Occupational Prestige in South Korea: Stability and Variations*

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This study examined stability and variations in occupational prestige in South Korea. We investigated both the differentiation and incorporation processes of occupational prestige evaluation using the Korean Social Stratification Survey 2022 and obtained several findings. First, prestige rank correlations for the 15 common occupations obtained from five surveys conducted between 1990 and 2021 were extremely high, showing strong stability in occupational prestige ranks. Second, prestige score rating differed by individuals' socioeconomic status (SES) and social network. High-SES people tend to rate occupational prestige higher than low-SES individuals but this differential disappeared after controlling for other factors, and people evaluated an occupation more highly if they knew a person in that occupation personally. Third, the effects of SES and social network on prestige score evaluation depended on occupational prestige ranks. While the difference in prestige ratings between college graduates and non-college graduates was greater for high-ranked occupations than low-ranked ones, the positive effect of having a friend in an occupation on prestige rating was greater for low-ranked occupations than high-ranked ones, suggesting that social network had a buffering effect on occupational prestige evaluation. This study showed that occupational prestige in South Korea was characterized by both between-group variations and temporal stability.

Keywords: occupational prestige, social network, buffering effect, between-group variations, temporal stability

Introduction

This study examines changes and variations in occupational prestige in South Korea (hereafter Korea). Occupational prestige refers to the collective consciousness attached to occupations in a social hierarchy system (Duncan 1961a, 1961b; Treiman 1977), and it has been investigated by stratification researchers from two different angles. First, variations in occupational prestige have attracted the attention of stratification scholars, and the invariance in occupational prestige ranks across time and space, the so-called Treiman constant (Hout and DiPrete 2006), has been found almost universally (Kraus, Schild and Hodge 1978; Kye and Hwang 2017; Treiman 1977; Zhou 2005). Because occupational prestige is indicative of the existing consensus about hierarchical structure in a given society, the commonality in occupational prestige also suggests similar hierarchical structures across time and space. Second, occupational prestige has been regarded as an indicator of social status. Max Weber identified multiple dimensions of the determinants of inequality, such as economic resources, political power, and social status (Weber 1946). Because occupational prestige is closely associated with social status distinctive from economic and political power, it has been used to construct indices of social status (Blau and Duncan 1967; Hauser and Warren 1997; Nakao and Treas 1994; Yoo and Kim 2006). Commonality in occupational prestige also enables the development of internationally comparable socioeconomic status indices (Ganzeboom and Treiman 1996).

While the current study is aligned with the first perspective, it examines occupational prestige from a different viewpoint. We focus on how occupational prestige ratings depend on raters' characteristics instead of commonality. While variations in occupational prestige are linked to raters' characteristics as well as occupational factors, studies have mostly focused on differentiation among occupations, which has been found consistent over time and across societies, and tended to ignore differential evaluation processes among raters. Several recent studies have renewed this interest (Lynn and Ellerbach 2017; Valentino 2021). Therefore, in this study, we investigate both stability and variations in occupational prestige in Korea, focusing on how socioeconomic status and social network affect one's evaluation of occupational prestige.

Review of Literature

As discussed above, a main theme in the study of occupational prestige is invariance. Occupational prestige ranks did not vary much over time and across societies, nor did raters' occupation, ethnicity, region, and sex affect them (Treiman 1977). Studies have confirmed invariance in occupational prestige ranks in many societies such as in Israel (Kraus, Schild and Hodge 1978), the United States (Nakao and Treas 1994), urban China (Lin and Xie 1988), Canada (Goyder 2005), and Korea (Hong 1983; Kye and Hwang 2017). The universality of occupational prestige ranking was called the Treiman constant, regarded as one of the most salient empirical generalizations established in contemporary stratification research (Hout and DiPrete 2006). Invariance in occupational prestige was attributed to similarities in functional imperative, role differentiation, and the differential allocation of power and privilege attached to occupations in all societies (Treiman 1977: 5).

Although the Treiman constant was a remarkable finding, we must still consider the possibility of heterogeneity in prestige ratings due to raters' attributes. Zhou (2005) distinguished two mechanisms to determine occupational prestige rating: differentiation and incorporation. The differentiation process refers to variations in how people recognize the prestige of occupations based on occupational characteristics. Invariance in occupational prestige shows that most societies share a common differentiation process (e.g., role differentiation). For example, most societies rate medical doctors highly because their role is universally considered important. However, occupational prestige was not automatically determined by differential roles attached to occupations but must rather be socially recognized (Zhou 2005: 97). Meanwhile, the incorporation process may depend on respondents' characteristics, although empirical evidence has been mixed. Balkwell, Bates and Garbin (1980) showed extremely high pairwise correlations in occupational prestige ratings between individuals, and Kraus, Schild and Hodge (1978) showed the existence of a common criterion for evaluating occupational prestige shared by different subgroups in the Israeli population. In contrast, Guppy and Goyder (1984) showed high degree of heterogeneity in occupational prestige evaluation among low-socioeconomic status (SES) groups in the United States, questioning the consensus in prestige assessment. Goyder (2005) also showed that in Canada, people who had completed postsecondary education gave lower prestige scores on average than those with lower educational attainment, and Kye and

Hwang (2017) found a similar pattern in Korea. Zhou (2005) also showed that SES gradients also depend on occupational characteristics. For example, differences in occupational prestige evaluations between college graduates and non-college graduates are larger for occupations with high authority than those with low authority. These findings suggest that the incorporation process depends on raters' SES, leading to heterogeneity in prestige ratings. Nevertheless, we must note that a strong commonality exists in prestige ranks despite differences in prestige scores by subgroups. In other words, respondents recognize prestige distances between occupations differently depending on their SES, but they are similar in sorting occupational prestige. Recent studies have examined the latent structure of occupational prestige ratings (Lynn and Ellberbach 2017; Valentino 2021). These studies showed that multiple, instead of single, criteria for occupational prestige evaluations exist and raters' characteristics are associated with the choice of criteria. For example, better educated individuals tend to make sharper distinctions between training-intensive occupations and the others than their less educated counterparts (Lynn and Ellberbach 2017).

One missing piece in the literature is the association between raters' social networks and prestige ratings. For example, one may highly evaluate an occupation if they personally know someone who holds that occupation. One's evaluation may also depend on how close their relationship is to this individual. Simply put, an individual's social network may affect their incorporation process. Positive social network effects on various socioeconomic outcomes, such as the job search, have been widely found (Lin and Dumin 1986; Kim 2020), suggesting that knowing someone in a given occupation leads to a positive evaluation of this occupation. However, social networks also bring burdens as well as benefits (Kim 2016). In this sense, knowing someone in an occupation may mean that he or she knows more negative information about this occupation, leading to lower prestige ratings. In addition, the association between social networks and prestige rating also suggests that changes in occupational structure may lead to changes in prestige rating because people become more connected with growing occupations. Temporal changes in occupational prestige, if any, may reflect this change. Although this aspect may be critical in occupational prestige rating, it has not been examined extensively. The current study thus attempts to fill this gap in the literature.

Research Questions

This study seeks to answer the following research questions. First, how did occupational prestige ranks change in Korea? By analyzing changes in the prestige rankings of the 15 commonly examined occupational titles in the last 30 years or so, we examine the stability of occupational prestige rankings in Korea over time.

The second set of questions pertains to the differential incorporation process. How do raters' SES and social networks affect occupational prestige ratings? Do high-SES people on average assign different prestige scores than low-SES individuals? How does the fact that a family member or relative (hereafter "relative"), friend, or acquaintance holds a certain occupation affect one's prestige rating for that occupation? Finally, does the effect of SES and network on prestige ratings depend on occupational prestige rankings? For example, does the effect of knowing a high-status occupation holder on the prestige rating of that occupation differ from that of knowing a low-status occupation holder? Scholars have examined the stability of occupational prestige and the differential incorporation process by SES but no study so far has examined the association between social network and occupational prestige. Hence, our analysis will enrich the understanding of the incorporation process in occupational prestige evaluations.

Data and Methods

Online Survey Data Based on the RDD Sample with Face-to-Face Supplement

We used the Korean Social Stratification Survey (KSSS) conducted by the Jeonbuk National University Social Science Research Institute and Gallup Korea between January 7 and 25, 2022 and face-to-face supplements of farmers and fishers between November 2 and 8, 2022. The main survey was conducted online and therefore had the usual weaknesses such as limited coverage and nonrandom selection into sample (Biemer and Lyberg 2003; Groves, Fowler, Couper, Lepkowski, Singer and Tourangeau 2009; Han 2012). To minimize these problems, the KSSS implemented new procedures. Most importantly, Gallup Korea constructed a quasi-sampling frame by using a random digit dialing (RDD) method instead of relying on volunteer panels. From a total of 42,413 RDD calls, 7,266 responded to the recruitment

interviews (17.1% response rate), which constituted the quasi-sampling frame. Using this frame, 3,107 individuals were randomly selected and contacted for the KSSS, from which 2,030 were interviewed (65.3% response rate). This shows that constructing a sampling frame is much more challenging than interviewing individuals in the sampling frame. Consequently, we may estimate that the overall response rate was 11.2% (17.1% × 65.3%) (Seol, Lee, Jang and Shim 2022). Although this response rate was not sufficiently high, the sampling design was arguably superior to typical online surveys. Whereas most online surveys choose respondent samples from volunteer panels that cannot represent the population or whose representativeness cannot be assessed, the sampling frame in KSSS was constructed using the RDD method. While a low response rate remained a concern, this method avoided the arbitrary sampling used in most online surveys.

A comparison with the 2020 Korean census and other representative samples shows that, to some degree, the KSSS sample differs from the Korean population in terms of region, age, sex, education, subjective class, household income, household size, residence type, and political ideology (Seol, Lee, Jang and Shim 2022). This is the case because the followings are more likely to participate in the KSSS than others: Seoul residents, young people, men, college educated, high class, high income, large household, apartment residents, and liberals.[1] This is consistent with evidence that online surveys overrepresent highly educated and high-income individuals (Han 2012). The KSSS attempted to apply more rigorous sampling procedures for online surveys, but the result was not fully satisfactory. To address this problem, the KSSS also conducted face-to-face supplementary surveys of farmers and fishers in November 2022. The KSSS selected 10 enumeration districts in rural areas, and interviewed 10 farmers and fishers from each district. Although this was not a completely satisfactory solution, this reduced the representativeness problem to some extent. To minimize this data problem, we applied weights based on region, age, and sex in all analyses presented here.

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[1] We experimented by weighting the data based on the probability of participating in the "quasi-sampling frame" given the initial invitation calls. The results did not differ from the cell weighting probably because we had insufficient information on the determinants of participating in the "quasi-sampling frame." Hence, we reported the results based on simple cell weights using region, age, and sex.

Measures: Occupational Prestige and Covariates

The KSSS included questions on topics relevant to examine inequality and stratification: education, occupation, notions about inequality, social mobility, fairness and welfare, social network, and occupational prestige. The KSSS can be useful in studying the diverse aspects of social inequality and mobility. This study focused on how individual characteristics affect prestige evaluations for different occupations and measured occupational prestige through the following instruction: "The following questions are designed to evaluate social status of occupations in Korea. Please rate each occupation's social status using 0-10 point scale. 0 means very low, 5 means middle, and 10 means very high." A total of 32 occupational titles were used to measure occupational prestige, listed in Tables 4 and 5.

We examined differences in the evaluation of occupational prestige scores according to age (a continuous measure), sex (men and women), marital status (never married, currently married, and divorced and widowed), education (college graduate and others), occupation (professional and managerial occupations and others), household income (high income and others), and social networks. While most measures are straightforward, those for household income and social network must be clarified.

First, household income was measured through the following question: "The Korean government implemented the COVID-19 disaster subsidy program between September and December in 2021. A disaster subsidy of 250,000 Korean won was provided to each individual whose household income was in the lowest 88% of households. Was your family eligible for the subsidy?" Those who answered "No" to this question were classified as high income. The KSSS also has an ordinal measure of household income; however, instead of this measure, we determined to use whether or not respondents received the disaster subsidy to reduce measurement errors. It is well-known that income is difficult to measure accurately for many reasons; people may lie or incorrectly remember their income. Since their receipt of the disaster subsidy was a recent event that attracted substantial public attention, using this metric reduced the risk of recall errors. Because only the top 12% in terms of household income was not eligible for the subsidy, we could use this measure to distinguish high-income individuals from the others. Second, we used three different social network measures reflecting the strength of ties (see Lin and Dumin 1986; Shim and Seol 2010), as in the question: "Do you have a person with the following occupations as family

member and relative, friend, and acquaintance?" The occupation list is the same used to measure prestige. We used this measure to see whether or not knowing someone in an occupation as a relative, friend, and acquaintance affects one's evaluation of this occupation's prestige.

Statistical Model: Random-Effects Model

To examine the association between individual characteristics and occupational prestige evaluation, we used a linear random-effects model. Equations (1) to (4) show the basic estimation models:

$$Prestige\ Score_{pi} = \alpha + \sum b_p \times occupation_p + u_i + e_{pi} \tag{1}$$

$$u_i = \pi_0 + \pi_f female_i + \pi_a age_i + \sum \pi_{mar} \times marital\ status_i +$$
$$\sum \pi_{SES} \times SES_i + \sum \pi_{network} \times network_i + u_{i'} \tag{2}$$

$$u_{i'} \sim N(0,\ \tau^2) \tag{3}$$

$$e_{pi} \sim N(0,\ \sigma^2) \tag{4}$$

(p: occupation to be evaluated, i: rater)

Equation (1) is a model for occupational prestige rating, which has two error components: one for individual-specific random effect (u_i) and individual-occupation-specific error term (e_{pi}). The coefficients for occupation (b_p) capture the difference in mean occupational prestige from the reference occupation. Equation (2) shows variations in individual-specific random effects depending on age, sex, marital status, SES, and social network. As discussed previously, we included three SES variables (education, occupation, and household income) and three social network variables (relative, friend, and acquaintance). The remaining error terms ($u_{i'}$ and e_{pi}) were assumed to be distributed normally with respective variance (τ^2 and σ^2) (equations 3 and 4).

The model presented above assumes homogeneous SES and social network effects on occupational prestige. For example, the difference in prestige rating for highly ranked occupations between college graduates and non-college graduates after controlling for other factors is assumed to be same for lowly ranked occupations. The same homogenous effects are also assumed for social network. This model assumes that the incorporation process differs by SES and social network but these effects do not differ by the evaluated occupations. To test the possibility of heterogeneous effects on prestige rating, we estimate equation (2').

$$u_i = \pi_0 + \pi_f female_i + \pi_a age_i + \sum \pi_{mar} \times marital\ status_i +$$
$$\sum \pi_{SES} \times SES_i + \sum \pi_{SES\_p} \times SES_i \times rank_p +$$
$$\sum \pi_{network} \times network_i + \sum \pi_{network\_p} \times network_i \times rank_p + u_i, \qquad (2')$$

(p: occupation to be evaluated, i: rater)

Equation (2′) allows for SES and social network effects to vary based on occupational prestige rankings. This specification is unconventional because occupational rank is not included as a covariate but included in interaction terms. We used this specification because we want to see how associations between occupational prestige and SES and network vary by occupational rank but it does not force us to include the occupational rank in our model as a covariate. We also considered fully interactive models that include all interactions between occupations and SES and network variables, but this model has too many parameters to interpret. In some sense, our model can be understood as a parsimonious version of a fully interactive model in which occupational dummies for interaction terms were replaced by the occupational rank. By estimating this model, we examine how the incorporation process depends on raters' characteristics and prestige ranks.

Results

Descriptive Analysis

Table 1 shows the summary statistics of the sample. Of the 2,132 respondents, 49.1% are women, and the mean age is 44.8 years. Regarding marital status, 30.7% of the participants have not been married, 59.9% are currently married, and 9.4% are divorced or widowed. In terms of educational attainment and occupation, 51.7% are bachelor's degree holders, and 26.3% have professional or managerial occupations. Finally, 28.2% reported household income higher than the COVID-19 disaster subsidy threshold, which is the top 12%. This shows that our sample overrepresented high-income earners, as discussed in the data section. Although weighted distribution made the population representative in terms of age, sex, and region, household income distribution remained upwardly skewed.

TABLE 1
DESCRIPTIVE STATISTICS*

Variables	Mean or Percent	S.D.
Female	49.1	-
Age	44.8	14.2
Marital Status		
Never married	30.7	-
Currently married	59.9	-
Divorced/Widowed	9.4	-
College Graduate	51.7	-
Professional/Managerial Occupation	26.3	-
HH income High**	28.2	-

Notes: N=2,132.
* Weighted mean and percent are presented.
** Household income is higher than COVID-19 disaster subsidy threshold.

Table 2 presents the descriptive statistics of social network measures, and its figures show the proportion of respondents with relatives, friends, and acquaintances in each occupation. Occupation was sorted by prestige ranks presented in Tables 4 and 5. Overall, respondents were less likely to have relatives, friends, and acquaintances in high- or low-ranking occupations than in middle-ranking ones. For example, while only 4% of respondents have a congressperson and 7% have a janitor as a relative, 32% have a nurse as a relative. This is not always the case, however. Although medical doctor is the third-ranked occupation, the proportion of those who know a medical doctor in their close networks was fairly high. In the low-ranking occupations, a simple laborer is such an example.

TABLE 2
PROPORTION OF HAVING FAMILY, FRIEND, AND ACQUAINTANCE IN EACH
OCCUPATION

Occupational Title	Family	Friend	Acquaintance
Congressperson	0.04	0.10	0.07
Lawyer	0.10	0.16	0.13
Medical Doctor	0.20	0.22	0.19
High-Ranking Officer	0.15	0.14	0.13

Military General	0.03	0.04	0.03
College Professor	0.19	0.24	0.20
Manager, Large Firm	0.27	0.19	0.21
Journalist	0.08	0.15	0.12
Computer Scientist	0.13	0.16	0.15
Manager, Small Firm	0.20	0.18	0.17
School Teacher	0.39	0.40	0.40
Middle Manager	0.26	0.19	0.21
Police Officer	0.20	0.28	0.24
Professional Artist	0.08	0.14	0.12
Clerical Worker	0.18	0.22	0.21
Nurse	0.32	0.32	0.28
Foreman	0.11	0.10	0.09
Social Worker	0.21	0.27	0.26
Librarian	0.03	0.06	0.05
Skilled Worker	0.13	0.11	0.09
Mechanic	0.07	0.13	0.09
Businessperson	0.33	0.33	0.30
Hairdresser	0.09	0.17	0.15
Carpenter	0.06	0.06	0.05
Salesperson	0.14	0.17	0.15
Bus/Truck Driver	0.13	0.13	0.11
Farmer/Fisher	0.24	0.17	0.14
Receptionist	0.07	0.10	0.08
Unskilled Worker	0.18	0.17	0.13
Cleaner	0.06	0.07	0.05
Janitor	0.07	0.06	0.04
Simple Laborer	0.15	0.14	0.12

Note: N=2,132.

Stability in Occupational Prestige

As discussed earlier, occupational prestige is evaluated almost uniformly across time and place (Treiman 1977). Because it is based on power and privilege associated with occupation (Zhou 2005), this commonality suggests that the power and privilege of occupations are invariant across time and place. Table 3 shows the stability of the prestige ranks of the 15 comparable occupations rated in every survey between 1990 and 2022. Each survey examined different sets of occupations, and these 15 occupational titles were found to be comparable. Because the occupational titles in the 2022 KSSS are somewhat different from those in previous surveys, we presented two sets of occupational titles in Table 3. For example, while the 2022 KSSS asked the prestige of lawyers, the prior surveys asked that of judges. Prestige ranks for each occupation between 1990 and 2016 were extracted from a previous study (Kye and Hwang 2017). The results showed a strong stability of prestige rankings in Korea. Correlations of ranks were above 0.9 for all pairs. Correlations between the 2022 KSSS and other years were somewhat lower than those between other years, which may reflect changes in occupational titles. Other than minor changes (e.g., rank drops for college professor and businessperson), occupational ranks remained stable, which is consistent with the Treiman constant thesis.

TABLE 3
PRESTIGE RANKS FOR SELECTED OCCUPATIONS, 1990-2022

Occupational Title (2022)	Occupational Title (1990-2016)	Rank (1990)	Rank (2000)	Rank (2009)	Rank (2016)	Rank (2022)
Lawyer	Judge	1	1	1	1	1
College Professor	College Professor	2	2	2	2	4
Military General	Military General	3	3	3	4	3
High-Ranking Officer	High-Ranking Officer	4	4	4	3	2
Journalist	Journalist	5	5	6	5	5
Clerical Worker	Bank Clerk	6	9	9	9	9
School Teacher	Middle School Teacher	7	6	5	6	7
Businessperson	Businessperson, Electronic Mart	8	8	8	7	11

Manager, Small Firm	Middle Manager, Small Firm	9	7	7	8	6
Policeman	Traffic Police Officer	10	10	10	10	8
Farmer/Fisher	Independent Farmer	11	12	11	12	10
Foreman	Foreman	12	11	12	11	13
Salesperson	Salesperson, Department Store	13	13	13	13	12
Janitor	Janitor	14	14	14	14	14
Simple Laborer	Simple Laborer	15	15	15	15	15

	Rank Order Correlation			
	1990	2000	2009	2016
2000	0.971			
2009	0.968	0.993		
2016	0.971	0.993	0.986	
2022	0.925	0.943	0.946	0.929

Sources: Kye and Hwang (2017) for 1990-2016; KSSS 2022 for 2022 data.

Occupational Prestige Variations by Respondent Characteristics

Table 4 shows the means and standard deviations of occupational prestige. Occupations were sorted by prestige ranks from high to low. The highest-ranked occupation was congressperson, and the lowest one was simple laborer. The difference in mean prestige scores between these two occupations was 5.74, which was greater than the half of range (10 points). The standard deviation of the mean occupational prestige scores was 1.79. As previously discussed, between-rater differences were observed in occupational prestige, which is related with the differential incorporation process. The standard deviations of prestige scores for each occupation ranged from 1.60 (middle manager) to 2.10 (congressperson). There seemed to be an absence of a systematic relation between prestige ranks and standard deviations in prestige although some high-ranked occupations such as congressperson and military general showed greater variations than others, suggesting a stronger disagreement in prestige ratings for high-ranked occupations.

TABLE 4
OCCUPATIONAL PRESTIGE BY EDUCATION, OCCUPATION, AND HOUSEHOLD INCOME

Occupational Title	Overall		College Graduate		Professional/ Managerial		High Household Income	
	Mean	S.D.	No	Yes	No	Yes	No	Yes
Congressperson	8.18	2.10	7.97	8.38	8.10	8.40	8.13	8.30
Lawyer	8.05	1.77	8.00	8.09	8.02	*8.12*	8.03	8.08
Medical Doctor	8.04	1.71	7.95	8.12	7.99	*8.17*	8.01	8.09
High-Ranking Officer	7.52	1.81	7.31	7.70	7.45	7.70	7.49	7.58
Military General	7.42	2.02	7.23	7.60	*7.35*	7.61	7.38	*7.53*
College Professor	7.40	1.73	7.29	7.51	*7.37*	7.51	7.35	*7.55*
Manager, Large Firm	7.13	1.77	7.06	7.20	7.08	7.29	**7.14**	**7.10**
Journalist	6.57	1.84	6.54	6.59	6.53	6.67	6.54	6.63
Computer Scientist	6.28	1.80	6.22	6.33	**6.28**	**6.26**	6.25	6.34
Manager, Small Firm	6.23	1.65	6.19	6.28	6.21	*6.31*	**6.24**	**6.22**
School Teacher	5.97	1.75	5.89	6.05	5.95	6.05	**5.99**	**5.93**
Middle Manager	5.92	1.60	5.89	5.95	5.89	6.01	5.90	*5.97*
Police Officer	5.48	1.73	**5.49**	**5.47**	5.46	5.54	**5.50**	**5.42**
Professional Artist	5.21	1.91	**5.23**	*5.19*	5.24	5.12	5.18	5.27
Clerical Worker	5.20	1.62	5.10	*5.29*	5.18	5.24	5.17	5.26
Nurse	4.86	1.75	4.76	4.94	4.82	4.96	4.85	4.88
Foreman	4.18	1.82	4.13	*4.22*	*4.15*	*4.25*	**4.19**	**4.14**
Social Worker	4.16	1.74	**4.19**	**4.14**	**4.17**	**4.15**	4.14	*4.21*
Librarian	4.13	1.73	4.01	*4.25*	4.09	*4.26*	4.10	*4.22*
Skilled Worker	4.08	1.97	4.00	*4.15*	4.05	*4.16*	4.07	4.10
Mechanic	3.99	1.77	3.95	4.02	3.99	*3.99*	3.98	4.00
Businessperson	3.92	1.74	3.87	3.96	3.89	*4.00*	3.90	3.95
Hairdresser	3.75	1.73	3.73	*3.77*	3.75	*3.75*	3.75	*3.75*
Carpenter	3.71	1.89	3.63	*3.78*	3.69	*3.77*	3.67	*3.83*

Salesperson	3.49	1.70	**3.50**	**3.48**	3.49	3.50	3.46	3.56
Bus/Truck Driver	3.35	1.72	3.35	3.35	3.32	3.41	3.36	*3.31*
Farmer/Fisher	3.31	1.94	3.29	3.33	3.31	3.32	3.30	*3.33*
Receptionist	3.26	1.73	**3.30**	**3.22**	**3.29**	**3.16**	3.27	3.24
Unskilled Worker	3.04	1.83	2.99	3.08	3.04	3.04	3.04	3.03
Cleaner	2.86	1.97	2.79	2.93	2.81	2.99	2.83	2.93
Janitor	2.50	1.82	2.46	2.54	2.50	2.50	2.48	2.54
Simple Laborer	2.44	1.83	**2.45**	**2.43**	2.44	2.44	2.43	2.45
S.D. in Occupation Means	1.79	-	1.75	1.82	1.77	1.84	1.78	1.81

Notes: N = 2,132. Bold marks the different group differences in occupational prestige than the others; Italic marks different prestige sorting than the overall pattern.

Table 4 also shows how differently occupational prestige is evaluated by raters' SES measured by education, occupation, and household income. We observed several interesting patterns. First, SES was positively associated with prestige rating. College graduates, professional and managerial occupation holders, and people with high household income rated most occupation's prestige higher than their low-SES counterparts. The exceptions are marked in boldface. The relation appeared weaker than the others when we used household income as an SES measure, and we can see smaller differences in household income columns than the other two. Second, differences in occupational prestige by SES tended to be larger among high-ranked than low-ranked occupations. For example, whereas the difference in occupation prestige for congressperson between people with a bachelor's degree and others was 0.41, the difference for simple laborer was -0.02. This was reflected in the standard deviation of the mean occupational prestige by SES. The standard deviations for college graduates and professional/managerial occupation holders were larger than those for the others, showing that high-status people tended to favor high-ranked occupations more strongly than did low-status people in rating occupational prestige. Not only did high-status people assign higher prestige evaluations to all occupations, but they also evaluated occupational prestige more differentially than did low-status people. This is related to Lynn and Ellberach (2017)'s findings, which showed sharper distinctions between training-intensive occupations and the others among better educated individuals than less educated counterparts. Finally, we

observed similarities in occupational prestige ranks between groups. In Table 4, we mark prestige scores in italics when the group-specific ranks differed from the overall ranks. Although occupational prestige ranks were not identical, between-group variation was small, suggesting that the similar differentiation process of occupational prestige works for high- and low-SES people.

Table 5 shows how raters' social networks are associated with occupational prestige. First, knowing someone who holds a certain occupation in one's social network tended to be positively associated with their prestige rating of such occupation, although some exceptions existed, marked in boldface in Table 5. This indicates that having relatives, friends, or acquaintances in a certain occupation leads to positive prestige evaluation. Second, variations in occupational prestige were smaller for those with social networks in specific occupations, reflected in the smaller standard deviation for occupational prestige. Not only did social networks make for a positive evaluation of occupational prestige, but they also reduced variations in prestige evaluation. Finally, we observed a weak association between social networks and occupational prestige ranks. Simply put, occupational ranks hardly vary based on the existence of social networks. We mark in italic when prestige ranks for specific groups differ from overall ranks. While ranks for those with occupation holders in their social networks were somewhat different from the overall ranks, the ranks for those without such occupation holders were almost identical to the overall ranks. Even for the former, variation was not substantial, strongly suggesting commonalities in the differentiation process of occupational prestige regardless of social networks.

TABLE 5
OCCUPATIONAL PRESTIGE BY PERSONAL NETWORKS TO OCCUPATION HOLDERS

Occupational Title	Overall		Family		Friend		Acquaintance	
	Mean	S.D.	No	Yes	No	Yes	No	Yes
Congressperson	8.18	2.10	8.17	8.30	8.18	8.19	8.18	8.20
Lawyer	8.05	1.77	8.05	8.07	**8.05**	**8.04**	8.03	8.14
Medical Doctor	8.04	1.71	**8.05**	**7.96**	8.02	8.10	8.03	8.06
High-Ranking Officer	7.52	1.81	7.51	7.56	7.50	7.61	7.49	7.66
Military General	7.42	2.02	**7.44**	***6.91***	**7.43**	***7.18***	**7.42**	***7.41***
College Professor	7.40	1.73	**7.41**	***7.38***	7.39	*7.47*	7.37	*7.51*

Manager, Large Firm	7.13	1.77	7.11	*7.18*	**7.14**	7.11	**7.14**	7.09
Journalist	6.57	1.84	6.54	6.86	6.56	6.61	6.55	6.67
Computer Scientist	6.28	1.80	**6.30**	*6.09*	**6.32**	*6.06*	**6.29**	**6.18**
Manager, Small Firm	6.23	1.65	**6.24**	*6.21*	6.23	*6.27*	**6.25**	**6.16**
School Teacher	5.97	1.75	*5.91*	6.08	*5.90*	6.08	*5.89*	6.09
Middle Manager	5.92	1.60	*5.92*	5.93	*5.91*	5.97	*5.90*	6.01
Police Officer	5.48	1.73	5.47	5.52	5.46	5.55	5.47	5.50
Professional Artist	5.21	1.91	**5.21**	*5.12*	**5.22**	*5.09*	5.21	*5.21*
Clerical Worker	5.20	1.62	5.15	*5.43*	5.16	*5.35*	5.15	*5.39*
Nurse	4.86	1.75	4.81	4.95	4.76	*5.10*	4.79	4.99
Foreman	4.18	1.82	4.15	*4.39*	4.15	*4.44*	4.14	*4.48*
Social Worker	4.16	1.74	4.12	*4.31*	4.14	*4.23*	4.15	*4.20*
Librarian	4.13	1.73	4.12	*4.77*	4.11	*4.71*	4.10	*4.59*
Skilled Worker	4.08	1.97	4.04	*4.33*	4.05	*4.40*	4.04	*4.38*
Mechanic	3.99	1.77	3.97	4.22	3.97	4.18	3.96	*4.21*
Businessperson	3.92	1.74	3.83	4.08	3.87	4.02	3.81	4.13
Hairdresser	3.75	1.73	3.72	4.03	*3.69*	4.11	3.72	*3.88*
Carpenter	3.71	1.89	3.70	3.94	*3.71*	3.71	3.69	*3.98*
Salesperson	3.49	1.70	3.48	3.56	3.47	3.58	3.46	*3.63*
Bus/Truck Driver	3.35	1.72	3.35	3.36	3.34	*3.40*	**3.35**	**3.32**
Farmer/Fisher	3.31	1.94	**3.32**	*3.27*	3.31	3.33	3.29	*3.42*
Receptionist	3.26	1.73	3.25	*3.32*	3.23	*3.57*	3.24	*3.45*
Unskilled Worker	3.04	1.83	3.03	3.09	3.02	*3.14*	3.04	*3.01*
Cleaner	2.86	1.97	**2.87**	**2.64**	2.84	*3.29*	2.85	*3.01*
Janitor	2.50	1.82	**2.51**	*2.35*	2.52	*2.12*	**2.51**	*2.39*
Simple Laborer	2.44	1.83	2.42	*2.56*	2.43	*2.47*	**2.44**	*2.43*
S.D. in Occupation Means	1.79	-	1.80	1.76	1.79	1.74	1.79	1.77

Notes: N = 2,132. Bold marks the different group differences in occupational prestige than the others; Italic marks different prestige sorting than the overall pattern.

Random-Effects Models

Table 6 shows estimates from the random-effects models. Model 1 shows how occupational prestige was evaluated depending on individual characteristics, and Model 2 includes interaction terms between occupational prestige ranks on the one hand and SES and social networks on the other. The rank is coded from 0 to 31 to allow for an easy interpretation of intercepts and main effects. Random effects, presented at the bottom of Table 6, show the decomposition of error terms. In Models 1 and 2, ρ is equal to 0.310, which means that individual-level variability was responsible for about 31% of the total error variance, showing that the incorporation process was substantially different across individuals. In addition, we omitted coefficients for each occupation to save space when presenting results in Table 6. Because the reference category is the highest ranked occupation (congressperson), the coefficients show differences in mean occupational prestige scores compared with congressperson. According to the results not shown, the prestige ranks did not change after controlling for raters' characteristics.

In Model 1, we can see that age and social networks are significantly associated with occupational prestige evaluations after controlling for other factors while SES differentials disappeared after controlling for other factors. Young people and individuals with occupation holders as relatives, friends, and acquaintances evaluated occupational prestige more highly than did their respective counterparts. The difference due to knowing someone in a specific occupation as a relative, friend, and acquaintance ranged from 0.040 to 0.054, which was 2-3% of the standard deviation of the mean occupational prestige, 1.79. This result shows that those whose social networks were in a specific occupation tended to evaluate this one higher than those without such networks.

TABLE 6
ESTIMATES FROM RANDOM-EFFECTS MODELS*

Variables	Model 1			Model 2		
	Coef.	S.E.	*p*	Coef.	S.E.	*p*
Age	-0.004	0.002	0.042	-0.004	0.002	0.048
Female	0.051	0.045	0.264	0.052	0.045	0.255
Marital Status (ref. = Never Married)						
Currently Married	0.038	0.064	0.556	0.038	0.064	0.556

Divorced/Widowed	-0.110	0.096	0.253	-0.112	0.096	0.245
College Graduate	0.072	0.048	0.128	0.164	0.052	0.002
Professional/Managerial	0.040	0.054	0.459	0.112	0.059	0.057
HH Income High	0.016	0.051	0.748	0.018	0.056	0.748
Social Network						
Family	0.054	0.019	0.004	0.012	0.037	0.738
Friend	0.047	0.021	0.023	-0.096	0.041	0.019
Acquaintance	0.040	0.020	0.041	0.010	0.038	0.786
Interactions						
College*Rank				-0.006	0.001	0.000
Prof*Rank				-0.004	0.001	0.003
HH income*Rank				0.000	0.001	0.949
Family*Rank				0.002	0.002	0.268
Friend*Rank				0.009	0.002	0.000
Acquaintance*Rank				0.002	0.002	0.417
Intercept	8.269	0.092	0.000	8.211	0.093	0.000
Random Effects						
σ_u	1.000	0.016	-	1.000	0.016	-
σ_e	1.492	0.004	-	1.491	0.004	-
ρ	0.310	0.007	-	0.310	0.007	-

Notes: N=68,224 (=2,132×32). * Fixed effects for each occupation are omitted to save space.

Model 2 shows how associations between occupational prestige on the one hand and SES and social network on the other depend on prestige ranks.[2] It indicates that SES differentials are greater for higher ranked occupations. For example, the coefficient for college graduate in the model was 0.164, which means that college graduates gave 0.164 points higher to the first-ranked occupation (congressperson) than those with no bachelor's degree after controlling for other factors. The coefficient for the interaction term of college graduate and occupation rank (college × rank) was -0.006, which means that the difference in occupational prestige ratings between college graduates and others decreases by 0.006 points as the prestige rank drops by 1. For the lowest-ranked occupation (simple laborer), the difference in occupational prestige between college graduates and others was -0.022 points, meaning that college graduates evaluated this occupation even lower
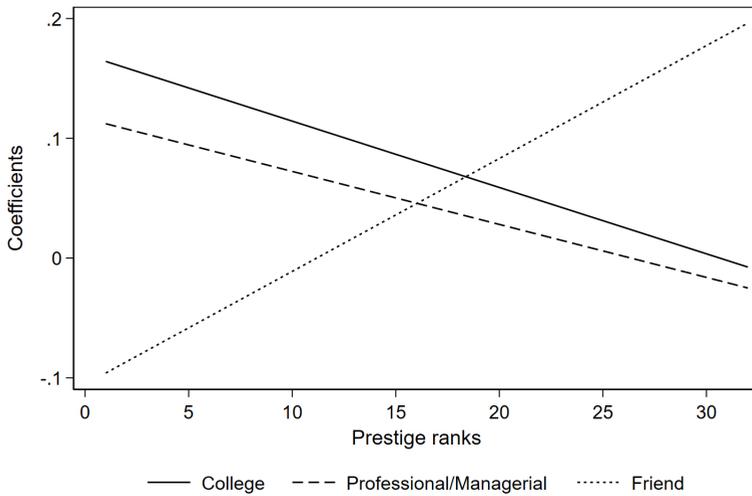
Fig. 1.—Differential Associations by Prestige Ranks (from Model 2 in Table 6)

than non-college graduates, although this difference is not statistically significant. The difference between professional and managerial occupation holders and the others followed a similar pattern, but the magnitude was smaller than educational differentials. In terms of the interaction between social network and prestige ranks, having friends in a specific occupation had a differential association, but no such interaction was observed for family/relative and acquaintance networks. For example, whereas having a congressperson friend reduced a congressperson's occupational prestige by 0.096 points, having a simple laborer friend increased simple laborer prestige by 0.183 points. Hence, having a friend in a lower-ranked occupation seemed to have a buffering effect on its prestige. Figure 1 visualizes this pattern. We can clearly see stronger SES effects on prestige scores for higher ranked occupations than the lower ranked ones and the opposite effects of having a friend in an occupation.

Summary and Discussion

In this study, we examined stability and variations in occupational prestige in Korea and obtained the following results. First, occupational prestige ranks have remained stable in the last 30 years. Correlations of the prestige ranks of

the 15 commonly examined occupations between pairing years were higher than 0.9, showing strong stability in occupational prestige ranks. Second, prestige ratings depended on SES and social network. High-SES people rated occupational prestige higher than low-SES people, and individuals rated an occupation higher when they know someone in that occupation. Third, SES and social network effects on prestige evaluation depended on occupation ranks. While differences in prestige ratings between college graduates and non-college graduates were greater for high-ranked occupations than low-ranked ones, the positive effect of having a friend in an occupation on one's prestige rating existed only for low-ranked occupations than for high-ranked ones, suggesting the buffering effect of social network on occupational prestige.

　　While most studies have focused on the differentiation process of occupational prestige based on occupational characteristics such as power and privilege and found invariance in occupational prestige across time and space, the current study examined the dependence of the incorporation process on SES and social network, showing that such process was not homogenous. This illustrates that both invariance and heterogeneity must be accounted for when studying occupational prestige.

References

Balkwell, James W., Frederick L. Bates, and Albeno P. Garbin. 1980. "On the Intersubjectivity of Occupational Status Evaluations: A Test of a Key Assumption Underlying the "Wisconsin Model" of Status Attainment." *Social Forces* 58(3): 865-881.

Biemer, Paul P., and Lars E. Lyberg. 2003. *Introduction to Survey Quality*. Hoboken, NJ: John Wiley & Sons.

Blau, Peter M., and Otis Dudley Duncan. 1967. *The American Occupational Structure*. New York: John Wiley & Sons.

Duncan, Otis D. 1961a. "A Socioeconomic Index for All Occupations." Pp. 109-138 in *Occupation and Social Status*, by Albert J. Reiss, Jr., with Otis D. Duncan, Paul K. Hatt and Cecil C. North. New York: The Free Press.

_____. 1961b. "Properties and Characteristics of the Socioeconomic Index." Pp. 139-161 in *Occupation and Social Status*, by Albert J. Reiss, Jr., with Otis D. Duncan, Paul K. Hatt and Cecil C. North. New York: The Free Press.

Ganzeboom, Harry B. G., and Donald J. Treiman. 1996. "Internationally Comparable

Measures of Occupational Status for the 1988 International Standard Classification of Occupations." *Social Science Research* 25(3): 201-239.

Goyder, John. 2005. "The Dynamics of Occupational Prestige: 1975-2000." *Canadian Review of Sociology* 42(1): 1-23.

Groves, Robert M., Floyd J. Fowler Jr., Mick P. Couper, James M. Lepkowski, Eleanor Singer, and Roger Tourangeau. 2009. *Survey Methodology*, 2nd Edition. Hoboken, NJ: John Wiley & Sons.

Guppy, Neil, and John C. Goyder. 1984. "Consensus on Occupational Prestige: A Reassessment of the Evidence." *Social Forces* 62(3): 709-725.

Han, Shin-Kap. 2012. "Prospects and Problems of the Recent Developments in Social Survey in Korea: Mixed-Mode Survey and Volunteer Web Panel." *Survey Research* 13(3): 1-31. [In Korean]

Hauser, Robert M., and John Robert Warren. 1997. "Socioeconomic Indexes for Occupations: A Review, Update, and Critique." *Sociological Methodology* 27(1): 177-298.

Hong, Doo-Seung. 1983. "A Preliminary Note for Social Stratification Research in Korea." Pp. 141-170 in *Traditions and Changes in Korean Society*, edited by Seoul National University Sociology Department. Seoul: Panmunsa. [In Korean]

Hout, Michael, and Thomas A. DiPrete. 2006. "What We Have Learned: RC28's Contributions to Knowledge about Social Stratification." *Research in Social Stratification and Mobility* 24(1): 1-20.

Kraus, Vered, Erling O. Schild, and Robert W. Hodge. 1978. "Occupational Prestige in the Collective Conscience." *Social Forces* 56(3): 900-918.

Kim, Harris Hyun-Soo. 2016. "Exploring the Downside of Social Embeddedness: Evidence from a Cross-National Study." *Social Science Quarterly* 97(2): 232-251.

_____. 2020. "Social Capital and Job Search Assistance: A Multilevel Analysis of East Asian Countries." *International Sociology* 35(1): 45-69.

Kye, Bongoh, and Sun-Jae Hwang. 2017. "Trends in Occupational Prestige Scores of Korea: 1990-2016." *Journal of the Korean Official Statistics* 22(3): 121-140. [In Korean]

Lin, Nan, and Mary Dumin. 1986. "Access to Occupations through Social Ties." *Social Networks* 8(4): 365-385.

Lin, Nan, and Wen Xie. 1988. "Occupational Prestige in Urban China." *American Journal of Sociology* 93(4): 793-832.

Lynn, Freda B., and George Ellerbach. 2017. "A Position with a View: Educational Status and the Construction of the Occupational Hierarchy." *American Sociological Review* 82(1): 32-58.

Nakao, Keiko, and Judith Treas. 1994. "Updating Occupational Prestige and Socioeconomic Scores: How the New Measures Measure up." *Sociological Methodology* 24: 1-72.

Seol, Dong-Hoon, Kee-Jae Lee, Deokhyun Jang, and Kyoung-Sub Shim. 2022. "Setting Up a Probability-Based Online Panel of the General Population in South

Korea: The Social Research Panel." Paper Presented at the Spring Meeting of the Korean Association for Survey Research (KASR). Conference Room B, Korea Chamber of Commerce and Industry, Seoul, South Korea. May 27, 2022.

Shim, Kyoung-Sub, and Dong-Hoon Seol. 2010. "Occupational Aspirations of College Students in Korea: The Effect of Social Capital and Cultural Capital." *Korea Journal of Population Studies* 33(2): 33-59. [In Korean]

Treiman, Donald J. 1977. *Occupational Prestige in Comparative Perspective*. New York: Academic Press.

Valentino, Lauren. 2021. "The Heterarchy of Occupational Status: Evidence for Diverse Logics of Prestige in the United States." *Sociological Forum* 36(S1): 1395-1418.

Weber, Max. 1946. "Class, Status, and Party." Pp. 180-195 in *From Max Weber: Essays in Sociology*, translated by Hans H. Gerth, and C. Wright Mills. New York: Oxford University Press.

Yoo, Hong Joon, and Worlwha Kim. 2006. "The Occupational Status Scores in Korea: Past and Present." *Korean Journal of Sociology* 40(6): 153-186. [In Korean]

Zhou, Xueguang. 2005. "The Institutional Logic of Occupational Prestige Ranking: Reconceptualization and Reanalyses." *American Journal of Sociology* 111(1): 90-140.

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