## What Climbers Think: an On-Line Survey.

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#### Abstract:

*Background*: Climbers are an elusive crowd to poll. What climbers think and what they experience in regards to the how they use their technical systems are difficult to measure. However, with the advent of the internet, better insight might be achieved and perhaps give educators a guide as to where to focus training. The purpose of this survey is purely informational.

*Methods*: An on-line survey was conducted in the spring/summer of 2005 of climbers in an effort to obtain a better understanding of what the climbing community may think about the systems it uses and the general concepts that are utilized by climbers. A convenience sample of 407 climbers was performed using a survey of 28 questions. The survey was located on <u>www.climbing.com</u>, <u>www.8a.nu/site2/</u>, and <u>www.rockclimbing.com</u>. The data was compiled via Ted Geving Web Designs.

Conclusions: Responding climbers were from all over the world. There appears to be a large spread in thought and experience throughout the climbing community. The results are presented here for reference only and were not compared to other sources of climbers. There is a clear bias, but the population is representative of the normal distribution of climbers. The information also gives insight into what one might expect when considering a maximum credible event. The data presented here is raw data and no effort to manipulate or control for any factor has been made.

### **RESULTS:**

Field Summary for 1:			
Any standard conditional or mechanical belay device sold at a climbing shop should hold a fall factor of?			
Answer Count Percentage			
No answer	0	0.00%	
0.5 (a)	9	2.21%	
1.0 (b)	38	9.34%	
1.5 (c)	36	8.85%	
1.7 (d)	28	6.88%	
2.0 (e)	296	72.73%	

### Field Summary for 2:

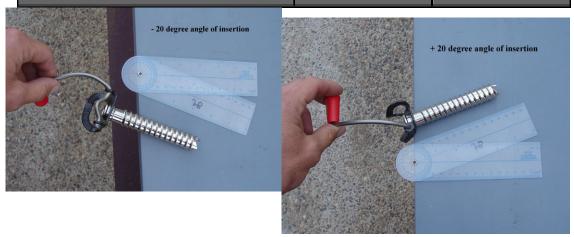
The UI AA and CE are the overseeing bodies that approver climbing gear.All climbing gear is tested in its itended application to meet their stringent standards.CountPercentageAnswerO0.00%True (a)20550.37%false (b)20249.63%

## Field Summary for 3:

The UI AA drop test guarantees that a belay device will hold a worst case<br/>scenario that could be belay system.AnswerCountPercentageNo answer00.00%true (a)13132.19%false (b)27667.81%

Field Summary for 4:				
Have you ever had any formal climbing instruction?				
Answer Count Percentage				
No answer	0	0.00%		
yes (a)	288	70.76%		
no (b)	119	29.24%		

Field Summary for 5:				
On vertical ice, the best placement of an ice screw is at: See this link for reference: http://www.geocities.com/ridge2run/beverly/icescrewangle.html				
Answer Count Percentage				
No answer	0	0.00%		
-10 to -20 degrees (a)	128	31.45%		
+10 to +20 degrees (b)	100	24.57%		
0 degrees (straight in) (c)	67	16.46%		
don't know (d)	112	27.52%		



# Field Summary for 6:

A short ice screw of about 10 cm (stubbie) is strong enough to hold a leader fall in good ice.			
Answer Count Percentage			
No answer	0	0.00%	
yes (a)	154	37.84%	
no (b)	87	21.38%	
don't know (c)	166	40.79%	

# Field Summary for 7:

The most important factor in whether an ice screw will hold a leader fall is:			
Answer Count Percenta			
the depth of the screw (a)	117	28.75%	
having at least 20 threads in contact with the ice (b)	29	7.13%	
avoiding placement aerated ice (small bubbles in the ice) (c)	116	28.50%	
the fall factor likely generated (d)	150	36.86%	
avoiding air pocketed ice (chandelier type ice) (e)	145	35.63%	
don't know (f)	124	30.47%	
doesn't matter - they're all the same (g)	44	10.81%	

# Field Summary for 8:

Assuming all gear is appropriately used, what is the weakest link in your climbing system?			
Answer Count Percentage			
No answer	0	0.00%	
tie-in knot of rope at harness (a)	156	38.33%	
carabiners (b)	88	21.62%	
slings (c)	46	11.30%	
harness (d)	13	3.19%	
belay device (e)	68	16.71%	
don't know (f)	36	8.85%	

Field Summary for 9:				
How many falls have you ever taken on a rope (either trad or sport) outside?				
Answer	Answer Count Percentage			
No answer	0	0.00%		
0-5 (a)	116	28.50%		
5-10 (b)	86	21.13%		
10-20 (c)	67	16.46%		
20-50 (d)	55	13.51%		
50-100 (e)	38	9.34%		
100-1000 (f)	32	7.86%		
>1000 (g)	13	3.19%		

Field Summary for 10:				
How many years have you been climbing on rope outside?				
Answer	Answer Count Percentage			
No answer	0	0.00%		
0-1 (a)	36	8.85%		
1-3 (b)	75	18.43%		
<5 (C)	66	16.22%		
<10 (d)	92	22.60%		
<20 (e)	71	17.44%		
>20 (f)	67	16.46%		

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How many days a year do you climb at rock gyms? 0 to 365					
Calculation	Calculation Result				
Sum	18669				
Standard Deviation	56.450193268921				
Average	45.869778869779				
Minimum	0				
1st Quartile (Q1)	2				
2nd Quartile (Median)	24				
3rd Quartile (Q3)	75				
Maximum	365				
*Null values are ignored in calculations *Q1 and Q3 calculated using minitab method					

Field Summary for 12:				
What is the greatest fall factor you think you have taken in a fall?				
Answer	Answer Count Percentage			
No answer	0	0.00%		
<0.3 (a)	48	11.79%		
0.3-0.5 (b)	92	22.60%		
0.5-1.0 (c)	121	29.73%		
1.0-1.5 (d)	71	17.44%		
1.5-1.78 (e)	18	4.42%		
2.0 (f)	18	4.42%		
other (g)	0	0.00%		
don't know (h)	39	9.58%		

Field Summary for 13:				
What is the greatest fall factor you have seen someone take?				
Answer	Answer Count Percentage			
No answer	0	0.00%		
<0.3 (a)	14	3.44%		
0.3-0.5 (b)	47	11.55%		
0.5-1.0 (c)	109	26.78%		
1.0-1.5 (d)	87	21.38%		
1.5-1.78 (e)	40	9.83%		
2.0 (f)	48	11.79%		
other (g)	4	0.98%		
don't know (h)	58	14.25%		

Field Summary for 14:
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What is the greatest distance you have fallen (or jumped) while on rope?		
Answer	Count	Percentage
No answer	0	0.00%
0-5 feet (a)	54	13.27%
5-10 feet (b)	77	18.92%
10-20 feet (c)	125	30.71%
20-30 feet (d)	69	16.95%

30-40 feet (e)	39	9.58%
40-50 feet (f)	22	5.41%
50-70 feet (g)	11	2.70%
70-100 feet (h)	4	0.98%
>100 feet (i)	6	1.47%

Field Summary for 15:				
Have you ever had a piece of protection fail(gear or bolt) from a fall?				
Answer	Answer Count Percentage			
No answer	0	0.00%		
yes (a)	99	24.32%		
no (b)	308	75.68%		

Field Summary for 16:				
Have you ever had a rope cut, either complete or partial, while there was a load on it?				
Answer	Answer Count Percentage			
No answer	0	0.00%		
yes (a)	74	18.18%		
no (b)	333	81.82%		

Field Summary for 17:				
Have you ever been hit by rock fall while climbing?				
Answer	Answer Count Percentage			
No answer	0	0.00%		
yes (a)	206	50.61%		
no (b)	201	49.39%		

My favorite belay device for multi pitch traditional climbing is:			
Answer Count Percentage			
No answer	0	0.00%	
ATC (a)	158	38.82%	
B-52 (b)	8	1.97%	
Jaws (c)	19	4.67%	
Munter Hitch (d)	18	4.42%	
Sheriff (e)	3	0.74%	

Reverso/Reversina (f)	93	22.85%
Bug (g)	2	0.49%
Grigri (h)	12	2.95%
Cinch (i)	2	0.49%
Variable Controller (j)	3	0.74%
SRC (k)	0	0.00%
BRD (I)	1	0.25%
ATC-XP (m)	30	7.37%
SBG (n)	0	0.00%
Matrix (o)	1	0.25%
other (p)	25	6.14%
I don't trad climb (q)	32	7.86%

Field Summary for 19:		
My favorite belay device for single pitch sport climbing is:		
Answer	Count	Percentage
No answer	0	0.00%
ATC (a)	158	38.82%
B-52 (b)	8	1.97%
Jaws (c)	18	4.42%
Munter hitch (d)	3	0.74%
Sheriff (e)	3	0.74%
Reverso (f)	29	7.13%
Bug (g)	3	0.74%
Grigri (h)	88	21.62%
Cinch (i)	8	1.97%
Variable Controller (j)	4	0.98%
SRC (k)	0	0.00%
BRD (I)	0	0.00%
ATC-XP (m)	30	7.37%
SBG (n)	0	0.00%
Matrix (o)	0	0.00%
other (p)	19	4.67%
I don't sport climb (q)	36	8.85%

Field Summary for 20:			
What is your climbing weight (no gear, pack, etc.) in pounds?			
Answer	Count Percentage		
No answer	0	0.00%	
50-100 (a)	4	0.98%	
100-130 (b)	50	12.29%	
130-160 (c)	135	33.17%	
160-190 (d)	146	35.87%	
190-220 (e)	57	14.00%	
220-250 (f)	15	3.69%	
>250 (g)	0	0.00%	

Field Summary for 21:				
Have you ever witnessed a climbing fatality?				
Answer	r Count Percentage			
No answer	0	0.00%		
yes (a)	59	14.50%		
no (b)	348	85.50%		

## Field Summary for 22:

Have you ever had or witnessed a climbing accident where bones were broken from a fall?			
Answer Count Percentage			
No answer	0	0.00%	
yes (a)	166	40.79%	
no (b)	241	59.21%	

Field Summary for 23:			
Relative to rock climbing, ice climbing is		_ dangerous.	
Answer	Count	Percentage	
No answer	0	0.00%	
equally as (a)	91	22.36%	
more (b)	302	74.20%	
less (c)	14	3.44%	

Field Summary for 24:			
I mostly climb in this region:			
Answer	Count	Percentage	
No answer	1	0.25%	
USA - pacific time zone (a)	103	25.31%	
USA - mountain time zone (b)	110	27.03%	
USA - central time zone (c)	20	4.91%	
USA - eastern time zone (d)	81	19.90%	
Alaska (e)	22	5.41%	
Hawaii (f)	0	0.00%	
Europe (g)	34	8.35%	
Australia (h)	4	0.98%	
North America (i)	21	5.16%	
South America (j)	1	0.25%	
Asia (k)	0	0.00%	
Africa (I)	5	1.23%	
Other (m)	5	1.23%	

## Field Summary for 25:

Have you or your climbing partner ever needed assistance or need to be rescued from a climbing accident? Please answer yes even if this was on an approach or descent.

Answer	Count	Percentage
No answer	0	0.00%
yes (a)	70	17.20%
no (b)	337	82.80%

Field Summary for 26:			
Do you belong to any of the following:			
Answer	Count	Percentage	
local climbing club (a)	139	34.15%	
mountain search and rescue organization (b)	120	29.48%	
climbing industry profession (c)	28	6.88%	
Access Fund (d)	76	18.67%	
American Alpine Club (e)	46	11.30%	
none (f)	120	29.48%	

Field Summary for 27:			
How many days a year do you go sport climbing? 0 to 365			
Calculation	Result		
Sum	11268		
Standard Deviation	42.742637179988		
Average	27.685503685504		
Minimum	0		
1st Quartile (Q1)	5		
2nd Quartile (Median)	12		
3rd Quartile (Q3)	30		
Maximum	365		
*Null values are ignored in calculations *Q1 and Q3 calculated using minitab method			

Field Summy for 28:How many days a year do you go wit-pitch tradition- climbing? 0-365CalculationResultCalculation8285Sum8285Standard Deviation33.416342480511Average20.356265356265Minimum01st Quartile (Q1)22nd Quartile (Median)103rd Quartile (Q3)27Maximum365