VMD Survey 2000

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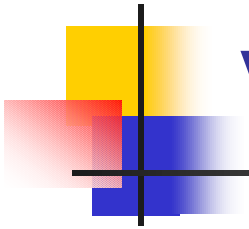
Contents

*Existing items: Items related to VMD existing features.

*Planned items: Items related to VMD planned features.



VMD Questionnaire

- The VMD Questionnaire is at:

http://www.ks.uiuc.edu/Research/vmd/survey/survey2000.html

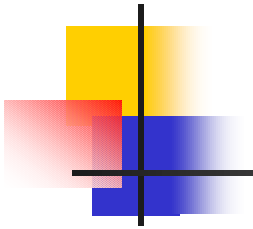
Response Rates

VMD 2000 survey was announced on May 12, 2000 to 3026 registered users of VMD 1.4. For convenience reasons the survey was mailed only to individuals who registered since January 7, 2000 and were included in our newly established database. Two reminders were sent to users on May 25 and June 6, leading to a 29.2% total response (884 responses).

Date survey notice sent	May 12	May 25	June 6	Total
Number of persons receiving notice by date	3026	2793	2401	3026
Responses up to date of next notice	291	422	171	884
Response rate for total population (all 3026)	9.6%	13.9%	5.7%	29.2%
Cumulative response rate	9.6%	15.1%	7.1%	29.2%

Those responses that were considered incomplete were deleted from our dataset. The deletions fell into two categories: Non-responsive and duplicates. Non-responsive records were those instances in which respondents did not answer most of the questions in the survey. Duplicates were those instances in which there was more than one response for a person, based on their e-mail address. After deletions, 805 records were used for further analyses.

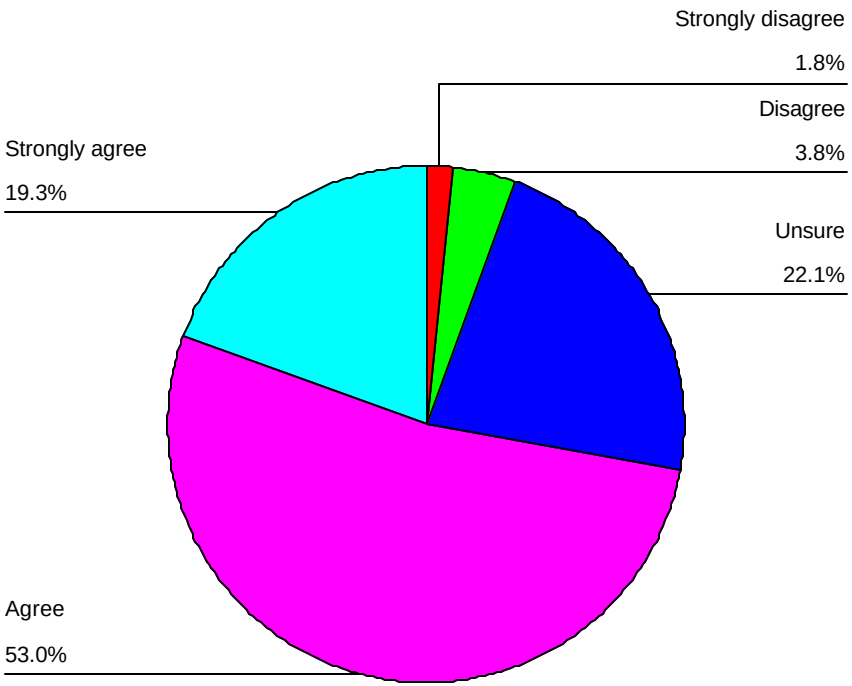
Deletions	Non-Responsive	Duplicates	Total
	62	17	79
Number of records in dataset after removing deletions			805



User Profile

An overwhelming majority of VMD users are affiliated with academic institutions (81%) and use VMD for research (72%). 15% of the respondents reported to be funded by NIH. 45% of VMD users run the program on a Windows (NT/95/98/2000) machine, followed by Linux (29%) and IRIX (22%) machines. Most of our users first heard of VMD via the web (43%) or from friends (31%), and they clearly prefer to be informed of VMD news by Email (57%) or web announcements (38%). Most sites (60%) have one user, though many (40%) have more than one user. Many users believe that they could benefit from using VMD with Amber (21%), Charmm (20%), Insight (19%), X-Plor (17%) and NAMD (15%).

Rating Distribution of Satisfaction



Mean & Std Deviation Distribution

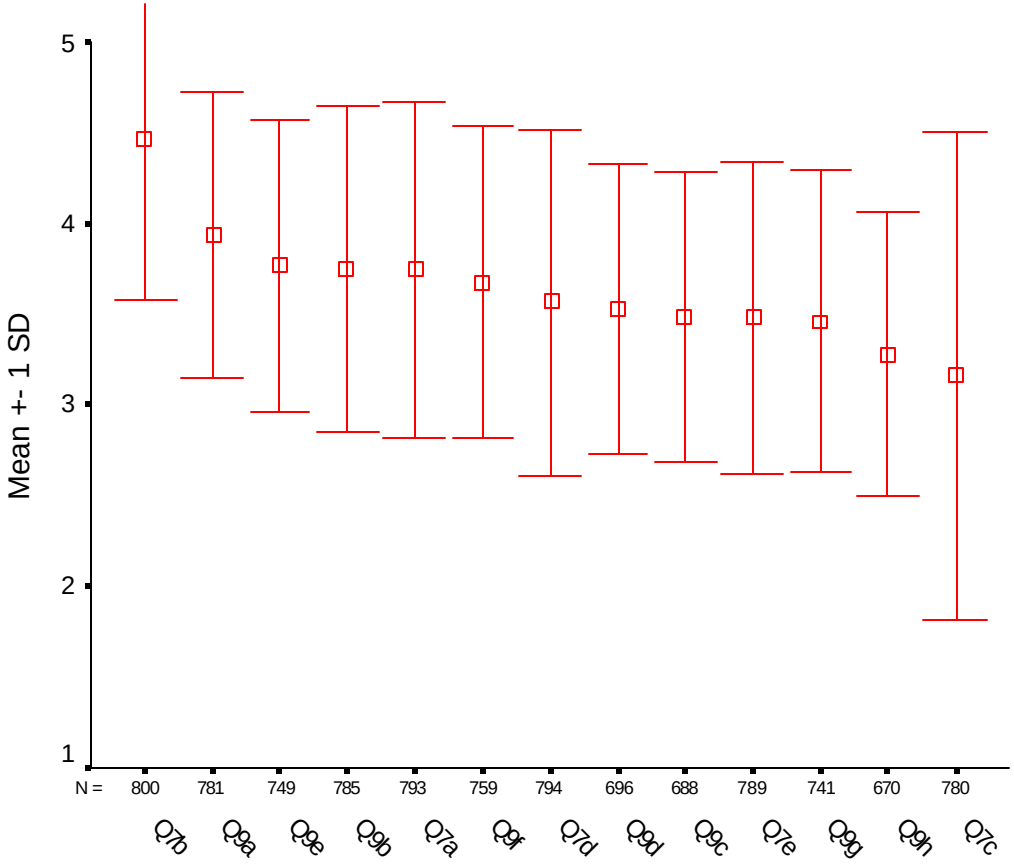
Question	Mean	Std Deviation
Q11 - Satisfied	3.84	.84

Frequency Distribution

Question Items	Frequency
Strongly disagree	14
Disagree	30
Unsure	174
Agree	417
Strongly agree	152
Total	787

•The mean response was 3.84 with a standard deviation of .84 on a 5-point scale (1=strongly disagree, 5=strongly agree).

Rating Distribution of Existing Items

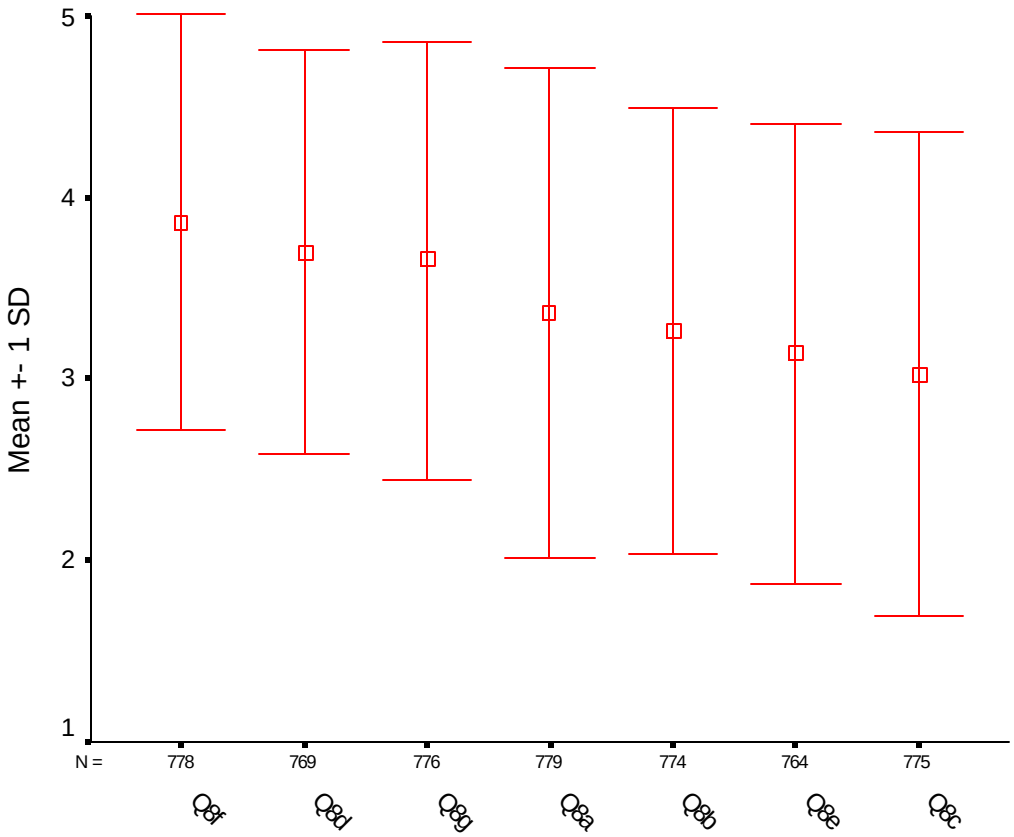


Means & Std Deviation Distributions

Evaluation Items	Mean	Std Deviation
Q7b - Use Because Free	4.47	0.89
Q9a - Well Written	3.94	0.78
Q9e - Web Page Instructive	3.77	0.81
Q9b - Meets My Needs	3.75	0.89
Q7a - Use Because Meets Needs	3.75	0.92
Q9f - Documentation Clear	3.67	0.86
Q7d - Use Because Friendly	3.56	0.95
Q9d - Support Meets Expectations	3.53	0.80
Q9c - Devs Respond	3.48	0.79
Q7e - Use Because Better	3.48	0.86
Q9g - Documents Complete	3.46	0.83
Q9h - Email List Useful	3.28	0.79
Q7c - Use Because Source	3.16	1.35

- Mean responses range between 3.16 to 4.47 on a 5-point scale (1=strongly disagree, 5=strongly agree).
- Standard deviations range from .89 to 1.35. The higher the std deviation, the higher the disagreement among respondents on the specific items.

Rating Distribution of Planned Items

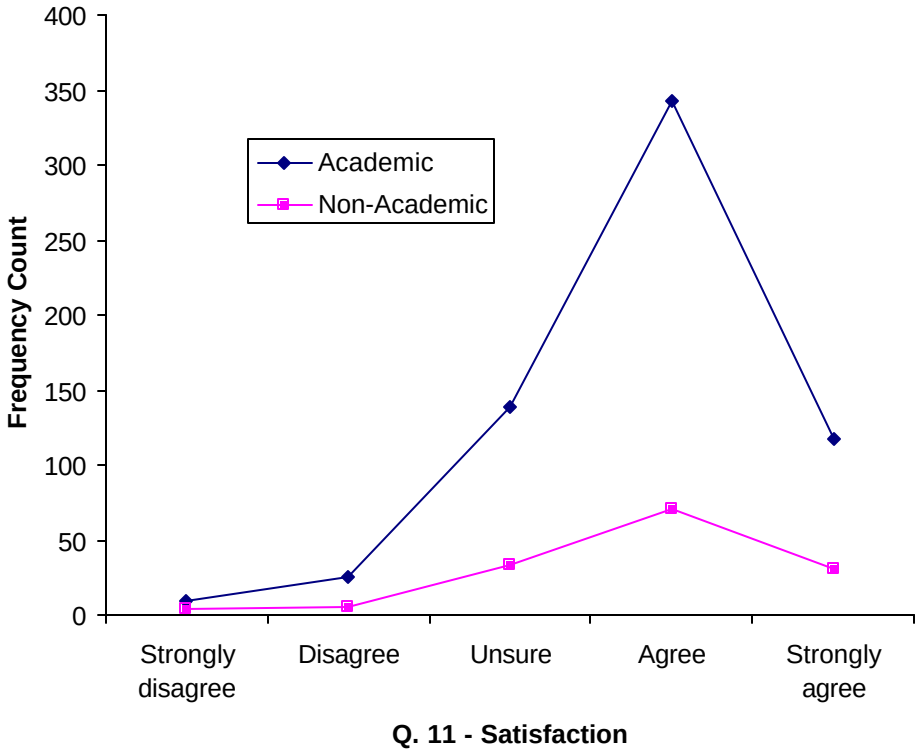


Means & Standard Deviations Distribution

Question	Mean	Std Deviation
Q8f - Need Isosurfaces	3.86	1.15
Q8d - Need Mol Selections	3.69	1.11
Q8g - Need Texture Maps	3.65	1.21
Q8a - Need RunTime MD	3.36	1.35
Q8b - Need Bond Recalc	3.26	1.23
Q8e - Need Scripting	3.14	1.26
Q8c - Need Crystal	3.02	1.33

- Mean responses range between 3.02 to 3.86 on a 5-point scale (1=strongly disagree, 5=strongly agree).
- Standard deviations range from 1.11 to 1.35. The higher the std deviation, the higher the disagreement among respondents on the specific item.

Satisfaction by Affiliation



Mean & Std Deviation Distribution

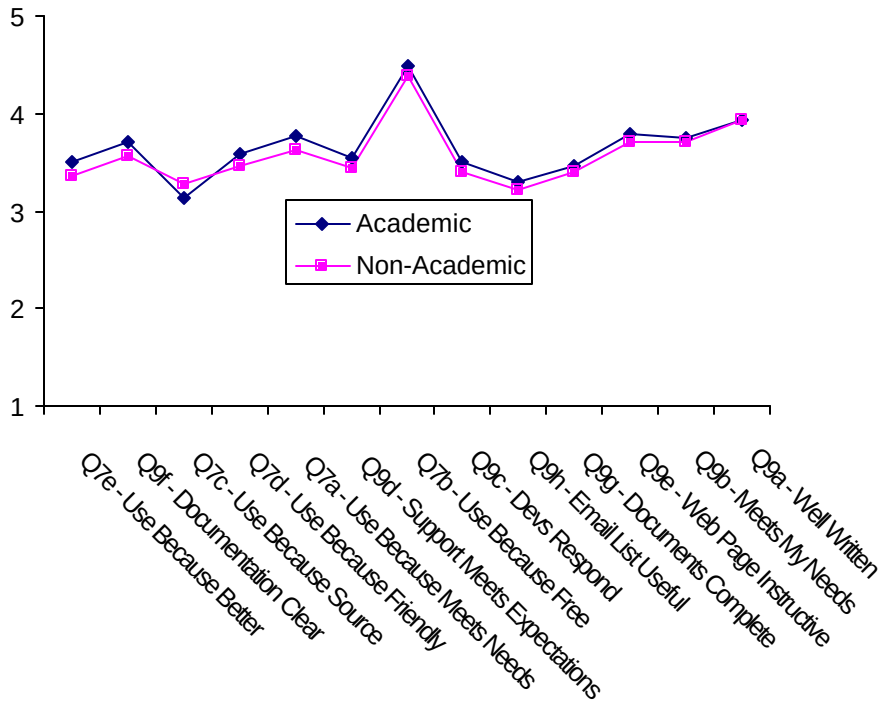
Q. 11 - Satisfied	Affiliation Academic	Non-Academic
Mean	3.84	3.83
Std Deviation	.82	.90

Frequency Distribution

Q. 11 - Satisfied	Q. 2 - Affiliation Academic	Non-Academic
Strongly disagree	10	4
Disagree	25	5
Unsure	139	34
Agree	343	71
Strongly agree	117	31
Total	634	145

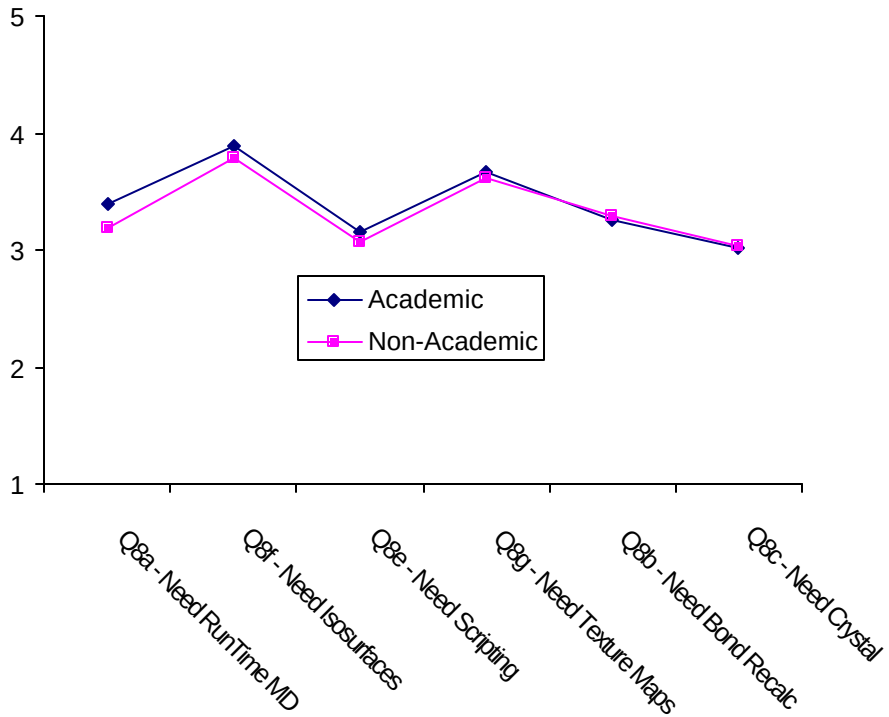
•Academic and non-Academic users are nearly identical in their satisfaction with VMD with mean ratings of 3.84 and 3.83 respectively.

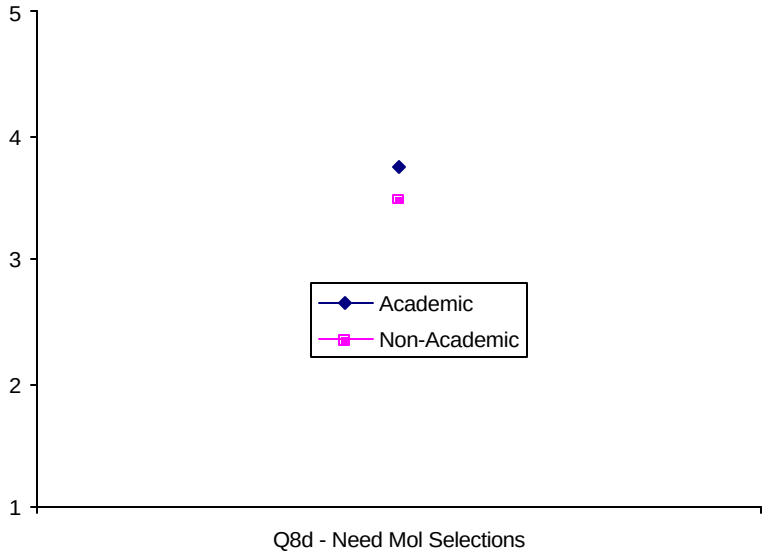
Mean Responses to Existing Items by Affiliation



•No significant difference between academic and non-academic users was found.

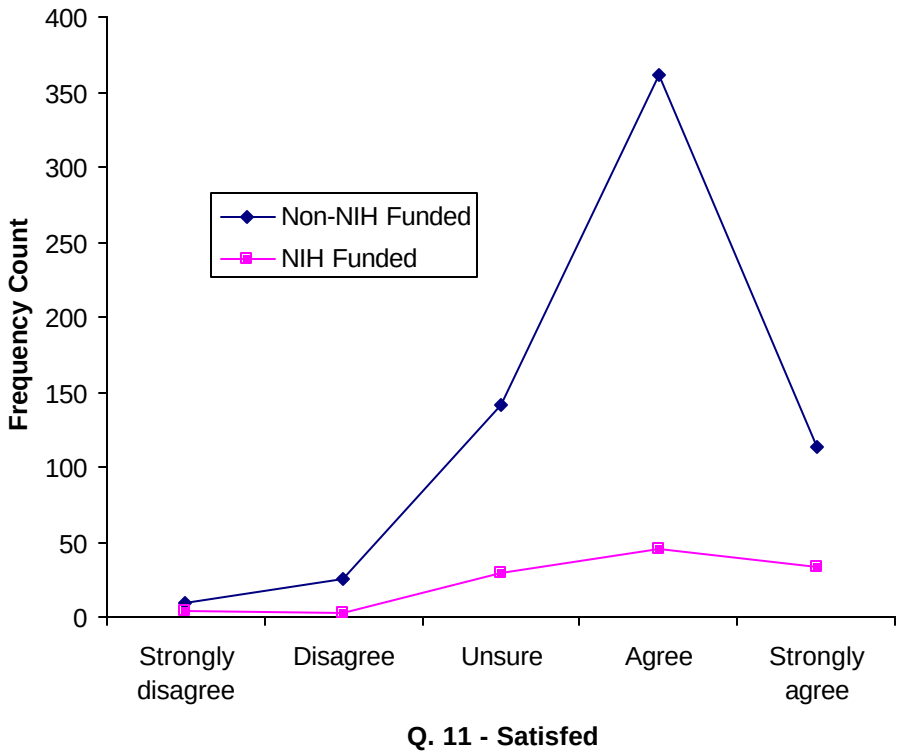
Mean Responses to Planned Items by Affiliation





- Academics rated the need for Intermolecule Selection significantly higher than nonacademics.

Satisfaction by Funding Source



Mean & Std Deviation Distribution

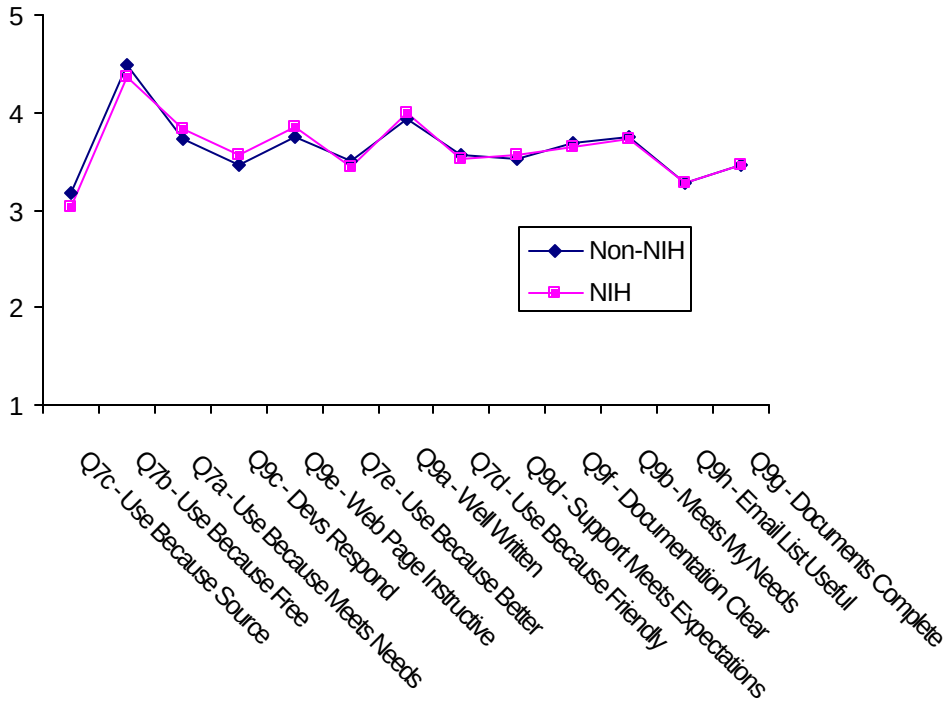
Q11 - Satisfied	Q3 - NIH Funded No	Yes
Mean	3.83	3.87
Std Deviation	.81	.98

Frequency Distribution

Q11 - Satisfied	Q3 - NIH Funded No	Yes
Strongly disagree	10	4
Disagree	26	3
Unsure	141	30
Agree	362	45
Strongly agree	114	33
Total	653	115

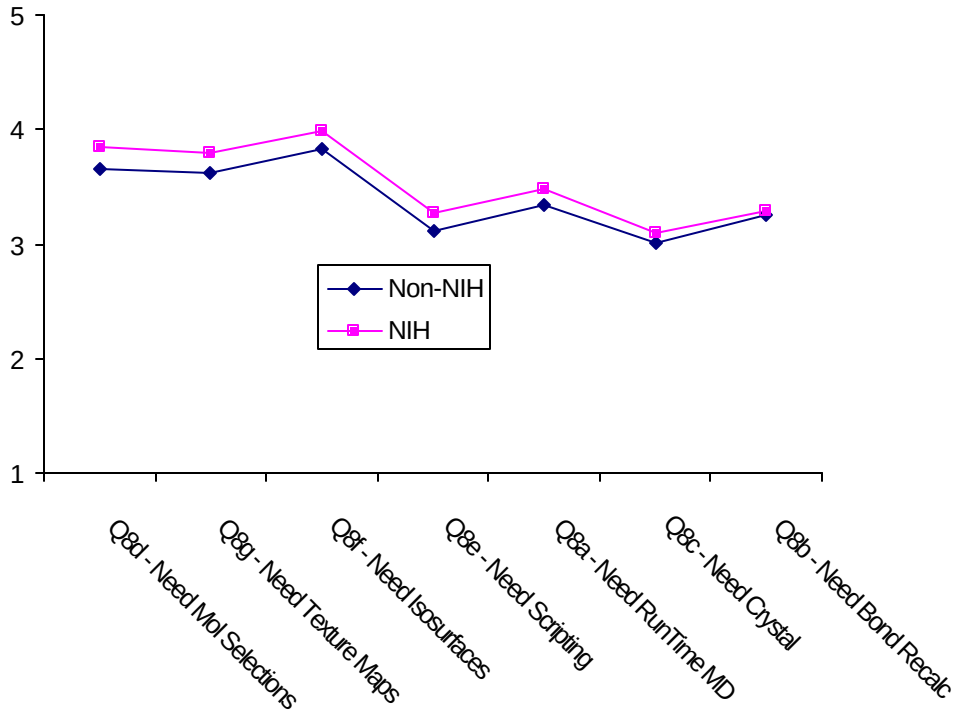
•NIH-funded and non-NIH funded users are nearly identical in their satisfaction with VMD with mean ratings of 3.87 and 3.83 respectively.

Mean Responses to Existing Items by Funding Source



No significant difference was found between NIH-funded and non-NIH funded respondents.

Mean Responses to Planned Items by Funding Source



No significant difference was found between NIH-funded and non-NIH funded respondents.

Correlations of Existing Items with Satisfaction

Evaluation Question	Correlations
Q9b - Meets My Needs (N=785)	.643
Q9a - Well Written (N=781)	.600
Q7a - Use Because Meets Needs (N=793)	.578
Q7d - Use Because Friendly (N=794)	.486
Q9d - Support Meets Expectations (N=696)	.460
Q7e - Use Because Better (N=789)	.437
Q9e - Web Page Instructive (N=749)	.420
Q9f - Documentation Clear (N=759)	.419
Q9g - Documents Complete (N=741)	.389
Q9c - Devs Respond (N=688)	.359
Q9h - Email List Useful (N=670)	.279
Q7b - Use Because Free (N=800)	.188

•All ratings of existing items have a significant Pearson's correlation with satisfaction: the higher the ratings, the higher the satisfaction.

Summary of Findings

1. The overall rating of VMD is high. Existing features are rated higher than planned features. Responses to existing items indicate higher agreement among the respondents than responses to planned items.
2. General satisfaction is high.
3. Academic and non-academic respondents rate existing and planned features similarly, and are equally satisfied with VMD.
4. NIH-funded and non-NIH funded respondents rate existing and planned features similarly, and are equally satisfied with VMD.
5. The responses to all existing features are significantly associated with overall satisfaction: the higher the rating the higher the satisfaction.

Appendix

Other analyses

2-Way Analysis of Variance (ANOVA): Affiliation x Funding

- Documentation
  - No significant interaction between Affiliation x Funding was found in rating of Documentation (Q's 9a, 9e, 9f, 9g)
- Support
  - No significant interaction between Affiliation x Funding was found in rating of Support (Q's 9b, 9c, 9d, 9h)
- Satisfaction
  - No significant interaction between Affiliation x Funding was found in ratings of Satisfaction (Q. 11)

Existing and Planned Items by Affiliation

	Q2 - Affiliation							
	Other		Industrial		Government		Academic	
Evaluative Item	Mean	Std Deviation	Mean	Std Deviation	Mean	Std Deviation	Mean	Std Deviation
Q7a - Use Because Meets Needs	3.63	0.90	3.55	1.06	3.76	0.86	3.77	0.92
Q7b - Use Because Free	4.43	0.81	4.41	0.94	4.29	1.15	4.48	0.87
Q7c - Use Because Source	3.09	1.21	3.38	1.44	3.32	1.27	3.13	1.35
Q7d - Use Because Friendly	3.33	0.93	3.44	0.99	3.61	0.86	3.59	0.96
Q7e - Use Because Better	3.35	0.85	3.29	0.88	3.44	0.98	3.50	0.85
Q9a - Well Written	4.00	0.83	3.93	0.80	3.88	0.76	3.93	0.78
Q9b - Meets My Needs	3.70	1.01	3.64	1.07	3.83	0.81	3.75	0.88
Q9c - Devs Respond	3.29	0.84	3.35	0.63	3.58	0.81	3.49	0.80
Q9d - Support Meets Expectations	3.33	0.75	3.46	0.73	3.57	0.69	3.55	0.81
Q9e - Web Page Instructive	3.60	0.81	3.75	0.64	3.80	0.69	3.78	0.83
Q9f - Documentation Clear	3.35	0.87	3.66	0.69	3.63	0.70	3.70	0.88
Q9g - Documents Complete	3.21	0.81	3.54	0.69	3.41	0.76	3.47	0.85
Q9h - Email List Useful	3.14	0.75	3.32	0.84	3.18	0.46	3.29	0.80
Q11 - Satisfied	3.79	1.00	3.71	0.88	4.05	0.78	3.84	0.82

	Q2 - Affiliation							
	Other		Industrial		Government		Academic	
Planned Item	Mean	Std Deviation	Mean	Std Deviation	Mean	Std Deviation	Mean	Std Deviation
Q7a - Use Because Meets Needs	3.63	0.90	3.55	1.06	3.76	0.86	3.77	0.92
Q8a - Need RunTime MD	2.98	1.31	3.19	1.39	3.41	1.20	3.40	1.36
Q8b - Need Bond Recalc	3.27	1.21	3.30	1.22	3.33	1.19	3.25	1.24
Q8c - Need Crystal	2.98	1.28	3.00	1.39	3.15	1.35	3.01	1.33
Q8d - Need Mol Selections	3.32	1.14	3.55	1.17	3.58	1.13	3.73	1.11
Q8e - Need Scripting	2.91	1.18	3.10	1.48	3.18	1.14	3.16	1.26
Q8f - Need Isosurfaces	3.60	1.14	3.83	1.08	3.93	1.05	3.89	1.17
Q8g - Need Texture Maps	3.70	1.09	3.53	1.24	3.63	1.10	3.66	1.22