

## Descriptives

### Amputees

N=22 Male=15 Female=7

#### Age

```
> describe(age_amp)

  vars  n  mean    sd median trimmed  mad min max range skew kurtosis  se
1    1  22 47.91 13.04   48.5   48.5 14.83  20  67   47 -0.34   -0.98 2.78
```

### Controls

N=40 Male=30 Female=10

#### Age

```
> describe(contr_age,na.rm=T)

  vars  n  mean    sd median trimmed  mad min max range skew kurtosis  se
1    1  39 45.82 13.01    40   45.27 11.86  27  70   43 0.37   -1.4 2.08
```

## Significance Tests

### Within Amputees Affected Wrist versus Unaffected Wrist

```
> describe(wrist_aw)

  vars n  mean    sd median trimmed  mad  min max range skew kurtosis  se
1    1  7 14.9  6.57  10.83   14.9 3.36  8.57  25 16.43  0.4   -1.83 2.48

> describe(wrist_uw)

  vars n  mean    sd median trimmed  mad  min  max range skew kurtosis  se
1    1  7 15.12  2.89  15.47   15.12  4 12.03 19.93  7.9 0.36   -1.52 1.09
```

```
> t.test(wrist_aw,wrist_uw,paired=T)
```

Paired t-test

```
data: wrist_aw and wrist_uw
t = -0.0825, df = 6, p-value = 0.9369
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -6.715630  6.277535
sample estimates:
mean of the differences
      -0.2190476
```

## Between Amputees and Controls Unaffected Hand's

```
> describe(cont_hands)
```

	vars	n	mean	sd	median	trimmed	mad	min	max	range	skew	kurtosis	se
1	1	40	4.48	1.42	4.19	4.36	1.3	2.03	8.82	6.79	0.84	0.57	0.23

```
> describe(amp_hands)
```

	vars	n	mean	sd	median	trimmed	mad	min	max	range	skew	kurtosis	se
1	1	20	4.85	1.55	4.47	4.67	1.45	2.98	9.02	6.04	0.96	0.3	0.35

```
> t.test(cont_hands,amp_hands)
```

Welch Two Sample t-test

data: cont\_hands and amp\_hands

t = -0.8982, df = 35.433, p-value = 0.3752

alternative hypothesis: true difference in means is not equal to 0

95 percent confidence interval:

-1.2083776 0.4668845

sample estimates:

mean of x mean of y

4.478361 4.849107

## Correlation: Age and Amputees Unaffected Wrist

Pearsons product-moment correlation

data: x\_uw\_age and y\_uw

t = 0.1375, df = 5, p-value = 0.896

alternative hypothesis: true correlation is not equal to 0

95 percent confidence interval:

-0.7252079 0.7784482

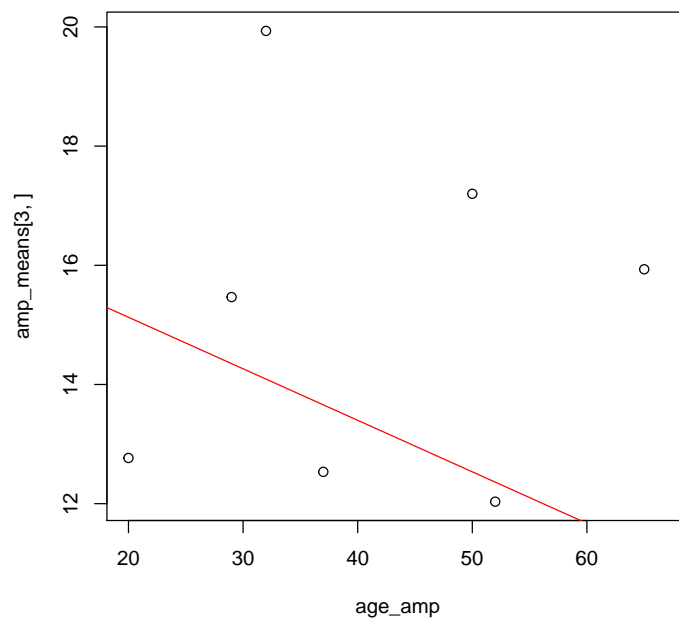
sample estimates:

cor

0.06136081

```
> plot(age_amp, amp_means[3,]) #plot of age and uw mean loc
```

```
> abline(lm(y_aw~x_aw_age), col="red")
```



## Correlation: Age and Amputees Unaffected Hand

Pearsons product-moment correlation

data: x\_uh\_age and y\_uh

t = 2.0326, df = 18, p-value = 0.05711

alternative hypothesis: true correlation is not equal to 0

95 percent confidence interval:

-0.01292106 0.73421001

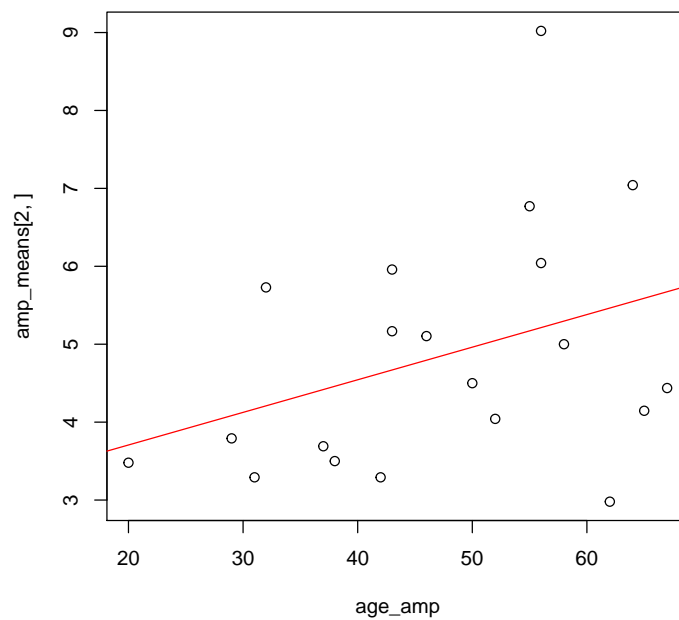
sample estimates:

cor

0.4320702

```
> plot(age_amp, amp_means[2,]) #plot of age and uh mean loc
```

```
> abline(lm(y_uh~x_uh_age), col="red")
```



## Correlation: Age and Amputees Affected Wrist

Pearsons product-moment correlation

data: x\_aw\_age and y\_aw

t = -0.6766, df = 9, p-value = 0.5157

alternative hypothesis: true correlation is not equal to 0

95 percent confidence interval:

-0.7242857 0.4376354

sample estimates:

cor

-0.2199938

```
> plot(age_amp, amp_means[3,]) #plot of age and uw mean loc
```

```
> abline(lm(y_aw~x_aw_age), col="red")
```

