

Same meaning but different feelings: Different expressions influence satisfaction in social comparisons

Yi Song,^{1,2} Xiaofei Xie^{1,2} and Hui Zhang^{1,2}

1S h P h ♪ a a ♪ C ♪ S , P ♪ U , a ♪ 2B ♪ K Lab a B ha a ♪
M a H a h , P ♪ U , B ♪ C h a

Key words: direction of comparison, framing effect, social comparison.

Correspondence: A. f., D. a. t. t. f. l.,
k. r. t., 5 a. a. 5, B., 100871,
C. a. E. l.; a. f. N@ E. 5.

5 10 2016;r 24 Febr 2017;a t 5
28 Eur ar 2017

52. *lr tr al ar*
 fr t t a a b' 5fr r t x
 a a 5 5a.1 a t t
 p a t 5fr t a 5 5a.1
 t a t f fr r a 5 t t
 aff t a t a t a ar r lt F t r
 r , a , p a t ff t tr ar 51 f
 tr t a l ar fr t r 5
 fr t t r r (.. Fr ') r 5 r
 t f (.. ').

Social comparison

a. 1	<i>mar</i>	a.	r tr	5 b	F	r
(1954) t	<i>mar</i>	a.	tfr	k	15,	b
t 1 5	r b	t	fr t	b	1	-
<i>ar</i>	F t tr	. Alt	F	tr	r	a 1
t r 1 f 5	t	<i>mar</i>	f	a	5	-
a b l t , t t r	rr d a	5 1	5	a	u	r
a r 5 a, 5	ara	f r	ar	(1	&
lr, 2000). C	rr d t a	b	5 tr fr	ta		
r	1	<i>mar</i>	t r	a	tr	t
t r (B	k & G	bb	, 2007).			
B 5	r rr d t	t	t	r		t
<i>ar</i>	<i>ar</i>	5, tr ar	t	t	f	a 1
<i>ar</i>	<i>ar</i>	<i>ar</i>	r	1	a	r
r 2 t	t	t	f	a 1	<i>ar</i>	
a. 5	<i>ar</i>	(C ll , 1996). I	5	t	t	t
<i>ar</i>	<i>ar</i>	r	5	t	t	
a. 5	<i>ar</i>	<i>ar</i>	t	f	<i>ar</i>	a
r r t a 5	<i>ar</i>	<i>ar</i>	t	5	t	(ll ,
1981).						

A r t 1 t 5, t a, 1 ar fr -
 a f t a, a b 5 r b 5 5fr -
 1 5fr r r al b ll b 5

t a. t. Fr t. t. r 5r f b t t b "ar 5
 5ffr t. Fr a. 1, a. t 1 "ar 5
 "a. a. a. ar 5 "ar 5 "ar 5
 "b "ar 5 "ar 5 "ar 5 "ar 5
 "ar 5 "ar 5 "ar 5 "ar 5
 "a. a. a. fa. f t t r . fr r r -
 a. a. t fa. (. . b "ar'), 1 t 1 "ar
 a. a. a. fa. (. . r').
 , 5 t 5ffr t x f a. u. u.
 ar fr 2t a. 5ffr t "a. t x 2t -
 ? A 5 fa. 5ffr 5 t. t a. 5b
 5ffr t r 5t f b t r b 5ffr tfa. ?
 ll 5 t t t t t full

Subject versus referent: Different orders of the objects

"ar 5 t b t x ar r f 5 52.1
 5ffr t r 5r f t b t 15 5 52.1
 f t 2t b t b t b t 15 5 52.1
 b t 5ffr t x r 5 52.1 15 5 52.1
 1 "ar t a. a. x r x t b t
 ar 5 t 2.1 x u. t b t 12 vice versa. It
 all 5 t 5r t f "ar a. n ff t
 (rank, 1977; rank & Göt, 1978).
 Fr a. 1, fr t t t t H "ar
 ? a. 5 H "ar a. I t "a? r ar r
 a. f. 5 52.1 fr r t t 15 5 52.1
 f 1 r a. u. "ar t b t t b t
 t t t t t t t t t t t t
 (a. 5 u.) (H rank & Gr 5, 1983;
 rill & G. 1 k, 1983). r a. fr 5 52.1
 F (I u.) r x r 5 52.1
 t Fr fr 5 ff t 5 52.1
 r x Fr 1 a. t fr 2t r 5 52.1
 t fr fr 2t (r, r, & rank, 1977),
 2 b t r 5t fa. 5 52.1
 t t ar 5 t F (rank & rf, 1987).
 5 t 5fr t f "ar a. n
 ff t t? A 5 52.1
 f 1 t t t t t t t t t t
 (J., 1983; ar, 1994).
 ar t t t t t t t t t t t t
 ar t t t t t t t t t t t t
 ar t t t t t t t t t t t t
 ar t t t t t t t t t t t t
 ar t t t t t t t t t t t t
 ar t t t t t t t t t t t t
 r fr 4t (B 51 & G t, 1997; rank, 1977; rank & Göt, 1978).
 a. a. k 15 5 52.1
 r a. t 2kr full 1 1 a. 5 52.1
 F 1 1 r a. t r a. t (a. 1, fa)
 Fr 1 1 r a. t b t 4 5 5 52.1
 t t t t t t t t t t t t

a. a. t "a. 5 52.1 t 15 5 52.1
 "ar 5 t 5 52.1 a. 5 52.1
 b t 5 52.1 b t b ar r 5 52.1
 t 5 52.1 f "ar a. 5 52.1
 1983; r & Hr, 1998; ar, 1994). Alt
 t f "ar a. 5 52.1 ff t t x
 1m "ar , 2.1 "ar 5x t
 x "ar 5a. 5 52.1 "ar 5 5 52.1
 ar 5r t a. 5 52.1 ar 5 5 52.1
 5x t , r f f t 5 52.1
 ff t t a. 5 52.1 5 52.1
 a. 5 52.1 ff t t 5 52.1
 r t 5 52.1 r t 5 52.1
 2.1 5 52.1 5 52.1
 2.1 5 52.1 5 52.1
 (C. b., Bk, & 5 52.1, 1996; ar k, 1990). a. t a. N 1 r fr t
 b "ar p. ("ar t t t t
 F (t r 5 52.1 t t t t
 f t F t t r). r fr t
 F t t r t t t t t
 2.1 5 52.1 t r fr t t t t
 r a. 5 52.1 r t 5 52.1
 x 5 52.1 a. 5 52.1
 a. a. a. 5 52.1 r t 5 52.1
 a. 5 52.1 fr 2t b a. 5 52.1
 ar 5 52.1 r r r a. 5 52.1
 t t (G. r, r, & Al, 1995) ar r,
 2 a. 5 52.1 fr 2t a. 5 52.1
 2.1 5 52.1 t t t t
 & E. k, 2014). r, 5 52.1
 x 5 52.1 5 52.1 a. a.
 r a. 5 52.1 5 52.1 n. 5 52.1
 r t t t t t t t t t t t
 1. 5 52.1 "ar 5 52.1 x /
 b "ar / r 5 52.1 5 52.1 15 5 52.1
 x 5 52.1 b "ar / r 5 52.1 5 52.1
 a. 5 52.1 2.2 5 52.1 t t t t
 fr 2t t

The influence of motivation to process the information on satisfaction

1 a. a. r t a. f fr 2t
 r t t t t t 5 52.1 a. t aff t 5?
 a. a. 5 52.1 t t t t t t
 a. 5 52.1 "ar 5 52.1 t t t t
 1 a. 5 52.1 5 52.1 x t r fr 5
 5 52.1 15 b r 2ff t 5 b t "ar
 r t t t t
 E. b. r t k 1 5 52.1 (E 5 52.1
 t 8.1 t r t t t t t t t t
 5 52.1 ll 8.1

	(H3a)	5	rate	5	ar 5
I. 55 t	t t r fr	t f t	t	b	5ffr t
t x , tr	a tr	5ffr	b t		
t x - b	tr' x r'	I t	t t ,		
15 l k t	lr a tr	t :	15 t		
5ffr	b t	b ur'a	5 r		
5 5a.1' a t f t ?	5ffr b t	b ur'a	5 r		
f t f	fa ff	(r k & a			
1981) w b t f	. Au p fa				
w b t f	a. 5 tr u a	5 tr u a	p u b	f a.	
b d n a	a t x	5 t	t r	a t	
f a. a	5 t r h a	a	t	5 5a.1'	
x fr	fr t b	tr t	t	5 r , &	
G. t, 1998). A	5 5a.1 f t a a	a t	a	-	
5 kr	5 b t b	t a	a	5	
f a. b t	15 f r	t a	a		
fr r t l - r	kr t a	t a	a		
a n t t b l	5 t (B. t r, Ba				
q k, F. k a r , & , 2001),	5 5a.1				15
a. r f a. a t	5 5a.1				
(. It, G. , & a. , 1998; a. , 1984;	a				
& , 2001). r fr ,	1 15 f r				
a t fr t a s l a a	t				
t r a t fr t a	1				
r fr a a s r	1				
a a r t a t r	fr t r				
a 1 a r fr t	15 a. b ur				
5 5a.1' a t f t					
I b a a a	5 5a.1 a a				
t a t t r	5 5a.1 a a				
f a. (. r), a 5 t	5 5a.1 a a				
15 r t r a t t	5 5a.1 a a				
f a. (. u b ur). r fr ,	5 5a.1 a a				
5ffr t f a. 15 a ff t	5 5a.1 a a				
(. f f ff):					
H4: I 5 ar 5 "ar	"ar	5	t t		
ar / r	/ r	5 5a.1'			
ar a t 15 b l r	t 1 t				
ar b ur a / r					
A55 t all , a a a a	5 5a.1'	"ta-			
t r t fr a t f t a a	a a	5 a. t r,			
H. 1 3 r 5 r 1					

Better versus worse: Different framings

I	a, 55	t t r fr	t f t	t b	5ffr	
		x , tr	a tr	5ffr	b t	
t	x	- b b rr' r r'	I t	t t ,		
	15 1k t	lr a tr	t :	15 t		
5ffr	b t	b rr' a	5 r	a 1		
5	5a 1 a t ?					
	5ffr	b t	b rr' a	5 r		
f t	b	fa ff	(r k & a	2		
1981	u	b t fa	Au b t fa	1		
	1a t r a	5 tr a	p u b t	fa		
b	5 t r l t a	5 t	t r	2 t		
fa	2 a	5 t r l t a	5 t	5 5a 1		
x fr	fr t b tr t			5r , &		
C 1, 1998) A	5 5a 1 fa a a a t					
	5	2 kr	5 b t b	a 1 a 5		
	fa b t	15 f	t r	a 1		
fr	r t l - r	4 r	t a	c t		
a n	t t b 1 5	1 r	t a	(B, t r, Ba		
q k, F k a r , & , 2001), g 5 t ,						15
a r fa a t	5 5a 1 ra			5 t		
(, It C , & a , 1998; a , 1984;						
& , 2001) . fr fr , 1 15 f , u r						
	2 a t fr a t a s 1 a a			a 1		
t x	a t fr a t a s 1 a a			t fr 2 t		
x fr a a a s 5 x r 1 ,				5 5a 1		
a a r a t a t fr	fr 2 t r			a 1		
a 1 a r a fr	15 a b rr					
	5 5a 1 a t ?					
I	b , a	ra	5 5a 1 a a			
	12 t t r	r				
fa	(. r), 2 5 t	a 1				
	15 r t r a t a t r	rr				
fa	(. b rr). r fr ,					
5ffr	fa	15 a ff	t 5 5a 1 a a t			
	ff 0:					
H4: I	5 a r 5 "a r	"a r	5 t t			
	/ r p a /	/ r	5 5a 1 ,			
a 1 p t	15 b 1 r t t	t t	b u /			
	"a r b rr a / r .					
A55 t a ll , a	"a r a	5 5a 1 "	ta ,			
	x t fr a t f t	a a	s tr ,			
H	3 r 5 x 1					

Which effect is stronger?

B. 5. r. a. t. f. a. u. ar. fr.
B. 2. 1. r. 5. 5fr. t. a. 1. btl
A. A. B. E. 1. S. A. a. t. f. a. l

After	ar 5 , ar t a t r a k 5 t .. . t ..	
5 r b -	5ffr b t t	5 5a,1 .. ,
fr - tr r	a l k ll , Ha	b ur r) 1a,
ar	b ur / r) pa Ha	(t tr t ..
5 t ..)	"a r 5 ar t a t' at f t .. t ..	
t b t t a 1 : A .. a t 5		
t r tr r a 1 k ll t ar ? (1 = ver		
unsatis ed 7 = ver satis ed 5 a t x a ja,		
r r r r a 1 k ll ? (1 = ver bad,		
7 = ver good).	a r a r f t t .. t ..	
a , 5a t 5 5 t a r a b l (r = .87). Fall ,		
ar t a t 5 5 t a 5).		
5r a , a 5 t a 5).		

Results

5 ($F_{1,100} = 11.72, p = .001, \eta^2 = .11$)
 F, r 3. 5, t 5 1 ff p, a, 1 f r -
 t r a, 1 t, t, t, lt 5 u, t 5 r, a, 1
 ar 5 u, ar, ar t, a, r, r, 5 t, (M = 3.56,
 SD = .74) r, t, I, r, r, 5 t, 5 t
 (M = 3.05, SD = .91), $F_{1,46} = 4.62, p = .037, \eta^2 = .09$.
 H r, S ar 5 u, ar, , t, a, t, t
 I a, b, u, r, t, 5 t, 5 t, (M = 5.28,
 SD = 1.18) a, t, a, t, r, r, t
 r, t, 5 t, (M = 4.47, SD = 1.02),
 $F_{1,54} = 7.57, p = .008, \eta^2 = .12$, r t, H
 12, 5 2 (. r f r t ff t), b, t, 1 H, t, 4 (. .
 fa, u, ff t).

Discussion

Study 2

Method

Participants and design.

Results

ar 5 **"ar** (M = 3.24, SD = .96). r lt
 r a 1 5 a t ff t fr b t,
 $F_{1,149} = .35, p = .556, \eta^2 = .002.$
 E, all, t r lt 15 5a, a t t - a,
 tra, F_{1,157} = 11.72, p = .001, $\eta^2 = .072,$
 E, t 4. Fr t r a, a l 5 ta t r ar 5
 "ar, a t a, t a, 5 r a t p t t
 b tr ta, 5 t (M = 3.51, SD = .94)
 ta, t la, r ta, 5 t (M = 2.95,
 $SD = .90), F_{1,80} = 7.65, p = .007, \eta^2 = .09. I 5$
 ar 5 "ar, r, ar t a, t r ar a, t -
 5 t la, b tr ta, 5 t (M = 5.26,
 $SD = .97) ta, t r, r ta, 5 t$
 $(M = 4.85, SD = .80), F_{1,78} = 4.45, p = .038, \eta^2 = .054,$
 r t 5 r a, t H t la, 5 2,
 b' t H t 4.

Motivation to process the information (mediation).

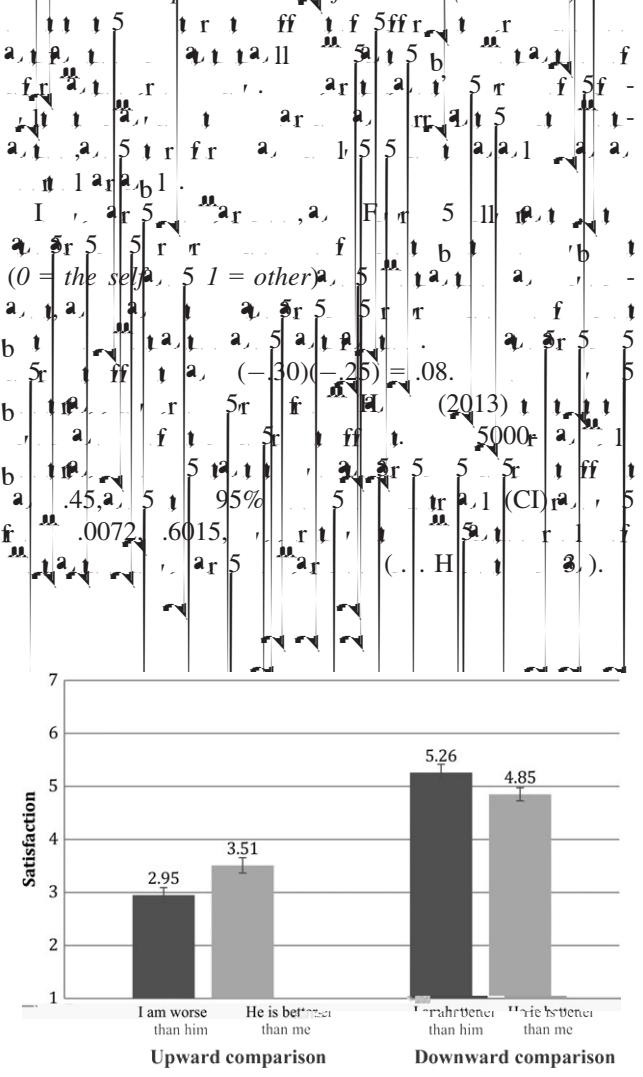


Figure 4 The results of satisfaction in four conditions in Study 2. Bars indicate standard errors.

I 5 ar 5 "ar ., t a. 5r 5 5 5r t
ff t a. (-.22)(.38) = -.08 a.
5000r a. 1 b. t ff r a. 1 5a. a. t 5r t
ff t f t b. t x . a. t ff t tr .
a. t a. t (a. 5r 5 5 5r t ff t a. -16 a. 5
95% CI a. -4748, -0197] (.. H. t 3b a.
r t 5).

Discussion

Results

F a r t a t r l 5 5 f u t a a 1 ,
 b a t t 1 5 t a 2 2 k. A a
 , 101 a r t a t r l 5 5 r a a 1
 (35 a , 66 M = 21.97 r , SD = 3.17).
 A 2 (a 1 a r 5 t : a r 5 a r
 r 5 a r 5 a r) × 2 (b t F r
 t r) A 2 5 1 5 5 a r a b l
 r t a t l r r 2 t 5 t t 5 5 t a r
 a b l r f r , t r t 1 5 5 t f ll
 a a 1

Satisfaction. $F_{1,97} = 6.99$, $p = .01$,
 $\eta^2 = .067$, $M = 4.25$, $SD = 1.20$)
 $F_{1,97} = 1.49$, $p = .226$, $\eta^2 = .015$.

For $F_{1,97} = 4.40$, $p = .043$, $\eta^2 = .072$,
 $F_{1,49} = 5.53$, $p = .023$, $\eta^2 = .101$,

Discussion

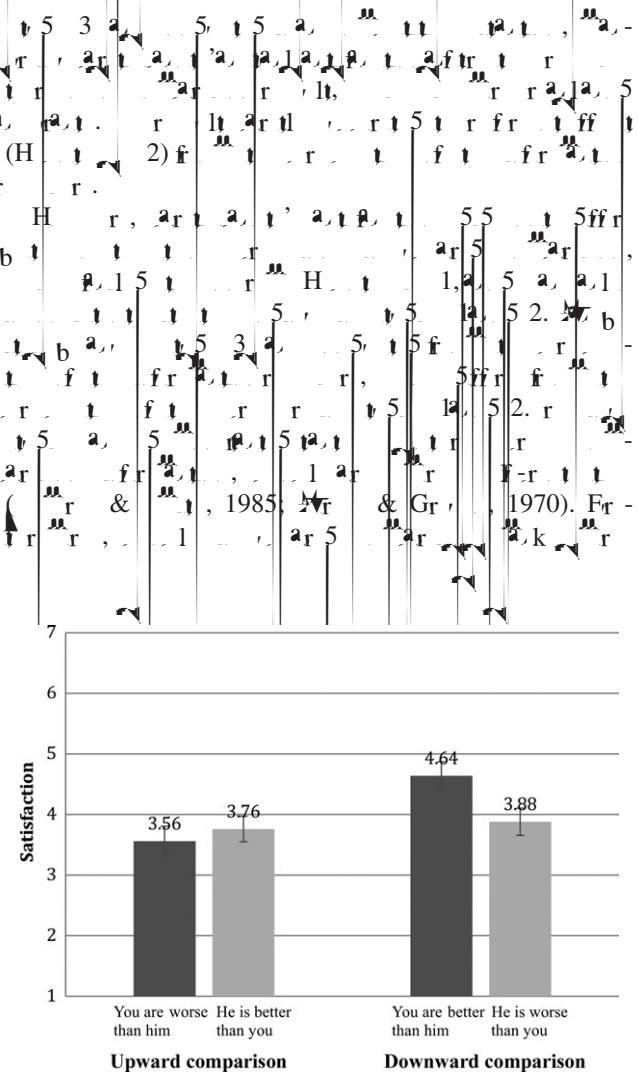


Figure 7 The results of satisfaction in four conditions in Study 3. Bars indicate standard errors.

ff r tt x t t t r F-t " (Durr, 1984; M
 & ar kr, 1984; M & Gr., 1970). r fr ,
 1 2 x t t r t r at f l t ,
 ar 5 ar (x r r t t r 5 a t t ,
 t t 1), r 5 r t F-r t t .
 5 4 a 5 5 t a a , ar t r o l t
 f r f r f r f r f r r Al ,
 a 5 t a r ar a t t a t t t t t t
 5 t r 1 .
 5 r 2 ll f t 5 t l 5 ar r r
 C Alt t C t fr
 ar b tr ta 5 f r f r E 1
 (t t t r f t C t 1 k
 a ar b tr C a 2 ar
 n tr (x ar t r t a 5
 r fr t 5; ar t ar l r a t
 r). r fr , a 5 p a t t r fr t ff
 1 E 1 .

Study 4

Method

Participants and design. - 5 5 5 ft ar
 t a t (78 " , 81 " , M = 32.96 ar,
 $SD = 9.86$) r r t 5 tr t t 1 r t ar
 a l rk t l b t r t t t t
 a , fra a la t.
 t 5 a a a b t t 5 t t
 5 5 t a r a b l : a l a r 5 x t (.
 a 5 " a r r r 5 a r 5 " a r) 5 b
 t (F r t t), r l 5 f r
 5 t : a r r t a , b t r t a
 , a r b t r t a , a 5 r t a

Procedure and materials. I a, a, a, r a, t 5
 12, 5 2, a r t a t r a k 5 t a, a, a 1
 a r a r a . I t a r , t a r t a p 5
 a, a, a, a, r a l a t 5 b t f b a
 a, a, 1, r f r a, a, a, a, 1, a r t a t t
 b t r a, a, 5 t, 15 r a, 5 12, 12, a, 5 a
 b t r a, a, 12 t, a, a, a, t a, t t
 t r a, a, 5 t, 15 r a, 5 r r r a
 a, a, a, a, r a, r a, a, 5 r r b t r
 r a, a, r a, t 1.
 After r a, 5, r a, a r t a t r a k 5 t
 a l t t a, a t a, a k t a, a r a, a 1
 (f r t u f t t a t t r t f r
 t a, a, a, a, r a, r a, t 5 2, G, B,
 1 a, = .85), t 5 5 t a r a b l (t a, t p 1
 t a, t a, a, t 5 3, r = .87), t 5 1
 a r a b l (a r t a, ' 5 t f 5 f t t
 a, a, s 1 r a, f a, a 1

1 t 5 t r 5 ~~u~~ a ~~u~~ a b l .

Results

art 3.1215 t a. at k, tr
 r 158 ff t art a. 1ft (78 u, 80
 $M_{ar} = 33.01$ ar, SD = 9.87). A 2 (a1 ar
 Sx t : ar 5 ar r : 5 ar 5 ar-
) \times 2 (b t f t t : fr tr)
 A A a. 5 t 5. a. 1 ar a b1 a. 5 5 -
 a ar a b1 a. 5 5 ff r b t r a. 5
 r fr r l 5 5 t a. 1 . tr r
 t t r l 5 5 t f ll a. 1 5 5 t
 a. t a. f t r lt.

Satisfaction. $F_{1,154} = 248.59$, $p < .001$,
 $\eta^2 = .62$, $M = 5.77$, $SD = 1.21$
 $F_{1,154} = 4.00$, $p = .047$, $\eta^2 = .025$

$F_{1,154} = 4.94, p = .028, \eta^2 = .031$.
 $M = 2.66, SD = 1.13$,
 $M = 2.62, SD = .53$,
 $F_{1,76} = .02, p = .89$. A
 1. H
 $M = 6.19, SD = 1.01$,
 $M = 5.35, SD = 1.27$,
 $F_{1,78} = 10.68, p = .002, \eta^2 = .12$,

Motivation to process the information (mediation).

ar 5 ar art a. t a. a. a. ill r-
 r 4 5 t a. t a. 5 tr f t a. a. b 5 5
 a. a. 1 a. r. b l t t ill a. a. 1 .
 A F. t 9, t 'b t (5 5 a.
 0 = the self, 5 I = other) 15 5 t t a. t ,
 $\beta = -.24$, $t = -2.15$, $p = .035$. Fr t r r , f 5
 a. t a. t a. a. t 1 rr a. t 5 t a. 1 2 -
 t , $\beta = .40$, $t = 3.80$, $p < .001$. r f r , t 2 -
 fr 5 5 5 t ff t a. $(-.24)(.40) = -.10$.
 t 5 t a. f t 5 t ff 5 t ff 5
 b. t p x 5t A 5000f a. 1 b. t p 5
 fr 5 5 5 t ff t a. -19, a. 5 t 95%
 5 fr a. ll 5 f " -5106, -0.0288.
 r t ff t a. a. t a. ll a. t (.

t b ff rk 15, t r tr ar
 t r tt fr k 15, 5r b t 5ffr tr 5r
 ft b tt b ar 5 (rk, 1977), 5ffr
 ff (rk & a, 1981). Alt t
 ff t a 51 ab1 5 ff t b 5 t
 r lt 5 ar 5 r 5 f 5 a t
 5r t ar 2 ff t (.. a t
 a ll 5r fr 1 ff t t a, r) a, 5a, r a t
 u, a, t fa, t ff t r b t
 b1 r a, t a t : r t, t 5 ab t a, a t
 t tr 2 5 5t 5 a t t b t t
 a, t a t (a, a kr, 1991; rr &
 5, 2001). a t a t a 1 f b
 15a, t 5 5a, 1 a n t, 2k 1
 f r 5r 5r f t b t (.. L r
 fa, t 5r 5r f t (.. b tr r
 5, b a t 5 tra 5 a t f
 1f t r t t 5ffr t 5r f t b t ll b
 ar 1r a 5r fr b r 5 ar 1r a t
 fa, t ar 1r a t f t ff t 15
 r b o l r r t t fa, ff t
 Al, t r tr ar 5 1 t ar
 15 f t ff t f 5ffr t a, a t a t

Discussion

t 5 4a, a, r, 1a, t 5 t r lt f t 5 3x a, 1 u
 a, t r fr t ff t 1 5 t 5 5 ar 5
 ar f t r t f t fr t t r
 r Fr t r r, t 5 r 5 p a t ff t a
 t 1 f, 5 C b t E 1 a ll.

General discussion

r lt f t fr t 5 5 12, t 5ffr t
 x f t a ar fr t t 15
 aff t 5 5a, 1 a t a t a t
 ar r t t a ll, 5 ar 5
 t x r b ar b m a, 2k 5
 5a, 1 f 1 r a t 5 a, t
 r p a / (t 5 1-4); I ar 5 a
 a, r 1 a t 5 a, t b t t r
 r b m r p a, (t 5 1a, 5 2). Al, t
 r lt r t 5 t 5 t r 1 f t a t t x
 t a, 1 ar fr 2 t (t 5 2, 5 4)

5 5a, 1f 1 " r " fr ab 1a, 5 1 f , 1t 5.
 H r - 5, f a, t t a, 5 t a, 5
 t k r ff r t, 15, t x -
 r r a, t k f 11 a, t
 5 5t, r k a, 5r .
 t t 5 t x r a, 5r r f t , " ar -
 lt 5ff r t t 5 b, t 5 5 t " ar
 t E r r a, 15 lr t r t a,
 fr 2 t x r 5 b F (. r t r I)
 a, 5 t r (. 5 r) , 15 a, 5ff r -
 B a, t 5 r , 15 r I (a, 5ff r -
 b l a, t r t r I (a, 5ff r -
 kr , 2007; ar a, & ar , 1999, 5ff r

Acknowledgements

Mr. R. A. F. S. G. L. R.
M. (71172024 & 71472005) a. 5 r.
(9224002) f. a. t. a. m. l. E. s. f.
C. a. N. N.

References

