



## Tactics of hierarchy negotiation

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### Abstract

Since resources flow to those at the top of the hierarchy in all known groups, “getting ahead” is assumed to be one of the central human motivations. The present research project was designed to assess tactics of hierarchy negotiation, identify the robustness of their factor structure, and relate tactics use with personality traits, values, and salary. The participants were 315 professionals in two work settings. Measures included assessments of tactics of hierarchy negotiation, personality traits, life values, and work-related variables. The results established the robustness of three factors of hierarchy negotiation: Deception/Manipulation, Social Display/Networking, and Industriousness/Knowledge. These factors showed coherent links with personality traits and values and predicted salary above and beyond the effects of personality traits. The discussion focuses on implications of the results and directions for future research.

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### 1. Introduction

Status, prestige, esteem, honor, respect, and rank are distributed differentially in all known groups. All human groups have social hierarchies, whether formal, as in the military or in business settings, or informal, as in cliques or other casual social groups (Bales, Strodbeck, Mills, & Roseborough, 1951; Barkow, 1989; Brown, 1991). Rank ordering

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occurs at a very early stage of social interaction (Kalma, 1991). Hierarchy-related behavior has been shown to emerge in early childhood (Hawley, 1999) and to increase in periods of group formation and transition (Pellegrini & Long, 2002). A person's position in the hierarchy affects how that person is treated as well as how the person treats others. People in subordinate positions typically display deferential behavior; their body posture is bent rather than erect, their voices are typically soft rather than loud, and they show more frequent smiling (Argyle, 1994). People in superordinate positions in social hierarchies are more likely to stand at full height facing the group, to look directly at others rather than averting their gaze, and to gesture by pointing to others.

Social hierarchies are not unique to humans. Since the discovery of the pecking order among hens (Schjelderup-Ebbe, 1922), the status hierarchy has been considered one of the main forms of social organization in animals. Indeed, status hierarchies are ubiquitous among the closest primate relatives of humans, the chimpanzee (de Waal, 1982). Social hierarchies have also been studied in many other species, such as, for example, in macaque monkeys (Gouzoules, Gouzoules, & Tomaszycki, 1998) and domestic goats (Barroso, Alados, & Boza, 2000) and in many insect and fish species. Among crickets, a cricket that loses fights subsequently becomes submissive and avoids confrontation in the future (Alexander, 1961). Among crayfish, more than one male cannot inhabit the same territory without determining who has higher rank (Barinaga, 1996). The crayfish that emerges as the victor in physical contests controls the territory, while the loser slinks away to the periphery and avoids further contact with the dominant male.

Hierarchies can be understood as the product of a group process, where individuals assess and remember their relative ability to compete for resources and hence gain the opportunity to yield from confrontations that are likely to lead to defeat. Research has shown that reproductively relevant resources are often linked with position within the hierarchy (Cummins, 2005). In goats, for instance, it has been shown that consumption of food is influenced by rank within the group (Barroso et al., 2000). Among chimpanzees and many other primate species, dominant males gain greater sexual access to females (de Waal, 1982), particularly, when the females are in estrus (Ellis, 1995). Rank also has a marked effect on the reproductive success of female chimpanzees, as shown, for example, by higher offspring survival (Pusey, Williams, & Goodall, 1997). Among humans, persons higher up in the hierarchy tend to obtain superior health care, better food, larger territory, bigger houses, and access to more desirable mates (Buss, 2004). Betzig (1993) found that in early civilizations high status and rank afforded men greater sexual access to women, and this linkage seems to hold even in modern times (Perruse, 1993). Because reproductively relevant resources typically flow to those at the top and trickle down more meagerly to those at the bottom, it is not surprising that many theories of personality and human nature have proposed that humans have evolved a fundamental motive of status striving or "getting ahead" (e.g., Barkow, 1989; Buss, 2004; Hogan & Hogan, 1991; Maslow, 1937).

Despite the importance of social hierarchies, relatively little research has been conducted to identify the tactics that humans use to negotiate hierarchies. An exception to this is a study by Kyl-Heku and Buss (1996) that addressed the need for bridging the gap between trait research and goal-based approaches in personality psychology. The authors proposed that tactics can be conceptualized as the means by which the individual tries to achieve his or her goals in a social environment. Tactics of hierarchy negotiation as units of analysis can be understood as a mediating construct between personality traits and outcomes related to the goal of "getting ahead." Kyl-Heku and Buss (1996) constructed a taxonomy of 26 tactics of

hierarchy negotiation, ranging from ingratiating oneself with superiors to socializing selectively to derogating the social reputation of others in the group. A factor analysis revealed five factors that the authors labeled Deception/Manipulation, Industriousness/Knowledge, Social Display/Networking, Aid Accrual, and Autonomy.

Using a sample of 212 married individuals, [Kyl-Heku and Buss \(1996\)](#) found that the tactics were associated with the Big Five personality traits. Deception/Manipulation, for example, was positively correlated with Surgency (Extraversion) and negatively correlated with Agreeableness and Conscientiousness. Industriousness/Knowledge was positively correlated with Surgency and Emotional Stability and showed an especially strong positive correlation with Intellect/Openness.

Use of tactics of hierarchy negotiation was also correlated with important life outcomes, such as salary, degrees obtained, pay raises, and promotions. The most robust predictor of these life outcomes was the factor of Industriousness/Knowledge. Tactics subsumed by this factor—including working hard, impressing others, being well-organized, and displaying knowledge—were positively correlated with salary and anticipated job promotion at the time of initial testing. In a subsequent longitudinal follow-up four years later, these same tactics assessed at Time 1 predicted actual salary and pay raises at Time 2.

The [Kyl-Heku and Buss \(1996\)](#) study, however, had several limitations. First, the factor analysis was conducted with a relatively small sample, suggesting the need for replication to identify whether the factor solution is robust. Second, the participants in the study had a wide diversity of occupations; a design including participants within specific occupational settings would offer possibilities in terms of exploring the influence of different contexts. Third, the study involved only a single sample from a limited geographical region of the United States. Fourth, the study did not report how hierarchy negotiation tactics compare to personality traits when it comes to predicting hierarchy-related outcomes.

### *1.1. Goals of the present study*

The main purpose of the present study was to investigate tactics of hierarchy negotiation among Norwegian professionals working in research and business settings. More specifically, our goals were to: (1) examine the robustness of the factor structure of [Kyl-Heku and Buss'](#) taxonomy of tactics of hierarchy negotiation; (2) investigate how tactic use relates to gender and organizational context; (3) identify the relationships between Big Five personality traits and the use of specific tactics of hierarchy negotiation; (4) explore relations between tactic use and central life values; (5) examine how tactics of hierarchy negotiation are related to life outcomes such as salary, education, perceived work success, and life satisfaction. With respect to this last goal, we wanted to investigate whether hierarchy negotiation tactics predict variance of salary over and above the effects of personality traits. We also sought to examine whether the tactics of hierarchy negotiation that predict salary in business settings are the same as those predicting salary in research settings.

## **2. Method**

### *2.1. Participants*

Participants were 315 professionals (147 men, 167 women, and 1 person of unknown gender), ranging in age from 18 to 68 years (means = 38.8,  $SD = 10.0$ ). They were recruited

from four organizations: a Norwegian state institute for health research ( $N=95$ ) and three private business firms (one consulting/accounting firm ( $N=106$ ) and two public relation firms ( $N=114$ )). These organizations were chosen because they constitute competitive work environments that reward personal achievement and offer hierarchically structured career opportunities.

At the research institute, participants received the questionnaires by mail. The head of the research institute simultaneously sent out an e-mail to all employees that provided information on the study and encouraged the employees to complete the questionnaire. Approximately, one-third of the questionnaires were returned by mail within a two-week period. At the three private companies, one of the researchers attended general employee and leadership meetings, where she presented the study and distributed questionnaires. Nearly all of these questionnaires were completed and collected shortly after the meetings.

## 2.2. Instruments

### 2.2.1. Assessment of personality traits

Personality traits were measured by a Norwegian version of the NEO-FFI (Costa & McCrae, 1992; Martinsen, Nordvik, & Østbø, 2003), a questionnaire that is designed to assess the personality factors of the Five-Factor Model. Each of the five scales is composed of 12 items that are rated on a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5). The scales achieved the following reliabilities (Cronbach's  $\alpha$ ): Neuroticism  $\alpha = .83$ , Extraversion  $\alpha = .76$ , Openness to Experience  $\alpha = .76$ , Agreeableness  $\alpha = .65$ , and Conscientiousness  $\alpha = .77$ . Correlations between the NEO-FFI scales ranged from  $r = .02$  (Agreeableness and Openness to Experience) to  $r = -.45$  (Neuroticism and Extraversion).

### 2.2.2. Assessment of tactic use

Tactics of hierarchy negotiation were measured by a Norwegian translation of the Hierarchy Negotiation Instrument that was developed by Kyl-Heku and Buss (1996). This measure consists of 109 items that are acts of hierarchy negotiation. The items are rated on a 7-point scale ranging from *very unlikely to perform* (1) to *extremely likely to perform* (7). The instructions were as follows: "We all do things to get ahead. Below is a list of things people sometimes do to get ahead. Please read each item carefully and decide how likely you are to perform this behavior to get ahead."

Following Kyl-Heku and Buss' procedure, we grouped the 109 items into 26 tactic categories (see Appendix A). Tactic scales were constructed by averaging across items. Scales were then checked by means of reliability analyses, using Cronbach's  $\alpha$  and mean inter-item correlations. Internal consistency ( $\alpha$ ) ranged from .38 to .84. Five of the 26 tactic scales were found to have relatively low internal consistency ( $\alpha$  ranging from .38 to .45) compared with the other scales, while the remaining 21 scales showed moderate to good levels of internal consistency ( $\alpha$  ranged from .58 to .84; see Appendix A). The five scales (*enlist aid*, *use sex*, *conform*, *hold one's own*, and *exclude others*) with relatively low internal consistency showed acceptable mean inter-item correlations (ranging between  $r = .18$  and  $.31$ ), a statistic that is less affected by the number of items in a scale. In addition, an all-tactics total composite score was computed by averaging across the 26 tactic scales. The all-tactics total composite showed internal consistency of  $\alpha = .92$  and inter-item correlation of  $r = .31$ .

### 2.2.3. Personal information and indices of effectiveness

Information serving as indices of effectiveness and success in the professional domain was assessed by means of single questions. Participants were asked to report number of years of work experience, average hours of work per week, educational level (reported on a 6-point scale), and annual salary (reported on a 7-point scale). In addition, participants rated their perceived level of success at work on a scale from 1 (*minimal success*) to 10 (*maximum success*). Similarly, participants rated their level of general satisfaction with life on a scale ranging from 1 (*little satisfied*) to 10 (*extensively satisfied*).

### 2.2.4. Assessment of values

Five questions about personal values were included. These values were chosen to capture the focal life motives of “getting ahead” (private economy, power, and health) and “getting along” (family, pleasure) (Hogan, 1983; Kyl-Heku & Buss, 1996). Though not exactly representing life goals, values constitute the background of basic beliefs from which specific goals can be derived. The content and format of the questions were inspired by the World Values Survey (World Values Survey Questionnaire, 2002). The instructions were as follows: “People value different things in life. Which values do you consider to be important in your life?” Importance of values was rated on a 4-point scale ranging from *very little important* (1) to *very important* (4).

## 3. Results

### 3.1. Principal component analysis of hierarchy negotiation tactic scales

A series of principal component analyses were used to explore the underlying structure of the 26 tactic scales and to attempt a reproduction of the original five-factor solution reported by Kyl-Heku and Buss (1996). Two different rotation methods, varimax and oblique, were applied. Inspection of the scree plots as well as the content of the factors suggested a three-factor solution that was robust across these two rotation methods. Because Kyl-Heku and Buss used varimax rotation, this method was chosen for purposes of comparison and interpretation (Table 1). The three-factor solution largely reproduced the first and largest three factors reported by Kyl-Heku and Buss (Deception/Manipulation, Social Display/Networking, and Industriousness/Knowledge). The original fourth and fifth factor (Aid Accrual and Autonomy), with loadings of one and two tactic scales, respectively, could not be reproduced in our study.

The first factor (Deception/Manipulation) assembled high loadings of tactic scales tapping deceptive self-promotion and derogation of competitors. Six of the original seven tactic scales loaded on this factor. The seventh tactic in the original study, *use relatives*, showed a high secondary loading on the second factor, whereas *ingratiate self with superiors* showed multiple loadings in the original study but a high loading on the first factor in our study.

The second factor, Social Display/Networking, reproduced the corresponding factor in Kyl-Heku and Buss' (1996) study to a great extent. In addition to the five tactics that originally loaded on this factor, the tactics *display positive characteristics* and *help others* loaded on this factor as well. Social Display/Networking compiles tactics denoting genuine friendliness and helpfulness together with tactics aimed at obtaining an advantage through social activities.

Table 1  
Factor loadings for hierarchy negotiation tactic scales

Hierarchy negotiation scale	Factors		
	Deception/ Manipulation	Social Display/ Networking	Industriousness/ Knowledge
Use deceptive self-promotion	<b>88</b>	02	14
Derogate others	<b>80</b>	−02	05
Boast	<b>73</b>	18	18
Aggress	<b>68</b>	−03	20
Use sex	<b>66</b>	21	16
Exclude others	<b>65</b>	03	09
Ingratiate self with superiors	<b>60</b>	17	24
Help others	−15	<b>82</b>	15
Cultivate friendships	−10	<b>81</b>	26
Display positive social characteristics	−03	<b>80</b>	11
Social participation	22	<b>70</b>	27
Attract opposite sex	47	<b>59</b>	19
Enhance appearance	44	<b>58</b>	23
Display athleticism	15	<b>48</b>	28
Display knowledge	17	19	<b>78</b>
Work hard	29	16	<b>73</b>
Advance professionally	21	30	<b>70</b>
Obtain education or knowledge	−06	−01	<b>68</b>
Organize/ strategize	06	48	<b>66</b>
Assume leadership	41	04	<b>64</b>
Hold one's own	16	11	<b>59</b>
Conform	22	34	−22
Enlist aid	40	49	00
Impress others	60	24	55
Socialize selectively	44	36	48
Use relatives	51	45	06

*Note.* The scales within each factor are ordered by the magnitude of the factor loadings, following the criteria that the highest factor loading should be higher than .40 and be at least .10 higher than the other factor loadings. The highest factor loading for each scale is boldfaced. Decimal omitted.  $N = 301$ .

The third factor, Industriousness/Knowledge, largely reproduced the corresponding factor presented by [Kyl-Heku and Buss \(1996\)](#). Five of the seven tactics loading on this factor were identical in their and our material. Two additional tactic scales loaded on this factor in our study; *advance professionally* and *hold one's own*. *Impress others* loaded on the *Industriousness/Knowledge* factor in the [Kyl-Heku and Buss](#) study, whereas it had a substantial loading on two factors in our study.

Based on the distribution of the factor loadings, three tactic composites were constructed by computing the mean across the respective tactic scales.

### 3.2. Differences in subgroups: gender and organization

[Table 2](#) lists the means and standard deviations of tactic composites and tactic scales in the total sample and broken down by gender. An inspection of the means shows that Deception/Manipulation and corresponding tactics were used less frequently, whereas Social Display/Networking and Industriousness/Knowledge were used more often. This

Table 2  
Means and standard deviations of tactics in men, women and total sample

Hierarchy negotiation tactics	Total		Men		Women		<i>t</i> <sup>a</sup>	<i>d</i> <sup>b</sup>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
<i>I. Deception/Manipulation</i>	2.1	0.7	2.3	0.7	1.9	0.7	3.8*	.44
Use deceptive self-promotion	2.0	0.9	2.2	0.9	1.8	0.8	3.8*	.45
Derogate others	2.0	0.9	2.1	0.9	1.9	0.9	2.2*	.25
Boast	2.4	1.0	2.5	1.0	2.2	0.9	2.9*	.33
Aggress	2.0	1.0	2.1	1.0	1.8	1.0	2.7*	.31
Use sex	1.7	0.7	1.9	0.8	1.6	0.6	3.6*	.44
Exclude others	2.1	1.0	2.3	1.0	2.0	1.0	3.3*	.37
Ingratiate self with superiors	2.5	1.4	2.7	1.4	2.4	1.3	2.3*	.26
<i>II. Social Display/Networking</i>	4.5	0.9	4.4	0.9	4.5	0.9	-1.0	-.11
Help others	5.3	1.0	5.2	0.9	5.5	1.0	-2.6*	-.29
Cultivate friendships	5.5	0.9	5.4	0.9	5.6	1.0	-2.0*	-.23
Display pos. social characteristics	5.8	0.8	5.7	0.8	5.9	0.8	-3.0*	-.34
Social participation	4.3	1.3	4.2	1.3	4.4	1.3	-1.1	-.13
Attract opposite sex	3.7	1.6	3.7	1.5	3.6	1.7	0.7	.09
Enhance appearance	3.2	1.4	3.0	1.2	3.4	1.4	-2.3*	-.27
Display athleticism	3.7	1.6	3.9	1.6	3.5	1.5	2.6*	.30
<i>III. Industriousness/Knowledge</i>	4.6	0.9	4.7	0.8	4.5	0.9	2.1*	.24
Display knowledge	4.7	1.1	4.9	1.0	4.6	1.1	2.6*	.29
Work hard	4.3	1.0	4.4	1.0	4.1	1.1	2.5*	.29
Advance professionally	4.6	1.2	4.7	1.1	4.5	1.3	1.1	.13
Obtain education or knowledge	4.4	1.8	4.3	1.9	4.5	1.8	-0.8	-.09
Organize/ strategize	5.3	0.9	5.2	0.8	5.3	1.0	-0.4	-.05
Assume leadership	4.2	1.3	4.5	1.2	3.9	1.3	4.4*	.50
Hold one's own	4.8	1.0	5.0	0.8	4.7	1.1	2.8*	.32
Conform	3.5	1.0	3.4	0.9	3.7	1.1	-2.4*	-.28
Enlist aid	3.3	1.1	3.4	1.1	3.3	1.1	0.5	.06
Impress others	3.7	1.1	3.9	1.0	3.5	1.1	3.4*	.38
Socialize selectively	3.8	1.4	4.0	1.3	3.6	1.5	3.0*	.35
Use relatives	2.5	1.5	2.6	1.4	2.4	1.6	0.8	.09
All-tactics total	3.7	0.7	3.7	0.6	3.6	0.7	1.8	.20

Note. *N* = 301.

<sup>a</sup> Independent samples *t* test.

<sup>b</sup> Cohen's *d*.

\* *p* < .05.

corresponds well with the findings reported by [Kyl-Heku and Buss \(1996\)](#). Gender differences were found for Deception/Manipulation and all the corresponding tactics, with men reporting more frequent use of these tactics than women. There were no significant gender differences for the Social Display/Networking composite, but women scored higher on several of the corresponding tactics. They engaged more often in helping others, cultivating friendships, displaying positive social characteristics, and enhancing appearance. In contrast, men engaged more often in displaying athleticism. Men scored significantly higher on the Industriousness/Knowledge composite than women. Specifically, men showed higher scores on the scales *display knowledge*, *work hard*, *assume leadership*, and *hold one's own*. The effect sizes of these differences are interpreted as small to medium ([Cohen, 1988](#)).

To examine differences in mean levels of tactic use between the research institute and the three private business firms, independent samples *t* tests were conducted. Tactic use was consistently greater in the three private firms than in the research institute, with differences on all tactic composites (*t* ranging from 4.26 to 4.95,  $p < .05$ ) and 23 out of the 26 tactic scales reaching statistical significance (*t* ranging from 2.19 to 7.37,  $p < .05$ ). All three tactic composites showed effect sizes that ranged from medium to large (Cohen's *d* from .53 to .72). The 23 tactic scales that showed significantly greater use in the private business firms had effect sizes in the range from small to large (Cohen's *d* in the range from .27 to .84), with the two largest effect sizes on *socialize selectively* ( $d = .84$ ) and *impress others* ( $d = .81$ ). The three tactic scales that did not show greater use in private business were *help others*, *conform*, and *obtain education or knowledge*, with *conform* showing a significantly higher use in the research institute ( $t = 3.17$ ,  $p < .05$ ,  $d = .36$ ).

### 3.3. Associations between tactics and personality

As shown in Table 3, there were coherent links between hierarchy negotiation tactics and the NEO-FFI personality factors. Deception/Manipulation showed moderate negative correlations with Agreeableness, and the same was true for the corresponding tactics. Moreover, Deception/Manipulation and the corresponding tactics correlated consistently negatively with Conscientiousness. In addition, Deception/Manipulation and the tactics *deceptive self-promotion* and *derogate others* showed small positive correlations with Neuroticism. The Social Display/Networking composite and most corresponding tactic scales showed moderate positive correlations with Extraversion, and small correlations with Conscientiousness and Openness to Experience. The Social Display/Networking tactic scales *help others*, *cultivate friendships*, and *display positive characteristics* correlated positively with Agreeableness, whereas the tactics *attract opposite sex*, *enhance appearance*, and *display athleticism* showed negative correlations. The Industriousness/Knowledge composite showed significant correlations with all five personality traits. This composite and most of its corresponding scales correlated positively with Extraversion, Conscientiousness and Openness to Experience, and negatively with Agreeableness. Neuroticism correlated negatively with Industriousness/Knowledge and two of its scales.

### 3.4. Associations between tactics and demographic/criterion variables

In Table 4, correlations between tactics and various demographic and success-related variables are shown. Age correlated negatively with all three tactic composites, with most of the tactic scales, and with the all-tactics total composite score. As expected, education showed moderate positive correlations with the Industriousness/Knowledge composite and with tactics related to knowledge. Education also showed positive correlations with Deception/Manipulation. Salary correlated positively with both Deception/Manipulation and Industriousness/Knowledge and particularly strongly with the tactic *assume leadership*. Salary had its second largest correlation with the tactic *conform*, in negative direction. Of the three tactic composites, Industriousness/Knowledge showed the strongest relation with perceived work success. Both Social Display/Networking and Industriousness/Knowledge correlated positively with life satisfaction, whereas Deception/Manipulation showed a negative correlation.



Table 3  
Correlations between hierarchy negotiation tactics and personality traits

Hierarchy negotiation tactics	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness
<i>I. Deception/Manipulation</i>	.00	-.43*	-.25*	.16*	.09
Use deceptive self-promotion	-.07	-.39*	-.33*	.22*	.07
Derogate others	-.16*	-.46*	-.32*	.24*	-.04
Boast	.02	-.30*	-.14*	.10	.07
Aggress	-.01	-.53*	-.13*	.09	.02
Use sex	.09	-.28*	-.18*	.07	.16*
Exclude others	-.02	-.27*	-.19*	.05	.04
Ingratiate self with superiors	.08	-.17*	-.12*	.08	.09
<i>II. Social Display/Networking</i>	.42*	-.01	.22*	-.07	.20*
Help others	.37*	.29*	.27*	-.17*	.20*
Cultivate friendships	.41*	.17*	.23*	-.15*	.21*
Display pos. social characteristics	.40*	.27*	.27*	-.11	.07
Social participation	.46*	.01	.11	-.12*	.19*
Attract opposite sex	.24*	-.20*	.07	.05	.17*
Enhance appearance	.21*	-.12*	.15*	.06	.16*
Display athleticism	.21*	-.15*	.17*	-.04	.04
<i>III. Industriousness/Knowledge</i>	.28*	-.27*	.25*	-.13*	.22*
Display knowledge	.22*	-.18*	.13*	-.09	.32*
Work hard	.17*	-.29*	.21*	-.03	.15*
Advance professionally	.22*	-.21*	.19*	-.13*	.08
Obtain education or knowledge	.06	-.11	.17*	-.08	.14*
Organize/ strategize	.32*	-.14*	.45*	-.18*	.16*
Assume leadership	.36*	-.27*	.04	-.08	.16*
Hold one's own	.17*	-.22*	.19*	-.07	.11
Conform	-.17*	.10	.03	.21*	-.14*
Enlist aid	.10	-.01	-.07	.12*	.12*
Impress others	.14*	-.32*	.05	.06	.13*
Socialize selectively	.26*	-.26*	.03	-.11*	.14*
Use relatives	.10	-.20*	-.01	.09	.03
All-tactic total	.30*	-.27*	.10	.01	.22*

Note.  $N = 301$ .

\*  $p < .05$ .

### 3.5. Associations between tactics and values

Table 5 shows the correlations between tactics and values. Valuing power was significantly and positively correlated with all tactic composites and scales, except for the tactics *help others*, *cultivate friendships*, *display positive social characteristics*, *conform*, and *enlist aid*. The strongest correlations were with the tactics *assume leadership*, *impress others*, and *socialize selectively*. In addition, there was a moderate correlation between the value power and the all-tactics composite. Valuing family was positively correlated with social display and networking. The value health was positively related to social display and networking, and negatively correlated to deception and manipulation. Valuing pleasure was clearly related with display and networking tactics. Valuing pleasure was also positively correlated with the Deception/Manipulation and Industriousness/Knowledge composites and with the all-tactics total composite.

Table 4  
Correlations between hierarchy negotiation tactics, age and success-related variables

Hierarchy negotiation tactics	Age	Education	Salary	Perceived work success	Life satisfaction
<i>I. Deception/Manipulation</i>	-.19*	.17*	.20*	.12*	-.13*
Use deceptive self-promotion	-.14*	.15*	.21*	.08	-.17*
Derogate others	-.08	.11*	.15*	.03	-.10
Boast	-.18*	.12*	.13*	.13*	-.07
Aggress	-.03	.11	.22*	.06	-.09
Use sex	-.24*	.10	.13*	.10	-.09
Exclude others	-.03	.14*	.19*	.13*	-.09
Ingratiate self with superiors	-.28*	.17*	.07	.11	-.07
<i>II. Social Display/Networking</i>	-.19*	-.01	-.02	.07	.15*
Help others	-.12*	-.10	-.11	.06	.19*
Cultivate friendships	-.19*	-.07	-.11*	.04	.19*
Display pos. social characteristics	-.23*	-.15*	-.16*	.06	.10
Social participation	-.11	.01	.03	.12*	.20*
Attract opposite sex	-.15*	.01	.06	.02	.01
Enhance appearance	-.16*	.02	.00	.04	.01
Display athleticism	-.11	.12*	.04	.03	.12*
<i>III. Industriousness/Knowledge</i>	-.23*	.44*	.21*	.24*	.13*
Display knowledge	-.20*	.47*	.22*	.22*	.14*
Work hard	-.19*	.22*	.23*	.24*	.02
Advance professionally	-.33*	.26*	.04	.11	.09
Obtain education or knowledge	-.23*	.44*	-.01	.09	.05
Organize/ strategize	-.11	.19*	.07	.18*	.22*
Assume leadership	-.09	.36*	.42*	.29*	.11
Hold one's own	.01	.18*	.18*	.15*	.13*
Conform	-.04	-.13*	-.33*	-.16*	-.12*
Enlist aid	-.22*	.03	-.02	.07	.01
Impress others	-.30*	.27*	.25*	.25*	-.01
Socialize selectively	-.29*	.23*	.21*	.16*	.09
Use relatives	-.11	.09	.09	.08	.04
All-tactic total	-.27*	.24*	.15*	.17*	.06

Note.  $N = 301$ .

\*  $p < .05$ .

### 3.6. Associations between demographic/criterion variables

Table 6 shows the inter-correlations between the various demographic and effectiveness-related variables. Male gender was associated with working in the private business sector, having a longer education, and earning a higher salary. The participants working at the research institute tended to be older and to have lower incomes. Finally, salary correlated positively with education as well as with perceived work success.

### 3.7. Prediction of salary from personality traits and tactics

To examine the effects of personality traits and tactics use on salary, a series of stepwise hierarchical regression analyses was computed (Table 7, total sample). Gender, years of work experience, and type of organization were forced into the equation in the first block. Person-

Table 5  
Correlations between hierarchy negotiation tactics and values

Hierarchy negotiation tactics	Family	Health	Pleasure	Private economy	Power
<i>I. Deception/Manipulation</i>	-.01	-.13*	.14*	.05	.34*
Use deceptive self-promotion	-.02	-.11	.11	.02	.25*
Derogate others	-.05	-.11*	.06	.03	.22*
Boast	.01	-.04	.12*	.02	.24*
Aggress	.03	-.13*	.09	.03	.32*
Use sex	-.07	-.08	.15*	.03	.26*
Exclude others	.00	-.13*	.06	.08	.22*
Ingratiate self with superiors	.04	-.11	.10	.02	.27*
<i>II. Social Display/Networking</i>	.13*	.11*	.34*	.14*	.20*
Help others	.11	.14*	.25*	.06	-.05
Cultivate friendships	.13*	.13*	.25*	.06	.01
Display pos. social characteristics	.12*	.14*	.27*	.09	.04
Social participation	.08	.04	.23*	.09	.26*
Attract opposite sex	.04	.02	.33*	.13*	.28*
Enhance appearance	.04	.01	.26*	.19*	.21*
Display athleticism	.18*	.17*	.18*	.07	.15*
<i>III. Industriousness/Knowledge</i>	.10	.04	.12*	.02	.42*
Display knowledge	.08	.04	.12*	-.04	.35*
Work hard	.03	-.05	.13*	.02	.35*
Advance professionally	.10	.07	.10	.02	.29*
Obtain education or knowledge	.09	.12*	.01	-.06	.15*
Organize/ strategize	.14*	.09	.11	.13*	.31*
Assume leadership	.03	-.05	.12*	.05	.47*
Hold one's own	.03	-.03	.02	-.03	.27*
Conform	.05	.10	-.03	.01	-.05
Enlist aid	.11	.10	.22*	.01	.02
Impress others	.04	-.04	.20*	.14*	.41*
Socialize selectively	.03	-.02	.16*	.09	.40*
Use relatives	.06	.01	.13*	.13*	.21*
All-tactics total	.10	.03	.25*	.09	.40*

Note.  $N = 301$ .

\*  $p < .05$ .

ality traits were entered in a stepwise procedure in the second block ( $p$  of entry was .05), and tactic composites were entered stepwise in the third block. Gender, years of work experience, and type of organization together predicted 39% of the variance of salary. None of the five personality traits were entered into the regression equation in the second block. In the third block, two of the three tactic composites were entered, together explaining an additional 5% of the variance of annual salary, with Industriousness/Knowledge having a positive effect on salary and Social Display/Networking having a negative effect. The third tactic composite, Deception/Manipulation, did not contribute significantly to predicting salary.

Since type of organization contributed the most to predicting salary, and public research institutions and private businesses constitute quite different work environments, the regression analysis procedure was repeated for the two types of organizations separately (Table 7). In business settings the results roughly corresponded to the results of the total sample, except that one additional variable, namely Extraversion, also contributed significantly and posi-

Table 6

Correlations among demographic variables and indices of effectiveness

	Organization <sup>b</sup>	Age	Years of work experience	Education	Salary	Perceived work success	Life satisfaction
Gender <sup>a</sup>	.25*	.01	.02	-.20*	-.42*	-.22*	-.05
Organization <sup>b</sup>	—	.38*	.36*	-.13*	-.47*	-.24*	-.08
Age		—	.91*	-.03	.15*	-.00	-.01
Years of work experience			—	-.21*	.10	-.05	-.09
Education				—	.35*	.20*	.12*
Salary					—	.31*	.11*
Perceived work success						—	.29*
Life satisfaction							—

Note.  $N = 301$ .

<sup>a</sup> Men = 0; women = 1.

<sup>b</sup> Private business = 0; Research institute = 1.

\*  $p < .05$ .

Table 7

Summary of stepwise hierarchical multiple regression of salary on personality and tactic composites (analyses for total sample and for organizations separately)

Variable	Total sample			Private business			Research institute		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
<b>Step 1</b>									
Gender (0 = men, 1 = women)	-.75	.13	-.26*	-.88	.17	-.32*	-.43	.20	-.20*
Years of work experience	.05	.01	.32*	.07	.01	.41*	.02	.01	.21*
Organization (0 = private business, 1 = research institute)	-1.60	.16	-.51*	—	—	—	—	—	—
<b>Step 2</b>									
Extraversion	—	—	—	.45	.17	.17*	—	—	—
Agreeableness	—	—	—	-.28	.20	-.09	—	—	—
Conscientiousness	—	—	—	—	—	—	—	—	—
Neuroticism	—	—	—	—	—	—	—	—	—
Openness to Experience	—	—	—	—	—	—	—	—	—
<b>Step 3</b>									
Industriousness/Knowledge	.42	.09	.25*	.33	.13	.18*	.46	.11	.46*
Social Display/Networking	-.34	.08	-.21*	-.38	.11	-.24*	-.42	.11	-.38*
Deception/Manipulation	—	—	—	—	—	—	—	—	—

Note. Total sample:  $R^2 = .39^*$  for Step 1;  $\Delta R^2 = .00$  for Step 2;  $\Delta R^2 = .05^*$  for Step 3.  $R^2$  adj. Total equation: .43\*.  $F, p$  total: 46.212\*.  $N = 307$ . Private business:  $R^2 = .29^*$  for Step 1;  $\Delta R^2 = .03^*$  for Step 2;  $\Delta R^2 = .04^*$  for Step 3.  $R^2$  adj. Total equation: .35\*.  $F, p$  total: 19.510\*.  $N = 214$ . Research institute:  $R^2 = .10^*$  for Step 1;  $\Delta R^2 = .00$  for Step 2;  $\Delta R^2 = .20^*$  for Step 3.  $R^2$  adj. Total equation: .26\*.  $F, p$  total: 8.783\*.  $N = 90$ .

\*  $p < .05$ .

tively to predicting variance of salary. In research settings, the same variables as in the total sample contributed significantly to predicting variance of salary. Industriousness/Knowledge and Social Display/Networking, however, achieved higher standardized  $\beta$ -values in research settings than in both business settings and in the total sample.

Additional regression analyses with interaction terms were conducted to test whether organization type moderated the effects of personality traits and tactics. Gender, years of work experience, and type of organization were forced into the equation in the first block. Personality trait variables and tactic composites were centered and forced into the equa-

tion in the second and third block, respectively. Interaction terms were computed from the centered variables (see Aiken & West, 1991) and entered in a stepwise procedure in the fourth block ( $p$  of entry was .05). The results indicated that none of the five personality by organization interaction terms nor any of the three tactic composite by organization interaction terms significantly predicted salary.

#### 4. Discussion

The first goal of the present research study was to find out whether the factor structure of the tactics of hierarchy negotiation identified by Kyl-Heku and Buss (1996) would be replicated in a sample of experienced professionals in a different country in specific occupational settings. The results largely replicated the three largest factors: Deception/Manipulation, Social Display/Networking, and Industriousness/Knowledge. This suggests that three major strategies of hierarchy negotiation show some level of robustness across cultures and contexts. In contrast, the two small factors in Kyl-Heku and Buss (1996), Aid Accrual and Autonomy, were not reproduced in the present study. The three major strategies tap important themes in human interactions with regard to status assertion: self-enhancement and active undermining of rivals, building alliances and social networks, and working hard and displaying the results.

A second goal was to investigate gender differences and the influence of organizational context on the use of tactics of hierarchy negotiation. Men were significantly more likely than women to use all of the tactics subsumed by the Deception/Manipulation factor—using deceptive self-promotion, derogating others, boasting, aggressing, using sex, excluding others, and ingratiating themselves with superiors. Men were also more likely than women to report socializing selectively, working hard, displaying their knowledge, trying to impress others, displaying athleticism, holding one's own, and—most significantly—assuming leadership. Women were more likely to help others, cultivate friendships, display positive social characteristics, and enhance their physical appearance as tactics for getting ahead—all of which loaded on the Social Display/Networking factor. Women also reported using the tactic *conform* more often than men. The findings suggest that although men and women do not differ substantially in the total effort that they allocate to getting ahead in the workplace, they do differ in the tactics that they deploy. An individual's position in the status hierarchy might influence his or her available repertoire of tactics, and this can partly explain the gender differences in tactic use, since there are more men than women in high positions in many organizational hierarchies. In addition, it is presumably more consistent with male than female role expectations to admit using deceptive, coercive, and achievement-oriented tactics rather than tactics of social display and networking. The results show that the tactics women report using more frequently (Social Display/Networking) are negatively associated with salary (see Table 7). This might be one reason, among others, why women obtain lower salaries than men. Women apparently use tactics that may actually impede their upward mobility in business and research settings.

With respect to organizational context, the findings showed that professionals in private business firms used nearly all tactics more extensively, with the exception of tactics related to submissiveness and altruism. There are at least two possible explanations for this finding. The private business sector might require that employees display more active strategies for getting ahead than the public sector does. Alternatively, the private business sector might attract people that are motivated to use these strategies.

A third goal was to examine the associations between major personality variables and tactics use. At the factor level, the results of the current study corresponded fairly well with the results reported by [Kyl-Heku and Buss \(1996\)](#). In both studies, Deception/Manipulation was significantly associated with low agreeableness and low Conscientiousness; Social Display/Networking was associated with high Extraversion or Surgency; and Industriousness/Knowledge was associated with high Extraversion or Surgency, high Conscientiousness, high Openness, and low Neuroticism. Overall, these findings show that personality traits are important predictors of choice and intensity of tactics use, and it seems that persons are influenced by their individual tendencies in the way that they try to attain life goals, such as getting ahead in hierarchies. One additional finding deserves attention here, namely, the relationship between Social Display/Networking and Agreeableness. On the composite level, Social Display/Networking was uncorrelated with Agreeableness. At the level of tactic scales, *help others*, *cultivate friendships*, and *display positive characteristics* correlated positively with Agreeableness, whereas the tactics *attract opposite sex*, *enhance appearance*, and *display athleticism* showed negative correlations. This suggests that persons high in Agreeableness are engaged in the friendship-related social network activities but make less use of opportunistic social display tactics.

A fourth goal was to explore the relationship between major life values and the use of tactics. There were clear associations between valuing pleasure and use of Social Display/Networking tactics and between valuing power and using more tactics from all three factors. The pattern of correlations between tactics use and valuing power suggests that tactics indeed reflect the theme of getting ahead in a hierarchy and support the construct validity of the questionnaire. Five tactic scales were not correlated with the value power; *help others*, *cultivate friendships*, *display positive social characteristic*, *conform*, and *enlist aid*. Together these tactics represent an altruistic, prosocial orientation towards others rather than an instrumental orientation and perhaps make up a cluster of tactics more oriented towards the goal of “getting along” ([Hogan, 1983](#)).

A fifth goal was to examine how tactics of hierarchy negotiation relate to important life outcomes, whether tactics use predict variance of salary over and above the effects of personality traits, and whether organizational setting moderated the effects of tactics use and personality on salary. Both Deception/Manipulation and Industriousness/Knowledge were significantly and positively correlated with salary (see [Table 4](#)). As income is related to position in the organization’s status hierarchy, these results suggest that tactics use is indeed related to a person’s position in the hierarchy. Interestingly, Industriousness/Knowledge correlated positively with both perceived work success and life satisfaction, whereas Deception/Manipulation correlated positively with perceived work success but negatively with life satisfaction. One can speculate that using Deception/Manipulation, although potentially effective in obtaining higher status, is also related to higher stress, and consequently, lower life satisfaction.

Concerning prediction of salary, none of the five personality traits contributed significantly after controlling for gender, years of work experience and organizational context (see [Table 7](#)). Two tactic composites contributed significantly to the prediction of salary. Industriousness/Knowledge is the most powerful predictor of salary among the tactics; this finding replicates [Kyl-Heku and Buss \(1996\)](#). Ironically, the use of tactics of social display and networking seems to contribute negatively to income. Furthermore, it is interesting to note that it seems that Machiavellianism does not pay; after controlling for the other variables, use of tactics of deception and manipulation does not predict salary. When it comes to tactics predicting salary over and above personality traits, this could be due to tactics being more context-specific and because they capture the acts

involved in gaining position in a more fine-grained and proximal way than the broad Big Five personality traits do.

When examining the differences between the two organizations, Industriousness/Knowledge and Social Display/Networking had a somewhat higher predictive effect on salary in research settings, while Extraversion contributed somewhat to explaining variance in salary in business firms. The interaction analysis did not, however, find any moderating effects of organizational context on the effect of tactics use on salary.

The current study has several limitations. First, the tactics of hierarchy negotiation were all assessed through self-report. Future research could use other data sources, such as observer reports, to assess the tactics that individuals use to get ahead. Second, the current study was conducted within a single culture. Future research could fruitfully explore the generality of the findings obtained here in a wider diversity of cultures. Third, the current study explored tactics of hierarchy negotiation at a single point in time. Longitudinal research designs might be most effective in determining whether tactics used at one point in time predict important status and resource outcomes later in life. Lastly, additional measures of status and rank, such as actual or expected job promotion, formal position in the organization hierarchy, or peer rating of status and influence in the group could be included.

#### *4.1. Conclusions and directions for future research*

Despite these limitations, the current study makes several contributions. It establishes the robustness of three major factors of hierarchy negotiation. It suggests differences between men and women in the tactics that they use to get ahead. It showed coherent links between tactics of hierarchy negotiation, personality traits, and life values. And it illustrates that certain tactics of hierarchy negotiation predict important life outcomes, such as salary, above and beyond the effects of gender, years of work experience, organizational context, and personality traits. Given the importance of social hierarchies and the apparent effort that individuals allocate to it, these contributions represent just a few modest steps toward a more comprehensive scientific understanding of the psychology of getting ahead.

Further research could profitably explore a more diverse array of social groups and settings. One can readily imagine that physical formidability would be an effective tactic for getting ahead in the context of a motorcycle gang but not at all effective in an academic hierarchy. Another direction could explore tactic effectiveness depending on the target to whom the tactic is directed. Ingratiating oneself with superiors, such as flattering the boss, might be effective when used with a superior who is high on narcissism but ineffective when used with a superior who is low on narcissism. In additional context and setting differences, another interesting research direction could explore the effectiveness of tactic usage in dependency on the personal qualities and assets of the individual deploying the tactic. Another critical research direction pertains to effort allocation. All individuals have finite time and energy budgets. Time and energy allocated to one adaptive problem, such as getting ahead, usually takes time and energy away from efforts on other adaptive problems, such as finding a mate, investing in children, or helping one's kin. Different individuals can be expected to make different trade-offs, shifting allocation to or away from the adaptive problem of hierarchy negotiation depending on life-stage and personal circumstances. Young males who lack a mate, for example, might be predicted to devote a larger percentage of effort to hierarchy negotiation, given the premium that women place on the qualities of status and resources in their mate preferences

(Buss, 1989, 2003). The budget allocation method developed by Li, Bailey, Kenrick, and Linsenmeier (2002) could be used to test predictions of this sort.

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## Appendix A. Internal consistency of hierarchy negotiation tactic scales

### A.1. Scale 1: Work hard ( $\alpha=.75$ )

- Put in extra time and effort
- Be able to handle everything
- Work hard
- Outperform others
- Become a workaholic
- Do a better job than others

### A.2. Scale 2: Organize/strategize ( $\alpha=.74$ )

- Participate in area in which you perform well
- Pursue key opportunities that come up
- Prioritize goals
- Manage time efficiently
- Plan for what the future might bring
- Have money

### A.3. Scale 3: Socialize selectively ( $\alpha=.82$ )

- Know the “right” people
- Associate with important, popular or successful people
- Establish/use contacts (e.g., to get a job)
- Attend certain social events where certain “key” people will be

### A.4. Scale 4: Social participation ( $\alpha=.68$ )

- Get involved in a lot of activities
- Throw a great party
- Be friends with a lot of people
- Join a social group, club, team or political organization

### A.5. Scale 5: Cultivate friendships ( $\alpha=.76$ )

- Be a good listener
- Maintain good, close friendships
- Consistently contact others
- Stick up for friends
- Be highly thought of by friends of both sexes

### A.6. Scale 6: Display positive social characteristics ( $\alpha=.72$ )

- Be caring



- Act friendly
- Be courteous and polite
- Smile
- Get praise from others

A.7. Scale 7: Help others ( $\alpha=.75$ )

- Be very helpful
- Be generous to others
- Do things for people without being asked
- Help out whenever asked

A.8. Scale 8: Enlist aid ( $\alpha=.45$ )

- Get relatives to help
- Act helpless
- Ask for help or support

A.9. Scale 9: Attract opposite sex ( $\alpha=.83$ )

- Try to be attractive to the opposite sex
- Be seen with members of opposite sex
- Try to be more attractive to the opposite sex

A.10. Scale 10: Use sex ( $\alpha=.39$ )

- Have sex to get ahead
- Flirt with someone to get something
- Sleep with boss or co-worker

A.11. Scale 11: Enhance appearance ( $\alpha=.83$ )

- Dress better than your peers
- Enhance or improve appearance
- Wear fashionable clothes
- Try to look your best physically
- Change hairstyle or style of dress

A.12. Scale 12: Display athleticism ( $\alpha=.79$ )

- Exercise or work out
- Display athletic ability
- Perform well at sports

A.13. Scale 13: Aggress ( $\alpha=.59$ )

- Threaten a competitor
- Be aggressive
- Instigate a fight

A.14. Scale 14: Derogate others ( $\alpha=.77$ )

- Blame someone else for your mistake
- Put down others
- Criticize others
- Gossip about others

- Exaggerate someone's faults when talking with others

*A.15. Scale 15: Exclude others ( $\alpha=.46$ )*

- Exclude others from some activity
- Prevent others from joining your group

*A.16. Scale 16: Assume leadership ( $\alpha=.78$ )*

- Make decisions for the group
- Run for office in a social group or organization or team
- Influence decision makers
- Dominate the conversation

*A.17. Scale 17: Impress others ( $\alpha=.70$ )*

- Work hard to impress someone
- Buy the newest electronics gadget<sup>1</sup>
- Use impressive language
- Drive an expensive car
- Win approval from others
- Try to impress employers

*A.18. Scale 18: Boast ( $\alpha=.71$ )*

- Boast about yourself
- Boast about your intelligence
- Pretend to have the same interests as others
- Act impressed with others

*A.19. Scale 19: Use deceptive self-promotion ( $\alpha=.84$ )*

- Stretch the truth
- Manipulate others
- Cheat on something
- Tell a white lie about self in order to sound better
- Misrepresent qualifications
- Steal an idea
- Exaggerate your present status
- Tamper with someone else's work to make yours look better

*A.20. Scale 20: Ingratiate self with superiors ( $\alpha=.79$ )*

- Flatter superiors
- Butter up the boss

*A.21. Scale 21: Conform ( $\alpha=.38$ )*

- Go along with the group, not being singled out
- Do anything the boss wants
- Conform to the beliefs of others

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<sup>1</sup> The original item formulation was 'get a good VCR or stereo.'

A.22. Scale 22: *Hold one's own* ( $\alpha=.46$ )

- Stick up for what you feel is right, despite opposition
- Be persistent in trying to get what you want
- Do not let someone sway your position

A.23. Scale 23: *Advance professionally* ( $\alpha=.75$ )

- Get a raise
- Obtain a particular job
- Get a promotion
- Quit a job to take one that pays more
- Learn specific information necessary for something

A.24. Scale 24: *Obtain education or knowledge* ( $\alpha=.84$ )

- Get a good education
- Go to a good school
- Get a college degree

A.25. Scale 25: *Display knowledge* ( $\alpha=.61$ )

- Do well academically
- Act knowledgeable or smart
- Use large vocabulary
- Ask questions about things

A.26. Scale 26: *Use relatives* ( $\alpha=.58$ )

- Talk about your family background
- Spend family's money

*Note.* The following items could not be placed: Not being friends with someone unimportant; Settle the disputes of others; Be indifferent to peer pressure; Pay someone to do work for you.  $N=301$ .

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