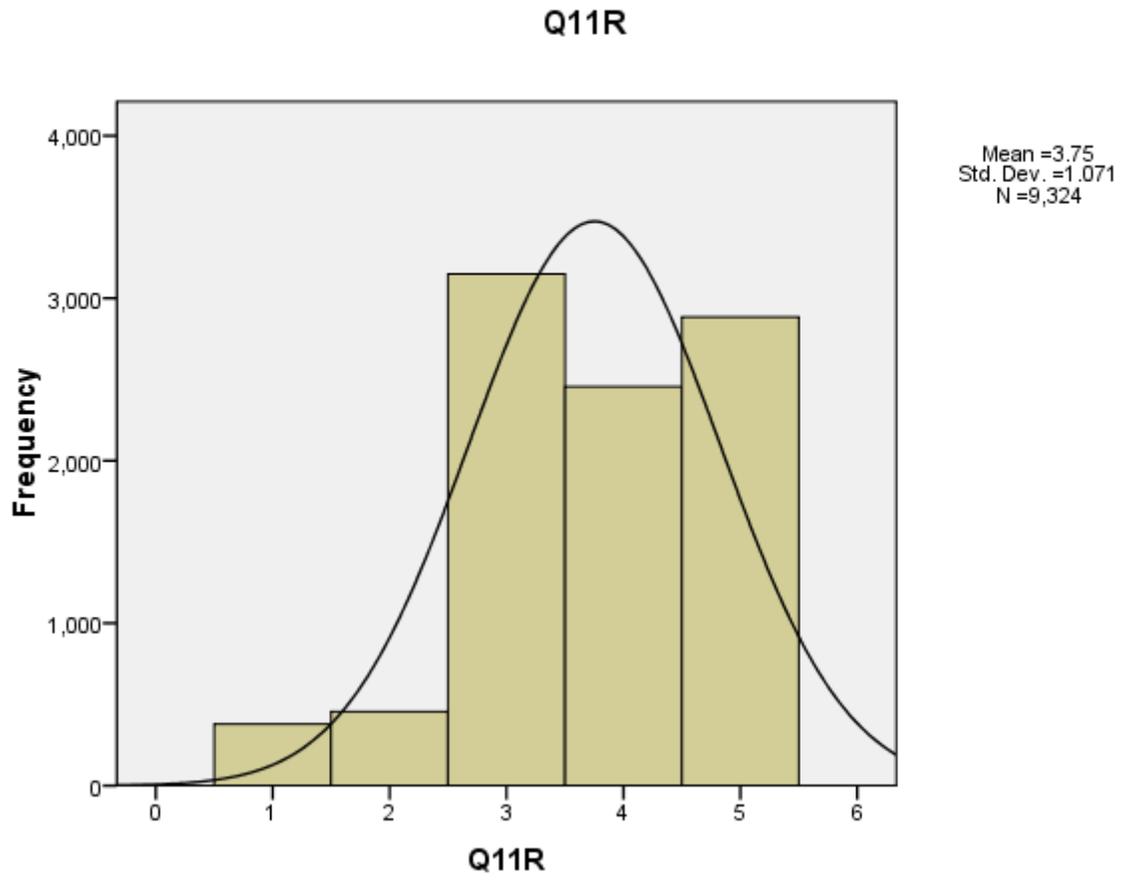


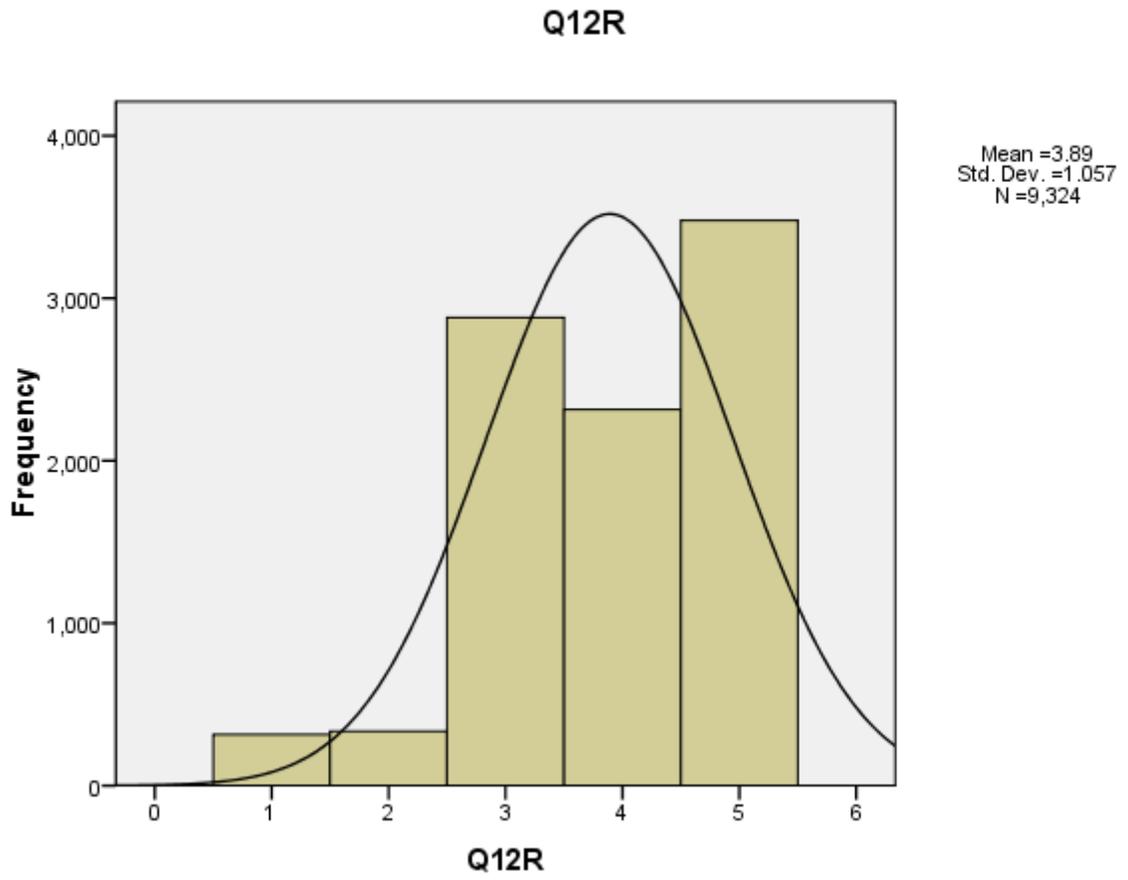


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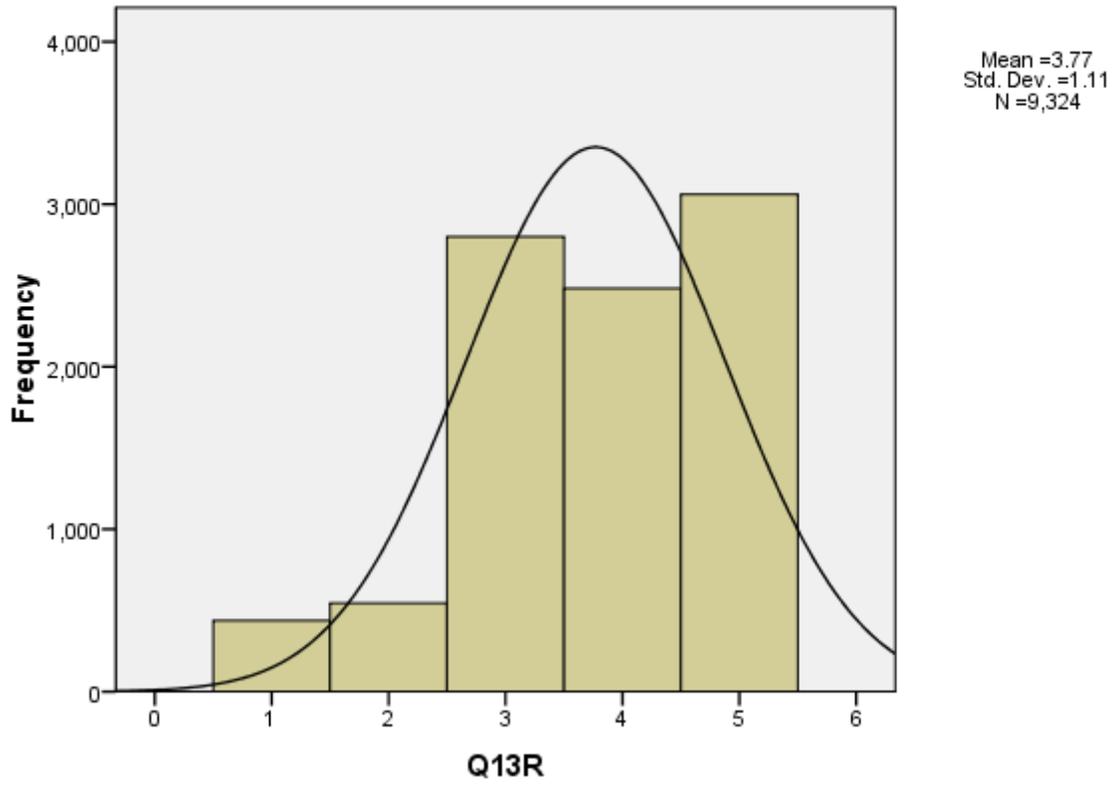




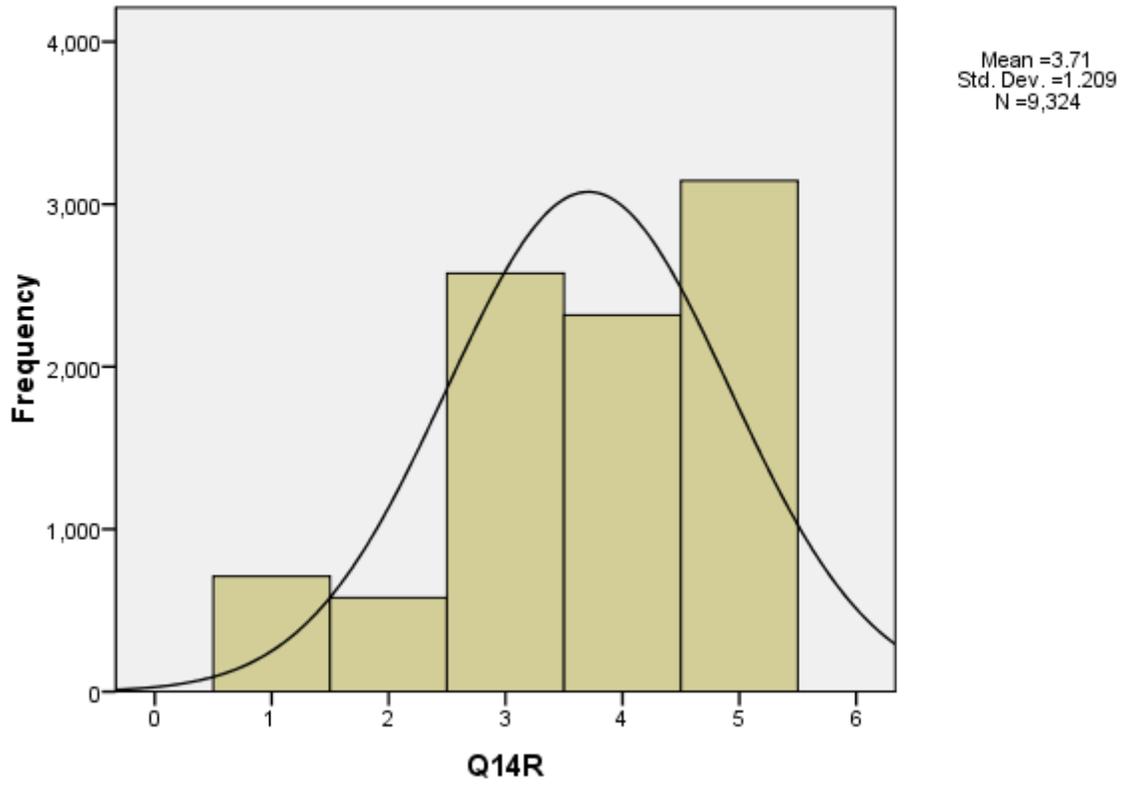


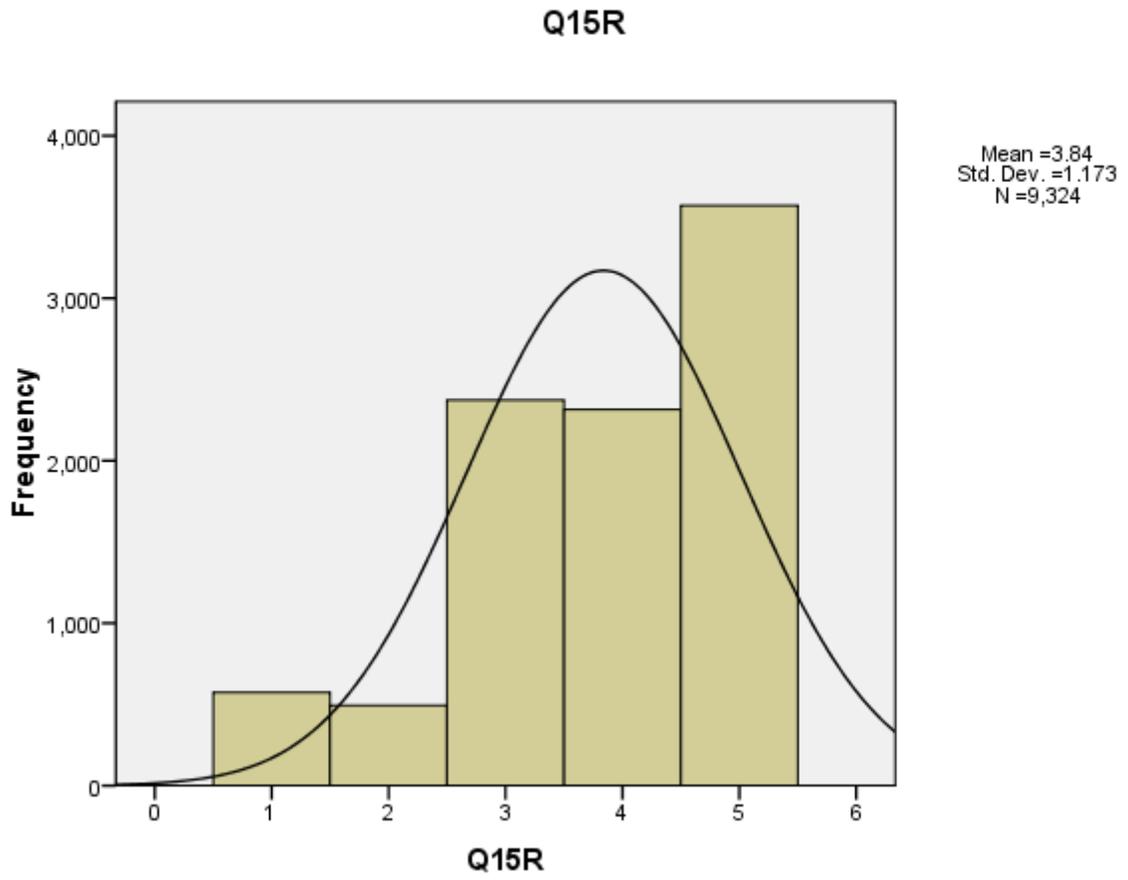


**Q13R**



**Q14R**





### Descriptive Statistics-DDCS Item Level- Pilot IV

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q1CR	9324	1	5	3.95	1.088	-.956	.025	.329	.051
Q2CR	9324	1	5	3.91	1.095	-.890	.025	.199	.051
Q3CR	9324	1	5	3.53	1.188	-.488	.025	-.517	.051
Q4CR	9324	1	5	3.39	1.176	-.363	.025	-.537	.051
Q5CR	9324	1	5	3.75	1.167	-.717	.025	-.282	.051
Q6CR	9324	1	5	3.64	1.153	-.495	.025	-.413	.051
Q7CR	9324	1	5	3.78	1.196	-.728	.025	-.320	.051
Q8CR	9324	1	5	3.82	1.228	-.809	.025	-.318	.051
Q9CR	9324	1	5	3.93	1.085	-.675	.025	-.232	.051
Q10CR	9324	1	5	3.82	1.167	-.779	.025	-.187	.051
Q11CR	9324	1	5	3.95	1.095	-.836	.025	.036	.051
Q12CR	9324	1	5	3.56	1.152	-.463	.025	-.419	.051
Q13CR	9324	1	5	3.44	1.200	-.364	.025	-.583	.051
Q14CR	9324	1	5	3.89	1.182	-.892	.025	-.053	.051
Q15CR	9324	1	5	3.84	1.175	-.846	.025	-.073	.051
Q1R	9324	1	5	3.84	1.020	-.529	.025	-.166	.051
Q2R	9324	1	5	3.70	1.061	-.449	.025	-.249	.051
Q3R	9324	1	5	3.75	1.090	-.575	.025	-.201	.051
Q4R	9324	1	5	3.81	1.090	-.639	.025	-.142	.051

**Descriptive Statistics-DDCS Item Level- Pilot IV**

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q5R	9324	1	5	3.72	1.109	-.520	.025	-.295	.051
Q6R	9324	1	5	4.04	1.009	-.773	.025	.001	.051
Q7R	9324	1	5	4.16	.984	-.974	.025	.384	.051
Q8R	9324	1	5	4.10	.990	-.843	.025	.111	.051
Q9R	9324	1	5	3.63	1.058	-.387	.025	-.228	.051
Q10R	9324	1	5	3.61	1.054	-.342	.025	-.232	.051
Q11R	9324	1	5	3.75	1.071	-.528	.025	-.223	.051
Q12R	9324	1	5	3.89	1.057	-.649	.025	-.138	.051
Q13R	9324	1	5	3.77	1.110	-.619	.025	-.234	.051
Q14R	9324	1	5	3.71	1.209	-.672	.025	-.362	.051
Q15R	9324	1	5	3.84	1.173	-.794	.025	-.140	.051

## XIV. Appendix F - DDCS Dimension Descriptives

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**Descriptive Statistics - DDCS- Dimensions**

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Inclusion	9324	3.82	.937	-.632	.025	-.047	.051
Justice	9324	3.59	.919	-.364	.025	-.248	.051
Value	9324	3.89	.846	-.486	.025	.073	.051