

Scholars believe that age norms, defined here as widely shared judgments of the standard or typical ages of individuals holding a role or status within a given context, circumscribe behavior in all human societies. Admonitions such as “act your age” indicate that we expect older people to conduct themselves differently from younger people. Laws codify society’s judgments of when people are old enough to vote and purchase alcoholic beverages. Work organizations have informal rules about typical ages for promotion. Yet, despite the centrality of age norms to human interaction, we know very little about them. Age norms seem easy to observe, but they have proved difficult to define and measure. Moreover, although many scholars consider age norms in a societal context, few examine them in other structured settings, such as communities or work organizations. This article explores theoretical and measurement issues that have impeded age norm studies, and presents one approach to their resolution using data from three work organizations.

Key Words: Social norms, Work expectations and performance, Age judgments

Organizational Age Norms: Why Is It So Hard To Know One When You See One?¹

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Scholars believe that age norms, defined here as members’ widely shared judgments of the standard or typical ages of individuals holding a role or status within a given context (Lawrence, 1988), exert significant influence on behavior in all human societies (e.g., Chudacoff, 1989; Eisenstadt, 1956; Linton, 1936; Murdock, 1945; Riley, Johnson, & Foner, 1972). This impact is easily observed in artifacts of everyday life. Admonitions such as “act your age” indicate that people distinguish the conduct of older people from that of younger people. Laws codify society’s judgments of when people are old enough to vote or purchase alcoholic beverages, and work organizations have informal rules about typical ages for promotion.

Yet, despite this widespread belief in age norms, we know little about them. Scholars produce more theoretical discussion than empirical data on the subject. Moreover, scholars’ focus on age norms in broad societal contexts neglects important distinctions that emerge in smaller institutional settings. I argue that age norm studies have been impeded by two problems. First, age norms are typically defined in ways that make them difficult to understand or study. Second, the embeddedness of age norms within interdependent social systems complicates empirical separation of age norm outcomes from age effects in general. Possible solutions to these problems are proposed and applied to a

study of what age norms look like and how they influence behavior in three work organizations.

Problems Impeding Age Norm Research

The first problem impeding research on age norms involves age norm definitions. Age norms represent a form of social norm. As a result, age norm definitions typically assume the characteristics of this more general social phenomenon. Although many different conceptions of norm exist (Gibbs, 1965), most involve three components (see Note 1). The first component is an *expectation*. A social norm includes a statement specifying what response or behavior people expect under given conditions. Other phrases used to capture the notion of expectations include “what people ought to do,” “what is appropriate to do,” and “what is the ideal.” For instance, Neugarten, Moore, and Lowe (1965) specify age norms as “expectations regarding age-appropriate behavior.” Plath and Ikeda (1975, p. 108) discuss age norms as spans of suitable years defining the “right time for almost any action in the human repertoire.” More recently, Chudacoff (1989, p. 7) notes age norms as what people “thought constituted appropriate behavior and attainments for people of particular ages.”

The second component is a *sanction*. People who violate an expectation are punished. For instance, Neugarten and Hägestad (1976, p. 42) suggest that “norms vary in the . . . strength of sanctions attached to them. . . . A middle-aged man who begins to dance in what others regard as an abandoned manner is subjected to frowns and mocking remarks.” Morris (1956, p. 610) notes that “norms always include sanctions,” and Homans (1950, p. 123) suggests that ex-

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expectations are only norms "... if any departure of real behavior from the norm is followed by some punishment." The third component is a *group*. Members of some group of people know and believe the expectation stated by the social norm and punish those who deviate. Thus, a norm requires a group both to be aware of the expectation and, by inference, to act when deviations occur. Hägestad (1990, p. 160) states that "expectations of what behavior ought to be" are "collectively held." Marini (1984, p. 232) suggests that a social norm "involves a collective, or shared, evaluation," while Morris (1956, p. 610) puts it more strongly, stating that "norms must be shared prescriptions."

Several theoretical and empirical difficulties emerge from these components. The first, and perhaps most serious, emerges from the sanctions requirement. If identifying an age norm requires observing a sanction, then one can never study age norms independent of their enforcement mechanisms (Cancian, 1975, p. 8). In order to be an age norm, a group must sanction violations. This means, however, that all age norm violations produce sanctions by definition, and the definition becomes a tautology. The existence of age norms and sanctions cannot be separated.

A second difficulty, also associated with the sanctions component, results because age norm violations do not only produce punishments. Lawrence (1988), for instance, finds both positive and negative responses to age norm violations. Managers who are seen by others as ahead of schedule in their careers — in other words, younger than the perceived age norm — are more likely to receive high performance evaluations than would be expected by chance. Only those who are seen by others as behind schedule are "punished" with lower performance ratings. Lawrence's result is consistent with responses to other age norms. At least in the United States, being seen as younger than expected or ahead of schedule frequently produces a positive evaluation. The 12-year-old who attends college acquires high status, as does the 22-year-old whose animated cartoon gets nominated for an Academy Award. Negative evaluations more typically accrue when one is seen as being too old, or "over the hill." Yet, even those who violate age norms by being behind schedule may receive approbation, as when a 70-year-old finishes college, or a 50-year-old begins training as a police cadet. While the exact outcomes vary by culture, these examples suggest that violating age norms may produce *either* punishments or rewards (see Note 2).

A third difficulty emerges from the expectations component. This component implies that people are aware of their expectations. In other words, if asked, they could tell you what behaviors they expect at what ages. In fact, people often seem unaware of age expectations, and many are so deeply held that they remain subconscious (Lawrence, in press). The question this raises is whether such age expectations represent norms. Cancian (1975, p. 3) suggests they do not. While such expectations, which she calls reality assumptions, represent normative beliefs,

they are more general in their behavioral implications than most social norms. Consequently, Cancian distinguishes normative beliefs that define the taken-for-granted world of everyday life from normative beliefs that define people as good or bad and included or excluded. This seems a good distinction; however, it appears likely that both types of normative beliefs operate as norms. Whether conscious or subconscious, groups share age expectations and sanction violations. It also seems likely that these two normative belief types are interdependent. Reality assumptions provide the foundation on which people construct their more conscious expectations. Whether different levels of norms exist or whether one represents a norm and the other does not remains a theoretical question underlying the study of age norms.

Assuming for the moment that shared, deeply held age expectations do represent age norms, a fourth difficulty is that they are exceedingly difficult to study. Garfinkel (1967) states that people cannot talk about that which they take for granted. Questioning people about the taken-for-granted results in ridicule, discomfort, embarrassment, or even hostility. For instance, many employers state without guile that age plays no role in their job application evaluations. If asked directly, they resent the inference that they use such an "unimportant" criterion (Lawrence, 1988, p. 319). Yet, studies show that employers do use age to evaluate job applicants, and, at the same time, seem unaware that they do so (Rosen & Jerdee, 1976a, 1976b, 1977). Thus, studying age norms from the perspective of group members requires some mechanism for eliciting consciously inaccessible information.

A final difficulty emerges from the group component. While most norm definitions specify or imply that expectations are "shared" among group members, they do not specify how widely shared expectations must be or why they must be shared. What theoretical relationship exists between a group and an age norm's existence? Presumably, age norm violations cannot be sanctioned unless sufficient group members share the same expectation and are willing to sanction its violation. Is consensus necessary before shared expectations become age norms, and if not, how many or what proportion of the group must agree? Combining the agreement issue with the sanctions requirement produces additional difficulties. If sanctions define age norms, then the relevant question may be *who* agrees rather than *how many* agree. If only one group member is willing to apply sanctions, is a shared expectation a norm? In most conditions, this would seem unlikely; however, a supervisor with formal authority might use sanctions to create shared expectations within a group that then become norms. Similarly, a dominant coalition might produce age norms independent of its size relative to the group. These numerous questions suggest that many theoretical issues regarding age norms remain unanswered.

The second problem impeding age norm research involves the embeddedness of age norms within in-

terdependent social systems. People's ethnic groups may hold one set of age norms, their work environments may support a second set, their communities may identify a third, and their national cultures may provide a fourth. These normative systems may either compare or collide. In one interview conducted by the author, a successful Bell Laboratories scientist expressed his difficulty with being seen in his community as "slightly behind the eightball" because the age norms for career progression at the laboratory were older than those generally accepted in his community. Although he was seen as extremely successful at work, he was viewed as not so successful by his friends and acquaintances, and the conflict was difficult for him. Whether age norms are similar to or different from one social system to another, members' experiences are inherently connected.

Moreover, age norms are embedded within and interdependent with other age phenomena. For example, people's age expectations and notions of appropriate ages emerge, in part, from inherent characteristics of biological development. Age norms vary because, while development provides physical boundaries, it does not precisely determine behavior at given chronological ages. The result, however, is that age norms are highly correlated with biological age. Age norms also appear to evolve from people's judgments of actual age distributions (Lawrence, 1987, 1988). Although people's judgments prove inaccurate, the age norms that result do reflect actual age distributions. These examples suggest that different kinds of age phenomena are theoretically and empirically interdependent, and this makes it difficult and perhaps impossible to distinguish age norm effects from other age phenomena effects. While "controlling" for other age phenomena produces a residual that may exclusively represent age norm effects, it also removes some of the main effects of age norms as well.

An Approach to Studying Age Norms

This article outlines one approach to resolving these problems, noting its theoretical and empirical assumptions. First, adding some detail to the definition provided earlier, age norms are *the ages viewed as standard or typical for a given role or status by the modal group of members of a social system*. Here, it is people's judgments of age-typical behaviors that are important, which provides a social as opposed to a demographic norm. Using judgments of age-typical behaviors distinguishes this definition from others used in age transition studies in which researchers define age norms by actual distributions of age-typical behaviors. The idea is to get as close as possible to capturing a picture of the social system as it is viewed by its members. This definition also differs from age norm definitions in general in that it does not include people's perceptions of expected, appropriate, or ideal age-related behaviors. Defining age norms as people's judgments of standard or typical ages follows in the tradition of those who

define norms as frames of reference or regularities (Newcomb, Turner, & Converse, 1965, p. 229).

One advantage to this definition is that people have cognitive access to typicality information. People find it relatively easy to provide their judgments of reality, and such judgments identify their overall view of the age-relatedness of a given role or status. Moreover, reality judgments produce responses with consistent meaning across subjects, and this increases construct validity (see Note 3). Another advantage to this definition is that it facilitates a number of distinctions and comparisons. People's judgments of typical ages can be assessed with no reference to the meanings people attach to them, the sanctions people apply to deviants, or the effects such sanctions produce. Thus, one can test, for instance, whether or not age norms influence behavior. In addition, this age norm definition allows age norm comparisons for a given role or status within embedded social systems or across independent social systems. In one social system, the age norms for a role may be broad and widely shared. In another, age norms for the same role may be narrow and not widely shared at all.

This definition also facilitates study of how widely shared age norms must be before they influence behavior. Defining age norms by modal agreement specifies that age norms need not be consensual. This decision is based on two assumptions. First, it assumes that using consensus as an agreement criterion risks defining age norms as age ranges that are so broad, they become meaningless. Previous research on age judgments (Lawrence, 1987, 1988; Plath & Ikeda, 1975; Neugarten et al., 1965; Zepelin, Sills, & Heath, 1986-87) suggests that considerable variation exists in people's age judgments of given behaviors. If people deem all ages as appropriate, then behavior is not really age-related. Second, it assumes that only some portion of a group's members must agree on age norms before this agreement influences how members interact. Using modality as an agreement criterion allows people's judgments and the similarity among their judgments to define the range of agreement.

While issues of embeddedness and interdependence cannot be eliminated, one can capitalize on them. Embeddedness implies that every social system holds within it smaller, and frequently comparable, social systems. For instance, many schools exist within a state, many churches exist within a religious organization, and many football teams exist within a professional league. In each case, the members within the larger social system develop age norms for roles and statuses. Age norms within the smaller social systems reflect those in the larger social system. However, each embedded social system may develop its own distinctive norms. One can compare age norms in the larger social system to those in the smaller social systems, or one can compare age norms across several smaller social systems. Such comparisons help generate preliminary hypotheses about how age norms emerge, why they look the way they do, and how they influence people.

Hypotheses

This study explores what age norms look like and what impact they exert on behavior by examining age norms for managerial careers in work organizations. Here, the large social system is the economic and regulatory environment for firms in the United States, the small social systems are work organizations, the comparison is across work organizations, and the role is management. There are several advantages to studying work organizations and managerial careers. First, management careers hold similar meaning for members across organizations. Thus, age norms for and their effects on managers can be compared across these social systems. Second, the hierarchically arrayed jobs within managerial careers and their relative statuses are formally defined and understood by organizational members. Each organization specifies the number of levels in the career and the association between increasing level and increasing status. These characteristics reduce the probability that subjects' age judgments include errors in their perceptions of the role or its status. Finally, work organizations are small enough to facilitate data collection but large enough to allow some statistical comparisons. One limitation is that while work organizations tend to provide sufficient numbers of individual subjects to examine key relationships, the numbers remain insufficient to control for alternate explanations. As a result, evaluating such explanations necessitates looking for patterns in the results, rather than statistical significance. This study thus requires a mix of hypothesis-testing and exploration.

Several working hypotheses guide the research that follows. People's perceptions of typical ages for managerial careers appear to emerge from their observations of the actual ages of managerial incumbents (Lawrence, 1987, 1988). Age norms therefore reflect actual age distributions. It seems likely that actual age distributions will fluctuate more in organizations with high turnover than in organizations with low turnover. This would result because organizations do not necessarily replace exiting employees with employees of similar age (see Note 4). Moreover, given that age norms must be learned by organizational newcomers, it also seems likely that people's judgments of typical ages will vary more in organizations with high turnover rates, where many people are learning the norms, than in organizations with low turnover rates, where few people are learning the norms. Given these two sources of variation:

Hypothesis 1: The more stable the organization's employment, the more widely shared the organizational age norms.

Research on social norms (e.g., Cancian, 1975; Homans, 1950; Roethlisberger & Dickson, 1939) suggests that age norms influence behavior because group members respond to those who violate the norms. Group members may respond either consciously or unconsciously to deviants by applying what group members perceive as rewards or punishments (see Note 5). It seems likely that the more consistently and frequently such pressures are ap-

plied to deviants, the more likely it is that deviants' behaviors are influenced. Thus, the larger the number of group members applying such pressures, the more likely deviation from age norms is to influence behavior. This suggests that:

Hypothesis 2: The more widely shared the organizational age norms, the more likely deviation from such norms is to influence behavior.

Age norms are interdependent with other age phenomena. Just as age norms emerge from actual age distributions for roles and statuses, they also emerge from actual biological and life-stage developments. For instance, age norms associated with youth or old age are in part based on actual biological changes with age. As a result, although some effects of organizational age norms are independent of these social and individual processes, others are not. A strict test of the impact of organizational age norms on behavior is to control for these other age phenomena and to see if any residual impact remains. If residual effects remain, this suggests that age norm effects exist and that some age norm effects remain independent from the effects of other age phenomena. If residual effects do not remain, the results are inconclusive. Either age norm effects do not exist, or they are codependent with the effects of other age phenomena. Thus:

Hypothesis 3: The influence of deviation from organizational age norms on behavior is moderated by the influence of other social and individual age phenomena on behavior.

A more specific question regarding embeddedness and interdependence is whether age norm effects differ from an individual's self-judgment effects. Research shows that age-related self-judgments do influence behavior (Cleveland & Shore, 1992; Lawrence, 1984). Thus, it is possible that what appear to be age norm effects actually represent aggregated individual effects. Thus, if age norms are a social and not an individual phenomenon:

Hypothesis 4: The influence of deviation from organizational age norms on behavior differs from the influence of deviation from individuals' age-related self-judgments on behavior.

Method

This study was conducted in three work organizations, noted here with the fictitious names Bennis, Computron, and Index (see Note 6). Table 1 provides a description of the three organizations. Several selection criteria were used. First, organizations in operation for more than 20 years were selected because each has had more than one generation of employees with sufficient time to generate shared age judgments. Second, organizations with dissimilar average organizational tenure were selected. Two of the three organizations have high average organizational tenure, and one has low average organizational tenure. This facilitates a comparison of high versus low employment stability effects on age norms. Third,

Table 1. Description of Three Organizations

Description	Bennix	Computron	Index
Type of organization			
Number of career levels			
Average organizational tenure			
Average age of managers			
Number of managers			
Questionnaire sample			

*80% of a 20% systematic stratified sample.

organizations with relatively large managerial work forces were selected. Each organization has more than 200 managers, thus providing sufficient numbers for some empirical contrasts.

Demographic and questionnaire data were collected on managerial careers in each organization. The demographic data come from organizational records and provide population information. The questionnaire data come from surveys distributed to employees with direct access to managerial careers. This includes managers in all three organizations as well as engineers in Computron and Ready-For-Management employees at Index. (See Lawrence, 1987 and 1988, for a more detailed discussion of data collection in the first two organizations. Data collection in the third organization followed a similar procedure.) The survey sample in Bennix ($N = 390$, 66%) is representative of the managerial population in level, functional area, and gender. Response levels are slightly higher for younger managers who have been with this organization fewer years; however, additional analysis suggests that this sample bias does not affect the generalizability of results. The survey sample in Computron ($N = 206$, 96%) is representative of the managerial population on all dimensions. The survey sample in Index ($N = 423$, 80% of a systematic, stratified sample) is representative of the managerial population on all stratification dimensions. Thus, for all three organizations, questionnaire results can be generalized to the organization.

Age Norms. — An organization's age norms are identified by examining the distribution of managers' typical age judgments for each level and selecting the modal range of agreement. Managers' typical age judgments for each level are obtained by asking subjects to identify the typical age of incumbents in that level. Actual position titles are used to identify each level. In Figure 1, the subject indicates that he or she believes the typical age for Grade Level 6 managers at Index is 37. Subjects also provide judgments of the age range for each level; however, this information is not used in the analysis reported here.

The modal range of agreement is defined by the youngest and oldest typical age judgments that receive 10% of the responses. This criterion was selected because it seems to best capture modal responses as perceived by subjects. Past research indicates that people throughout the world overreport ages that end in 0 and 5 (Shyrock, Siegel, &

1. At Index, my perception is that Grade Level 6 managers are:



Figure 1. Questionnaire item requesting subject's age judgments.

Associates, 1980, p. 204), and age judgment distributions from all three organizations conform to this finding. As a result, while the distributions remain unimodal they are characterized by frequency spikes at these overreported ages. Either a quartile or standard deviation criterion would ignore the spikes and thus miss age boundaries considered important by subjects. The 10% criterion was selected because, given the unimodal distributions, spikes that receive 10% of the responses appear by visual inspection to best distinguish modal responses from the distribution tails. The extent to which age norms are shared is assessed by the percent of responses that fall within the modal age range.

Self-Judgments. — A manager's age-related self-judgment is defined as the manager's actual age minus his or her judgment of the typical age for his or her career level. Thus, if a manager is 30 and his or her judgment of the typical age for his or her career level is 32, then his or her self-judgment is -2 . Managers whose self-judgments are between -2 and 4 are defined as seeing themselves as age-typical for their career level. These boundaries were selected because interviews suggest such age differences represent a range that people experience as typical. When managers are more than 2 years younger than what they judge is typical for their level, they are likely to see themselves as being younger than typical. Similarly, when managers are more than 4 years older than what they judge is typical for their level, they are likely to see themselves as being older than typical. A larger age difference is used to define the boundary of the older category than the younger category because people have a tendency to maintain hope in future promotions even after the ideal time has passed (Rosenbaum, 1989; see Note 7). They wait as long as possible before redefining themselves as older. While this measure notes individuals' judgments of themselves relative to others, it does not directly assess what the judgments mean to them. In other words, it is unknown whether all managers

who see themselves as 3 years younger than typical for their level feel “younger” in their careers, or whether all managers who see themselves as 5 years older than typical for their level feel “older.”

Deviations From Age Norms and Self-Judgments. — Managers are defined as deviating from age norms if they are either younger or older than the age norm for their own level. Thus, if the age norm for Grade Level 6 managers is 25–35, all managers younger than 25 and older than 35 are defined as deviants. Similarly, managers are defined as deviating from their self-judgments if they are either younger or older than what they perceive is typical for their career level. Thus, if a manager thinks the typical age for his or her level is 45, then if he or she is younger than 43 or older than 49, he or she is defined as a deviant.

Because age norms and self-judgments for careers define implicit timetables for advancement (Lawrence, 1984), such deviations denote whether managers are seen or see themselves as ahead of schedule or behind schedule. Managers whose ages fall within the age norm or within their self-judged typical age range are defined as on-schedule.

measured using the average organizational tenure of managers within the organization. Organizations with higher average organizational tenure have lower turnover and are thus more stable than organizations with lower organizational tenure. Compu-tron is the least stable firm, with an average organizational tenure of 5 years. Bennix and Index are the most stable firms, with average organizational tenures of 20 and 19 years, respectively.

Social and Individual Age Phenomena. — Chronological age groups provide an index of social and individual age phenomena. This measure does not identify which age phenomena are indexed, but it does capture age-related phenomena in general, including age norms that are interdependent with such phenomena. By definition it is difficult to be younger than the age norms at the beginning of one’s career or older than the age norms at the end of one’s career. As a result, the age group between 35 and 49 years old is the only chronological age group with sufficient sample size in all three organizations to allow comparisons across the on- and off-schedule categories.

Employment Stability. Employment stability is *Outcomes.* Table 2 describes the seven out-

Table 2. Outcome Variables

Outcome		Recoded
Work Expectations		
Manager has high 5-yr career aspirations	1 = Continuing in same job	1–3 ⇒ Low aspirations
	2 = Continuing in same job, with added responsibilities	4–5 ⇒ High aspirations
	3 = Diff. job at current level	
	4 = Diff. job, 1 level higher	
	5 = Diff. job, 2 levels higher	
Manager sees high probability of attaining 5-yr career aspirations	1 = 100% sure	1–2 ⇒ High probability
	2 = 75–99% sure	3–5 ⇒ Low probability
	3 = 50–74% sure	
	4 = Less than 50% sure	
	5 = Not at all sure	
Manager sees job as a career, rather than “just” a job	1 = Job only	NA
	2 = Step in a career	
Intensity of Relationship with Organization		
Manager hopes to leave the organization within 4 years	1 = Less than 1 year	1–3 ⇒ Within 4 years
	2 = 1–2 years	4–6 ⇒ 5–9 Years
	3 = 3–4 years	7–8 ⇒ More than 19 years
	4 = 5–9 years	(All those intending to stay until a retirement age were included in the last category.)
	5 = 10–14 years	
	6 = 15–19 years	
	7 = More than 20 years	
	8 = Until retirement	
Manager is committed to the organization	Average response on 10-item or 15-item scale	≥ Median ⇒ High commitment < Median ⇒ Low commitment
Manager feels empowered within the organization	Average response on 10-item scale	≥ Median ⇒ High empowerment < Median ⇒ Low empowerment
Organization’s Evaluation of Manager		
Manager receives high performance rating from superior	Coded separately for each organization. Based on population distribution of performance evaluations.	= High performance = Low-average performance

come measures selected to explore age norm effects; additional detail on these measures is available from the author. Each outcome assesses one aspect of managers' relationships with the organization. Presumably, if age norms for managerial careers influence behavior, they should affect both managers' expectations about their work as well as their feelings toward the organization. Moreover, they should affect superiors' evaluations of their work.

Three outcome measures assess managers' work expectations: (1) What are your aspirations for your job five years from now? (2) Realistically, how sure are you to attain the position you aspire to as reported in the previous question? and (3) How long do you expect to stay with this organization? Three outcome measures assess the intensity of managers' relationship with the organization: (1) Do you consider your current job as a job only or as a step in a career? (2) The manager's organizational commitment, $\alpha = .83$ in Computron, $\alpha = .90$ in Index (Mowday, Porter, & Steers, 1982), and (3) The manager's feelings of empowerment, $\alpha = .63$ in Computron, $\alpha = .64$ in Index (Schroeder, 1994). The final outcome measure provides managers' most recent performance evaluation by superiors. Note that the last three measures are not available for the Bennix organization.

Results

The results shown in Figures 2 through 4 support Hypothesis 1: that the more stable the organization's employment, the more widely shared the organizational age norms. As expected, age norms at Computron are less widely shared than those at either Bennix or Index. The average number of managers who agree on typical ages at Computron is 49% (range = 34%–66%), compared with 73% at Bennix (range = 66%–81%) and 81% at Index (range = 72%–91%). A Kruskal-Wallis test shows that these averages are significantly different ($T = 24.62, p < .05$). Moreover, a multiple comparisons test shows that the average at Computron is significantly lower than that at either Bennix or Index. An unexpected result is that the average at Bennix, while more similar to the average at Index than to Computron, is significantly lower than that at Index.

The results shown in Tables 3 and 4 provide mixed support for Hypothesis 2: that the more widely shared the organizational age norms, the more likely deviation from such norms is to influence behavior. As expected, the within-organization analyses show that Index and Bennix managers are more likely to be affected by age norm deviance than Computron managers. Age norm deviations show significant effects for all outcome measures at both Bennix and Index. At Computron, age norm deviations show significant effects for five of the seven outcome measures. In this organization, age norm deviation does not influence the probability that managers see their job as a career rather than as just a job. In addition, it does not influence the probability that managers feel empowered. While these results support the origi-

nally expected differences between the three firms, they do not support the expected differences based on the results from Hypothesis 1, which suggest that age norm deviations should influence behavior more at Index than at Bennix.

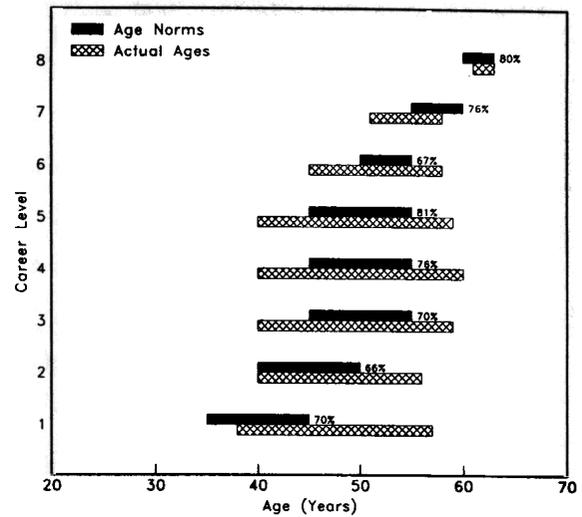


Figure 2. Comparison of age norms and actual ages for Bennix. The numbers next to the bars defining age norms indicate the fraction of the total responses falling within the given age range. The bars defining actual ages indicate the age range one standard deviation around the actual average age for each career level. Source: Lawrence (1988).

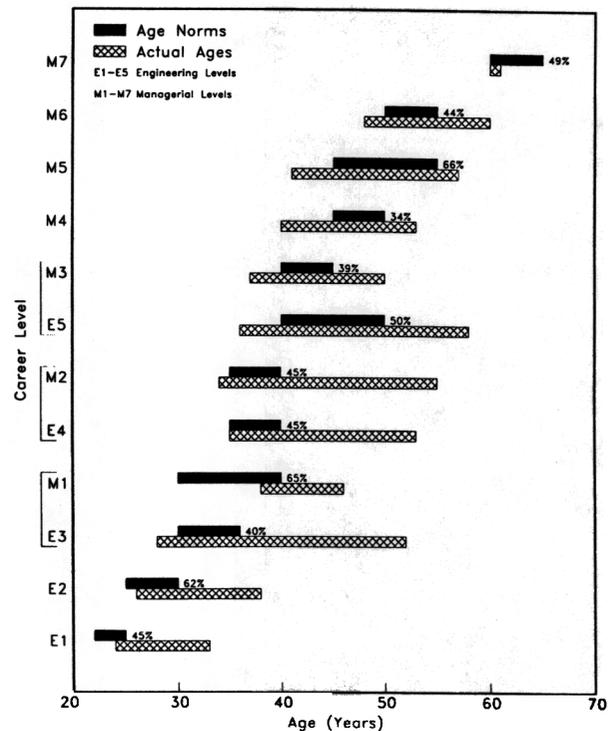


Figure 3. Comparison of age norms and actual ages for Computron. The numbers next to the bars defining age norms indicate the fraction of the total responses falling within the given age range. The bars defining actual ages indicate the age range one standard deviation around the actual average age for each career level. Source: Lawrence (1987).

While the results suggest that age norms influence more behaviors at Bennix and Index than at Computron, additional analysis shown in Table 4 does not show that the size of these effects is greater at Bennix and Index than at Computron, nor does it show that the direction of these effects is more similar at Bennix and Index than at Computron. Log-linear analysis reveals that either the size or the direction of the effects differs significantly across the organizations for four of the seven outcomes. Significant cross-

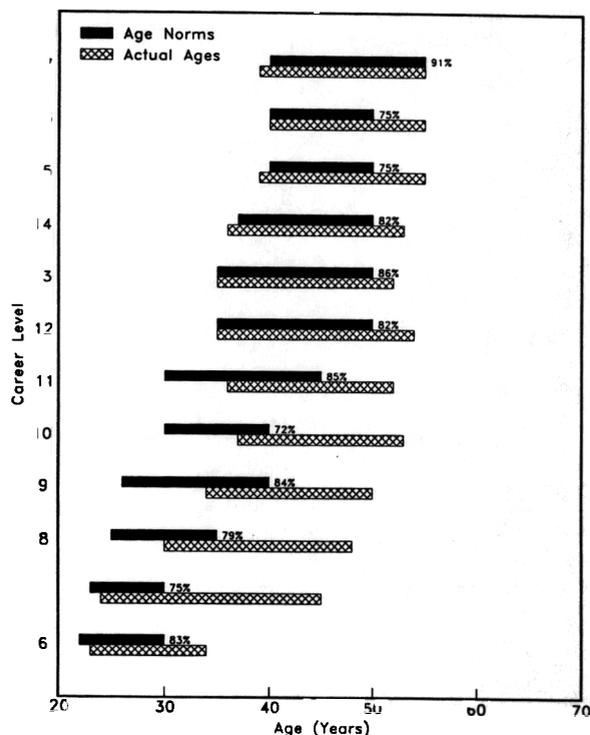


Figure 4. Comparison of age norms and actual ages for Index. The numbers next to the bars defining age norms indicate the fraction of the total responses falling within the given age range. The bars defining actual ages indicate the age range one standard deviation around the actual average age for each career level.

organization differences are observed for managers' perceptions of one of the work expectations outcomes: the probability managers will attain their five-year career aspirations; and all three of the relationship intensity outcomes: managers' hopes to leave the firm within four years, managers' commitment to the organization, and managers' feelings of empowerment.

However, additional detail on these results shows no discernible pattern to these cross-organizational differences. Differences in the size of age norm effects are assessed by subtracting the percent of the subjects who are seen as on-schedule and who responded in the outcome's high category, first, from the percent who are seen as ahead of schedule and who responded in the outcome's high category and second, from the percent who are seen as behind schedule and who responded in the outcome's high category. The larger the differences, the greater the size of the age norm effect. Differences in the direction of age norm effects are assessed by examining the sign of the difference. Positive differences indicate that subjects who are seen as off-schedule are more likely to respond in the outcome's high category than subjects who are seen as on-schedule. Negative differences indicate that subjects who are seen as off-schedule are less likely to respond in the outcome's high category than subjects who are seen as on-schedule.

Cross-organization differences result from differences in size for the questions on managers' perceptions of the probability that they will attain their five-year career aspirations and managers' hopes to leave the organization within four years. For the question on attaining their five-year career aspirations, the size of age norm effects appears greatest at Bennix. The difference between managers who are seen as ahead of schedule and managers who are seen as on-schedule is 24%, and the difference between managers who are seen as behind schedule and managers who are seen as on-schedule is 17%. The

Table 3. Cross-Tabulation Analysis of Age Norm and Self-Judgment Effects

Outcomes	Age Norm Effects (χ^2 , $df = 2$)			Self-Judgment Effects (χ^2 , $df = 2$)		
	Bennix	Computron	Index	Bennix	Computron	Index
Work Expectations						
Manager has high 5-yr career aspirations	20.82***	6.71*	9.00**	10.99**	3.78	0.94
Manager sees high probability of attaining 5-yr career aspirations	14.74***	0.99	5.97*	4.61 +	0.76	6.77*
Manager sees job as a career, rather than "just" a job	47.40***	6.54*	39.05***	31.11***	12.01**	17.32***
Intensity of Relationship With Organization						
Manager hopes to leave the organization within four years ^a	68.14***	34.02***	13.43**	6.58	44.77***	8.92 +
Manager is committed to the organization	—	5.76 +	4.64 +	—	7.19*	0.32
Manager feels empowered within the organization	—	1.83	9.56**	—	1.09	2.10
Organization's Evaluation of Manager						
Manager receives high performance rating from superior	—	4.85 +	17.08***	—	2.80	12.53**

^a $df = 4$.

+ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 4. Size and Direction of Age Norm Effects Showing Significant Differences Across Organizations*

Age Norm Category By Outcome	Bennix		Computron		Index	
	%		%	Δ^b	%	Δ^b
Work Expectations						
% of ahead of schedule managers who see high probability of attaining 5-yr career aspirations	53		69		58	
% of on-schedule managers who see high probability of attaining 5-yr career aspirations	29	+24	60	+9	49	+9
% of behind schedule managers who see high probability of attaining 5-yr career aspirations	46	+17	64	+4	42	-7
Intensity of Relationship With Organization						
% of ahead of schedule managers who hope to leave the organization within four years	24		52		21	
% of on-schedule managers who hope to leave the organization within four years	3	+21	35	+17	16	+5
% of behind schedule managers who hope to leave the organization within four years	3	0	14	-21	14	-2
% of ahead of schedule managers who have high commitment to the organization			52		37	
% of on-schedule managers who have high commitment to the organization			40	+14	52	-15
% of behind schedule managers who have high commitment to the organization			59	+19	51	-1
% of ahead of schedule managers who feel empowered within the organization			61		42	
% of on-schedule managers who feel empowered within the organization			47	+14	63	-21
% of behind schedule managers who feel empowered within the organization			51	+4	45	-18

*Based on log-linear analysis.

^b Δ = (% ahead-of-schedule - % on-schedule) or (% behind-schedule - % on-schedule).

comparable differences are smaller at Computron, 9% and 4%, and at Index, 9% and -7%. The direction of these differences suggests that, with the exception of the behind schedule group at Index, managers who are seen as off-schedule are more likely to see themselves as having a high probability of attaining their five-year career aspirations than managers who are seen as on-schedule.

For the question on managers' hopes to leave the organization within four years, the size of age norm effects appears greatest at Computron. The difference between managers who are seen as ahead of schedule and managers who are seen as on-schedule is 17%, and the difference between managers who are seen as behind schedule and managers who are seen as on-schedule is -21%. The comparable differences are smaller at Bennix, 21% and 0%, and at Index, 5% and -2%. The direction of these differences suggests a positive association between being seen as ahead of schedule and hoping to leave the organization within four years. There is almost no association between being seen as behind schedule and hoping to leave the organization within four years, except at Computron, which shows a negative association for this question.

Cross-organization differences seem to result from differences in the direction of age norm effects for the questions on managers' organizational commitment and feelings of empowerment. For the question on managers' organizational commitment, deviation from age norms exerts an opposite effect at the two organizations. At Computron, those who are seen as ahead of or behind schedule are more likely to feel committed to the organization than those who are seen as on-schedule, with differences of 14% and 19%, respectively. In contrast, at Index, those who are seen as ahead of or behind schedule are less likely to feel committed to the organization than those who are seen as on-schedule, with differences of -15% and -1%, respectively.

Similarly, for the question on managers' feelings of empowerment, deviation from age norms exerts an opposite effect at the two organizations. At Computron, those who are seen as ahead of or behind schedule are more likely to feel empowered than those who are seen as on-schedule, with differences of 14% and 4%, respectively. In contrast, at Index, those who are seen as ahead of or behind schedule are less likely to feel empowered than those who are seen as on-schedule, with differences of -21% and -18%, respectively.

The results in Table 5 support Hypothesis 3: that the influence of deviation from organizational age norms on behavior is moderated by the influence of other social and individual age phenomena on behavior. As expected, when other age phenomena are controlled by limiting the analysis to a single age group, 35-49, the residual effect of age norms on behavior is smaller than the overall impact of age norms shown in Table 1. However, residual effects do remain. Age norms produce a residual effect on 8 of the 18 outcomes in comparison to the earlier results in which age norms influenced 16 of the 18 outcomes. Interestingly, despite the residualization, the same pattern of results remains from Hypothesis 1. Computron shows fewer age norm effects than either Bennix or Index.

The results in Tables 3 and 5 support Hypothesis 4: that the influence of deviation from organizational age norms on behavior differs from the influence of deviation from individuals' age-related self-judgments on behavior. In both cases, age norms appear more likely to influence behavior than self-judgments. In the overall analysis, 16 of 18 outcomes show significant effects from age norm deviations, whereas only 10 of 18 outcomes show significant effects from self-judgment deviations. In the residual analysis, 7 of 18 outcomes show significant effects from age norm deviations, whereas only 2 of 18 outcomes show significant effects from self-judgment

Table 5. Cross-Tabulation Analysis of Age Norm and Self-Judgment Effects, Age Group 35–49^a

Outcomes	Age Norm Effects (χ^2 , df = 2)			Self-Judgment Effects (χ^2 , df = 2)		
	Bennix	Computron	Index	Bennix	Computron	Index
Work Expectations						
Manager has high 5-yr career aspirations	12.44**	0.75	0.69	1.62	1.24	1.07
Manager sees high probability of attaining 5-yr career aspirations	2.34	0.34	3.82	2.14	0.48	6.51*
Manager sees job as a career, rather than “just” a job	15.89***	0.63	9.38**	3.85	1.14	1.38
Intensity of Relationship With Organization						
Manager hopes to leave the organization within four years ^b	17.23**	1.70	13.47**	4.52	6.15	3.73
Manager is committed to the organization		2.18	1.68		0.62	0.49
Manager feels empowered within the organization		0.53	6.72*		1.99	5.90*
Organization’s Evaluation of Manager						
Manager receives high performance rating from superior		2.41	24.16***		0.56	8.62**

^aBennix *N* = 158, Computron *N* = 83, Index *N* = 275.

^bdf = 4.

p* < .05; *p* < .01; ****p* < .001.

deviations. A binomial test indicates that the number of significant outcomes is significantly different for age norm and self-judgment deviations in both analyses, $p < .001$, $p < .002$.

Discussion

This article presents and utilizes an approach to studying age norms and their effects within three work organizations. Age norms are defined as the ages viewed as typical for a given role or status by the modal group of members of a social system. This definition permits variation in the extent to which age norms are shared within a group, provides an initial specification for how many members must agree before their judgments are said to define a norm, and allows age norms to be distinguished from age norm sanctions and their effects. The results provide some exploratory glimpses of what age norms look like, how they influence group members, and how they are both related to, but distinct from, other age-related phenomena.

First, the results show that age norms can be measured within and compared across organizations. The extent to which age norms are shared seems related to the stability of organizational membership. Age norms appear more widely shared in stable organizations than in less stable organizations. Second, the results suggest that age norms do influence behavior. Organizations in which age norms are widely shared show more consistent age norm effects than the organization in which age norms are less widely shared. However, despite this consistency, the size and direction of any given effect differs across the organizations. While it is not surprising that age norms acquire different meanings across organizations, it is unexpected that the extent to which age norms are shared does not appear related to the size of any given age norm effect. Third, age norms do appear to exert a residual effect on behavior inde-

pendent from the effects of other age phenomena. Moreover, the effects of deviation from age norms appear to differ from and, in fact, to exceed the effects of deviation from age-related self-judgments, suggesting that age norms are indeed a social, rather than an individual, phenomenon.

One limitation to this study is that it was conducted in only three organizations. While cross-organization comparisons can be inferred from this sample, the results remain exploratory and should be interpreted with caution. Moreover, the size of these organizations, while relatively large, does not allow for the statistical control of alternative explanations. This problem is difficult to surmount, partly for practical reasons and partly for theoretical reasons. From a practical view, the number of organizations with thousands of managers is limited, and data collection at this scale is problematic. From a theoretical view, age norms may operate differently in large and small organizations. Thus, while large organizations facilitate sophisticated analyses, they may also produce results that do not generalize to smaller organizations. Another limitation to this analysis is that the seven outcomes are randomly selected, and the results may not represent the true distribution of age-related individual outcomes in these organizations. Future studies should broaden the outcome set as well as develop theory for why and under what conditions age norms influence these outcomes.

This study generates many sets of questions. One set involves where age norms come from. What determines the relationship between an organization’s actual age distribution and members’ judgments of it? It seems likely that members’ age judgments decrease in accuracy with increasing organizational size. However, it also seems likely that this relationship reaches an asymptote at some organizational size, after which further increases in size exert no impact on members’ age judgments. Another question is how fast and under what conditions do mem-

bers' judgments change? Do they shift in response to changes in an organization's age distribution? If so, how quickly do they adjust to such changes? It seems likely that judgments shift more quickly in a small organization than in a large organization. But what about judgments in a stable or an unstable organization? It seems possible that judgments in large, stable organizations shift more slowly than in large, unstable organizations. It also seems likely that newcomers shift their perceptions more rapidly than oldtimers, as their perceptions are less deeply rooted than those of oldtimers who have been in the organization a longer time.

A second set of questions involves the impact of age norms on organizational members. This study does not directly assess sanctions; thus, one question is what kinds of sanctions do groups use? Some may be explicit or formal while others may be implicit, informal, and perhaps unconsciously applied. What conditions appear to produce these different kinds of sanctions and which sanctions are most likely to influence an individual's behavior? The issue of how individuals perceive and experience sanctions also raises interesting questions. If people perceive the sanction, are they more or less likely to be affected by it than if they experience the sanction but do not perceive it consciously? It also seems likely that the effect of sanctions is moderated by the individual's age judgments. If the individual's judgments agree with the group's age norms, the effect of sanctions may be greater than if the individual's judgments disagree with the group's age norms.

Finally, the discussion throughout this article suggests that age norms influence behavior through a process. First, members of a group make age judgments of role incumbents. Second, they attach various understandings to these judgments. What does it mean for someone to hold the role at a typical or atypical age? Third, members, either individually or collectively, sanction or reward age deviants according to their understandings. Fourth, deviant individuals, either consciously or unconsciously, experience these sanctions. Finally, individuals respond to the sanctions. This study directly examines only the first and last stages of this process. How the others operate suggests considerable uncharted territory.

In conclusion, age norms have been neglected in both age research and theory. A more detailed critique and study of this construct suggests it provides a rich vein for continuing theoretical and empirical development. Given the changing age distributions in the United States and other countries, the evolution of age norms and their effects on life within society and its institutions seems a topic of wide and immediate relevance.

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See Appendix on next page

Appendix

Notes

1. Udry (1982), Marini (1984), and Cancian (1975) also discuss these distinguishing features of norms, but categorize them as two, rather than three, components. For reasons to be discussed, I consider the third component involving collectively held or shared ideas distinct from the first and second components involving expectations and sanctions.

2. It is also possible to be punished for *conforming* to an age norm. In a historical example, Chudacoff (1989, p. 24) notes that most accused witches in Salem, Massachusetts, were in their 40s and 50s. Holding positions with power over others increased the likelihood of being targeted as a witch, and during this period, both men and women were typically at the peak of their power, status, and prestige during the middle years. Given Chudacoff's explanation, it seems unlikely that colonists would have explicitly ascribed age to witchcraft. In fact, he suggests that these age-linked accusations were not age norms because people did not use age to identify witches. However, it also seems probable that the increased likelihood of being identified as a witch between the ages of 40 and 55, and presumably the decreased likelihood of being so identified during earlier or later years of life, did constitute an age norm for this particular social role. Clearly the role is age-dependent, and clearly sanctions exist, in this case for conforming to, rather than for deviating from, the age norm.

3. Shoulds, oughts, and ideals are much more difficult to discuss. For example, if asked, "What age should an Assistant Professor be?" thoughtful people are likely to respond that they can't answer the question without additional information: "What is the person's discipline, at what school

does he or she work, and is the person considered a 'star'? Do you want to know what I think or what other people think? Why do you care?" These questions result because shoulds, oughts, and ideals force people to both describe and evaluate reality. They must identify the possible ages, select appropriate evaluation criteria, and then conduct the evaluation. Many possible evaluation criteria and combinations of these criteria exist, each requiring a potentially different response. As a result, if the question does not specify all the criteria, people make assumptions about them. The variations in their assumptions then produce responses with inconsistent meanings across people, and this decreases construct validity.

4. However, some organizations may replace exiting employees with newcomers holding the same demographic characteristics. In this case, actual age distributions would not fluctuate even with high turnover. However, given that some exiting employees are retirees who will not be replaced by others of similar age, it seems likely that even organizations with high turnover do not maintain the same demographic composition.

5. Each group member, of course, holds his or her own interpretation of what behaviors represent appropriate sanctions and rewards. As a result, the actual sanctions and rewards that a deviant experiences are likely to show considerable variation.

6. Some data from the first two organizations have been reported previously (Lawrence, 1984, 1987, 1988, 1990). Lawrence (1988) provides a more detailed discussion of age norm identification and a figure depicting a typical age judgment frequency.

7. How people attach meaning to these years remains an interesting theoretical issue. Aside from Rosenbaum's (1989) observations, Taylor and Brown's (1988) work on positive illusion seems relevant to this phenomenon.