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Do Economic Conditions Influence How Theorists View Adolescents?

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Eighty-nine articles in the Pedagogical Seminary *and the* Journal of Genetic Psychology *appearing during two economic depressions and the two world wars were analyzed for their adolescent ideologies. A systematic, ideological bias in the content of these articles was found to be statistically significant. In times of economic depression theories of adolescence emerge that portray teenagers as immature, psychologically unstable, and in need of prolonged participation in the educational system. During wartime, the psychological competence of youth is emphasized and the duration of education is recommended to be more retracted than in depression. The objective, scientific nature of theory building is questioned and discussed.*

INTRODUCTION

In 1972 Klaus Riegel argued that the emergence of developmental psychology was profoundly influenced by two very different economic and

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political ideologies, which he termed the *capitalistic* and *mercantilistic-socialistic* orientations. The capitalistic orientation, which subsumes the tradition of Hobbes, Darwin, Galton, and G. Stanley Hall, was said to imply a developmental model of continuous growth, where the developmental status and achievement of all classes of individuals are measured against single standards (e.g., intelligence tests). The mercantilist-socialistic orientation, on the other hand, emphasized qualitative growth models, and multicultural and multigenerational standards of developmental progress. According to Riegel (1972), the developmental theories of Rousseau, Pestalozzi, Spranger, and Piaget were elaborated from within this ideological orientation.

By exposing the economic and ideological biases of developmental theories, Riegel (1972, p. 140) attempted to show that theoretical activity does not take place in a sociocultural vacuum, that it is, in fact, dependent upon the economic and political ideologies that dominate the society in which we live, and that, as a consequence, "it is naive, irrelevant, and irresponsible to anchor our [scientific] efforts upon an abstract truth criterion traditionally conceived as either 'god-given' or as provided by the 'scientific facts' and 'nature itself.'"

Only recently has there been much interest in extending Riegel's (1972) thesis that the actual developmental course, and theories about development, are dependent upon sociocultural contingencies (e.g., Buck-Morss, 1975, on the socioeconomic bias in Piaget's theory). Broughton (1979, 1981a,b, 1983, in press), for example, in a provocative series of essays on the self, has argued that there is indeed a relationship between psychological theories of the self and structural transformations of society, "between this historical constitution of the self within the rationalized work/social structures and the concepts or theories that psychology puts forward to account for the self's development" (Broughton, in press, p. 151). Broughton (1983) further argues that the nature of adolescence and the various disjunctive images of youth surveyed by theories of adolescence is phrased variously in light of historical transformations, so that a proper understanding of adolescence would require not only an evolutionary perspective, but a historical perspective as well.

This theme has found recent expression in a series of papers by Enright and Lapsley (1982) and their colleagues (Enright *et al.*, 1985; Lapsley *et al.*, 1985). They argue that societies regulate the status of youth in culturally adaptive ways, so that whether youth will be portrayed as competent to assume adult roles, or as psychologically incapacitated to warrant their exclusion from adult roles, will depend largely on the labor and economic requirements of the society in which they live. The necessity to appropriate youth labor and leisure has been shown to vary across historical time, so that the absence and invention of adolescence can be seen to reflect

the historically relative economic demands of a culture (Enright *et al.*, 1985; Lapsley *et al.*, 1985).

There is an emerging consensus, then, that a proper understanding of adolescence and of adolescent development requires an understanding of the economic, political, and ideological structures of a society, and of how these structures evolve and change historically. The purpose of this article is to empirically explore the subtle interplay between economic and social changes in American society and the phrasing of theories of adolescence.

To achieve this purpose, we will critically examine theories of adolescence as they emerged in two differing economic conditions: during times of economic depressions and times of rapid economic expansion in wartime. Because youths' leisure, not their labor, is usually appropriated in economic depression (see Lapsley *et al.*, 1985), we expect that theorists of adolescence will reflect these economic conditions in their writings. These theorists will see an unstable youth, an immature youth, a youth in need of prolonged education. In contrast, because youths' labor is appropriated particularly during wartime, we expect that theorists of adolescence here will see a more mature teenage group who would benefit by the retraction of adolescence. This would include a call for less schooling and faster assimilation into adult roles.

There are no more graphic stereotypes of economic depression in the United States than the two great post-Industrial Revolution depressions of the 1890s and the 1930s (Morison *et al.*, 1980). There are no more salient stereotypes of rapid economic expansion than World Wars I and II. These were fought by the United States between 1917–1919 and 1941–1945, respectively. We therefore examined theories of adolescence in these four time periods.

There is a major advantage for us in selecting these four periods. The historical progression was such that each war followed a depression in time. If our expectations are correct that economic conditions are a powerful independent variable in describing what theorists say about youth, then there should be ideological shifts in theorists' views that are nonmonotonic. Both depressions should share similar ideologies as should both wars. This should occur even though the depressions are not historically adjacent, nor are the wars. Those who believe the field of adolescent development represents a steady, consistent accumulation of knowledge would most likely expect the ideologies of the modern era (1930s and 1940s) to be more similar to each other than to the ideologies of the pioneering era.

Our hypotheses, then, of the relationship between theories of adolescence and economic conditions are as follows:

1. Theorists in the 1890s will have ideologies about adolescents that imply their greater immaturity than theorists in World War I.

2. Theorists in the 1930s Great Depression will have ideologies about adolescents that imply their greater immaturity than theorists in World War I.
3. Theorists in the Great Depression will have ideologies about adolescents that imply their greater immaturity than theorists in World War II.
4. Theorists in the 1890s depression will have ideologies about adolescents that imply their greater immaturity than theorists in World War II.
5. Theorists in the combined depressions will have ideologies about adolescents that imply their greater immaturity than theorists in the combined wartimes.

METHODS

Choice of Journal for Analysis of Theorists' Ideas

The *Journal of Genetic Psychology*, originally entitled the *Pedagogical Seminary*, was our choice for making the ratings. It is the oldest journal devoted to developmental psychology. It has always covered the life-span, from young children through adulthood.

Founded in 1891 by G. Stanley Hall, the journal published many American authors and enjoyed a steady submission from European psychologists. Hall was the editor until his death in 1925. As editor, he no doubt influenced the direction of the field in the two earliest periods of interest to us here—the economic depression of the 1890s and World War I. Carl Murchison replaced Hall as editor, and his editorial board included such international notables as Carmichael, E. L. Thorndike, Gesell, Luria, Pavlov, and Terman. Thus, Hall was not an influence in the final two periods of interest to us—the Great Depression of the 1930s and World War II. If our hypotheses are a function of Hallian influence, this will show when the Great Depression theories are compared to the World War II theories, and even when depressions are collapsed and compared with the two war periods. Thus, the change in editorial staff was particularly timely for the kinds of comparisons derived here.

Other journals were considered, but rejected as inappropriate. The *Journal of Educational Psychology*, although initiated in the 1890s, was too specifically educational, with little on theories of adolescent psychological development. *School Review* had virtually no empirical studies. It also emphasized education, not psychology, and so ratings of psychological theories were not possible. *Child Development* did not have its inaugural issue until the 1930s. Although the theories in the Great Depression could be

compared with World War II, the content of the early articles was inappropriate. Those articles focusing on adolescence emphasized not psychology, but physiology (muscle development, physical growth, and general physiological developments). By the time mainstream psychology articles (similar to those in the *Journal of Genetic Psychology*) emerged, the depression was virtually over. Apparently, psychologists continued to view the *Journal of Genetic Psychology* as the journal of choice in which to publish their views during the depression years.

Decision Rules for Article Selection

An article was considered appropriate if it covered any area of psychology and included human subjects up to at least 16 years of age. Articles that only included subjects up to age 15 were excluded because the degrees of freedom open to the theorist was limited in suggesting adultlike status or in abandoning education for this group. Our criteria allowed for the inclusion of articles that focused on either early adolescence (10–15) or late adolescence. If an article included subjects no younger than 17 it was also excluded because it virtually always involved an adult sample (e. g., 17–34-year-olds). Thus, the theorist would be biased toward viewing the group in an adultlike way. Therefore, we selected articles that included the entire age spectrum traditionally associated with adolescence provided that the group went up to at least age 16 and did not begin at age 17.

Decision Rules for Choosing Particular Years of Publication

Dates of article submission were not available in this journal until the late 1920s. We thus used actual date of publication as a decision rule for including or excluding a given article. As a general rule we allowed at least one year of the particular economic period (except for World War I) to unfold before we chose articles for that period. The years chosen for each of the four periods are as follows:

19th-Century Depression

Articles published between 1894–1898.

World War I

Articles published between June 1917–September 1918. Only articles published during United States' involvement in the war were included. War

was declared in April 1917 (Morison *et al.*, 1980). Because of the United States' relatively brief involvement, we could not wait one year into the war before choosing articles, otherwise our total number for the period would have substantially reduced statistical power. Because President Wilson warned the nation of an impending war in January 1916 (Morison *et al.*, 1980), our choice of June 1917 as the early selection limit seemed a reasonable compromise.

Great Depression

Articles accepted between 1933–1935 and published between 1933–1936. Because of an economic upsurge in 1937 (Morison *et al.*, 1980), we decided not to rate articles in that period.

World War II

Articles published from mid-1943 to June 1945. Although other articles were accepted during the war and published subsequent to it, we felt such articles could have been revised by the author after the war. Thus, we omitted them in our selection.

All articles within these four periods meeting the criteria described above were included in the sample.

Numbers of Articles Rated in Each Economic Period

Ninteenth Century Depression = 27
World War I = 16
Great Depression = 23
World War II = 23

Procedures

Three judges independently read each article. Before the judges read them, the articles were blinded to all information indicating author, year of publication, and economic period in which the article was published. Articles were given in random order to each rater so that a potential judge's response set bias in rating would be dispersed throughout all four economic periods. One judge was also blind to the hypotheses.

A training period for the judges occurred in which six articles were independently rated and discussed. Questions rated and scoring criteria were defined, redefined, and finalized. An interrater agreement of 80% was

achieved at this time. Following training, each rater independently rated each article. Ratings were compared, and any discrepancies were discussed and resolved. In the rare instance when consensus could not be reached, the rater blind to the hypotheses made the final decision. This happened only three times. Final interrater agreement was 87%.

Questions Used in the Ratings

1. Are adolescents stressed? (Stress must be unique to the adolescent group.)

   Example: "callow, shambling, American adolescent...boys are growing wild and slightly criminal" Hall (1918, p. 306).

2. Are adolescents childlike? (A "yes" rating occurs when adolescence is linked to childhood activity/qualities or the role of dependence.)

   Example: Dawson (1896–1897, p. 245) viewed 15–16-year-olds' attention as characterized by the "same restlessness and irregularity in application to their task that one sees in very young children."

3. Are adolescents adultlike? (A "yes" rating occurs when adolescence is linked to adult activities/qualities, the independent role of work, military duty as positive, and so forth.)

   Example: Bradway (1944, p. 198), in talking of ages 12–16, said "mental growth is nearly or entirely completed at this age." Dealey (1917, p. 245, 254) advocated "citizen soldiers" and "juvenile employment" for adolescents.

4. Should adolescents have adultlike work? (A "yes" rating occurs when the author either advocates such work or training specifically in such work for the adolescents' benefit or well-being.)

   Example: Ling (1918) advocates (p. 251) "military training for the youth" by means of a "broad program [of] physical education of a semimilitary character..." (p. 266).

5. Should adolescents defer their own needs for society's needs? (A rating occurs when the author emphasizes the importance of adolescents' serving society.)

   Example: Storey (1918, p. 244) advocated health instruction that serves the "mandatory requirements of the state" so that "two million future citizens may be saved the loss of working days, of income of productivity, of civil and military usefulness and of happiness."

6. Is adolescence a fast developmental stage? (A "yes" rating occurs when the author says that adolescence is completed by age 15 or 16.)

   Example: Merrill (1918, p. 95) said that by age 15 adolescents are able to "satisfactorily carry on" "a range of occupations." Ling (1918, p. 179) said that by age 16, adolescents are "mature enough" "to take care of [themselves] under all conditions. . . strong enough to stand the rigors of hard work on the farm."

7. Should education accelerate the adolescent stage? (A "yes" rating occurs when the author says that the time of adolescence is too lengthy and should be shortened.)

   Example: Hall (1918, p. 306), in believing that some teenagers are ready for adultlike experiences in the high-school years, said, "Concessions as to high requirements for graduation. . . are amply justified . . . ." He praised some high schools for having "real rifle practice like military manoeuvers [*sic*]."

RESULTS

The results of the analyses are summarized in Tables I and II, and are discussed below. The main statistical technique used to investigate differences between the time periods was the Fisher exact test (Marascuilo and McSweeney, 1977). This procedure tests the hypothesis of equality of proportions for two independent populations. The test is the statistical probability of the observed result occurring above or below $p < .05$. As an example, the proportion of theorists who view adolescents as stressed in the 1890s economic depression is compared with the independent proportion of theorists who view the same issue in World War I. All pairwise comparisons were made for each period: 1890s economic depression, World War I, 1930s economic depression, and World War II. Because there was no author overlap across these four economic periods, we could assume statistical independence.

The first set of analyses compared the 1890s economic depression with World War I. Of the seven comparisons, six were statistically significant ($p < .05$). The 1890s theorists had a higher percentage of responses in only one category: they saw adolescents as more psychologically stressed than did the World War I theorists (Question I). On the other hand, World War I theorists consistently portrayed adolescents as more grown-up, mature in a psychological sense compared with the earlier theorists. In World War I, adolescents were seen as more adultlike in their psychological conditions

Table I. Items on Which Theorists in Different Economic Periods Differed on Adolescence

Periods compared	Item used in the comparison						
	Adolescents as stressed (1)	Adolescents as child like (2)	Adolescents as adult like (3)	Adolescents as needing more adult like work or training (4)	Adolescents should defer own needs for society's needs (5)	Adolescence as a fast development stage (6)	Adolescence as a stage should be accelerated (7)
1890s vs World War I	1890s ($p < .03$)		WWI ($p < .0007$)	WWI ($p < .0001$)	WWI ($p < .0013$	WWI ($p < .008$)	WWI ($p < .005$)
1930s vs World War I			WWI ($p < .0004$)	WWI ($p < .0002$)	WWI ($p < .003$)	WWI ($p < .0007$)	WWI ($p < .008$)
1930s vs World War II			WWII ($p < .02$)			WWII ($p < .03$)	
1890s vs World War II			WWII ($p < .02$)				
Both depressions vs both wars		Depressions ($p < .02$)	Wars ($p < .00001$)	Wars ($p < .0003$)	Wars ($p < .0009$)	Wars ($p < .0007$)	Wars ($p < .02$)
1890s vs 1930s							
World War I vs World War II				WWI ($p < .0015$)	WWI ($p < .04$)		WWI ($p < .008$)

Table II. Percentage of Theorists' Articles Saying "Yes" to Each Question About Adolescence

	Question concerning adolescence						
Time period	Are adolescents psychologically stressed? (1)	Are adolescents child like? (2)	Are adolescents adult like? (3)	Should adolescents have adult like work (4)	Should adolescents defer their own needs for society's needs? (5)	Is adolescence a fast developmental stage? (6)	Should education accelerate the adolescent stage? (7)
1890s	37	19	7	0	0	7	0
World War I	6	0	56	50	37	44	31
Great Depression	13	22	4	0	0	0	0
World War II	22	4	35	4	9	22	0

(Question 3); they were seen as benefiting psychologically from adultlike vocations (Question 4); youth during the war should put aside their own internal/psychological needs and instead be trained for societal needs (Question 5); adolescence as a period of psychological growth was viewed as progressing quickly during the war and more slowly during the economic depression (Question 6); finally, the theorists during wartime thought that the already fast-paced growth of the adolescent should be sped up even more by educators and parents so that psychological adulthood is reached even sooner (Question 7). Thus, the theories expressed in the journal articles of the day, upon first analysis, show a potential bias based on the economic conditions of the time. When youth are not needed in the work force, theorists paint a childlike picture of teenagers. When youth are needed to tend victory gardens, to work in factories, or to fight in battle, theorists more frequently paint a more rugged, adultlike portrait of youth.

The above results, of course, confound economic condition and historical time. Perhaps our theories evolve and this evolution takes place apart from the influence of economic condition. If this is so, then the philosophies, theories, and knowledge base of World War I should not revert to the profiles of the 1890s in subsequent historical eras. On the other hand, if the economic conditions of the day seem to bias the theories of adolescence, then the Great Depression and World War I comparison should show somewhat similar patterns to the 1890s depression and World War I comparison. The World War I and Great Depression comparison of theories, then, becomes important if we are to eliminate time passage as the primary explanation of the statistical patterns found.

The Great Depression and World War I statistical patterns show convincingly that the philosophies of adolescence are not predominantly the function of the passage of time. In fact, the results here are quite similar to those shown for the 1890s depression and World War I. Of the five statistically significant comparisons, all show theoretical profiles of youth as more psychologically mature during World War I. For example, youth are seen by theorists to be more adultlike in character during the war (Question 3); youth should, for their own good, be given training for adult vocations (Question 4); youth during the war should put aside their own internal/psychological needs and instead be trained for societal needs (Question 5); psychological growth in adolescence was viewed as progressing quickly during the war and more slowly during the economic depression (Question 6); finally, as in the 1890s and World War I comparison, the theorists during wartime thought that the already fast-paced growth of the adolescent should be sped up even more by educators and parents (Question 7).

We now have two different comparisons in two different economic depressions and one wartime economy that further suggests a potential bias

in how theorists think about youth based on the economy of the times. The profiles of youth discussed in the leading developmental psychology journal of its time changed significantly from 1917 to the mid-1930s. That change was not progressive and cumulative. The economic depressions generated theories that were quite the opposite of those generated during wartime.

There is still a possible bias in these results. The comparisons could be unique to World War I. Perhaps other wartime, accelerated economies would reveal other patterns of theory construction. Thus, the comparison of the 1930s and World War II becomes important. Here, again, we find patterns similar to the above. There are two statistically significant patterns. In the first, youth are viewed as more adultlike during the war (Question 3), and adolescents' psychological growth was viewed by the theorists as progressing quickly during the war and more slowly during the depression (Question 6). The World War II comparison with the 1890s was similar. Youth were seen as more adultlike in character during the war (Question 3).

A final set of analyses on these particular issues compared the combined depression economies with the combined wartime economies on how theorists view adolescence. This is an important analysis because it stabilizes the comparisons to a greater extent than one time period can. The unique biases of each wartime economy, for example, are averaged, thus increasing the validity of the results. The findings, again, support the hypotheses. Youth in economic depressions are seen as more childlike in their psychological natures (Question 2). In contrast, wartime theorists more frequently emphasized the youths' adultlike nature (Question 3), their need for adultlike vocational skills (Question 4), and their need to forego their own needs for the needs of society (Question 5). Further, during wartime the adolescent stage of development was seen as a fast-moving stage (Question 6) that should be accelerated to adulthood more quickly than was then occurring (Question 7). Theorists view the adolescent very differently in wartime than in economic depressions.

A set of analyses was conducted to examine more closely whether the results may be influenced *somewhat* by time passage. To accomplish this, we examined three patterns. First, we explored the patterns between the two economic depressions. There were no differences on any of the questions in these two eras. The comparison between the wars showed a stronger emphasis on adultlike vocational training in World War I (Question 4), as well as on youths' deference to societal needs (Question 5) and a speeding up of adolescence (Question 7). Apparently, the ideologies in World War II were more subtle than those in World War I. The major theoretical stand in World War II, as seen in Table II, was that youth are adultlike. This was expressed most often in IQ research (see the appendix), where youths' psycho-

logy was favorably compared to adults. The subtlety emerges in looking at Question 6. Almost a quarter of the theorists implied that adolescence is a fast-moving stage. Youth quickly became adults. If adolescents were adultlike in IQ (which was considered necessary for military duty) and if the period was rapidly completed, one can see the usefulness of youth in the larger economy embedded in this ideology. These results, then, show that there may be an evolution of ideas apart from economic condition that makes ideologies in similar economies slightly different.

Finally, we explored the theoretical emphasis on psychological stress and on heredity vs environment across historical time. This was done with a linear trend analysis applied to proportions across all four economic periods using the Z statistic. No trends for stress (Question 1) emerged. As one would expect, effects of heredity (a new question not previously analyzed here) on adolescent psychological development exhibited a decreasing significant linear trend ($Z = -2.60$, 30%, 19%, 19%, 5% across the economic periods) while the effect of environment exhibited an increasing significant linear trend ($Z = 4.72$, 0%, 0% 26%, 27% across the economic periods). Even though theorists changed their world view consistently across historical time about what might *cause* adolescent psychological development (e.g., heredity or environment), those theorists kept shifting with economic conditions when theorizing about the adolescent's psychology. When youths' labor was needed, they were viewed as quite capable and adultlike. When youth were not needed in the work force, they were viewed as more immature and slow to develop by the psychological theorists.

DISCUSSION

The results of this investigation show that, during periods of economic retraction, theories of adolescence emerge that portray teenagers as immature, psychologically unstable, and in need of prolonged participation in the educational system. The image of youth is quite the reverse, however, when society has large manpower demands. During such periods either the psychological competence of youth is emphasized, or else the extent and duration of participation in the educational system should not be as great as had been supposed.

While the actual status of youth has been shown to be historically variable and to be dependent on sociocultural contingencies (Enright *et al.*, 1985; Lapsley *et al.*, 1985), the present study shows that psychological *theories* of adolescent development similarly reflect the economic condition of the era in which they were phrased. One cannot retreat from the implication that such theories mask an ideological purpose. As Broughton (in

press, p. 157) has pointed out, "developmental psychology seems to be serving the best interest of maintaining social stability, even at the risk of stunting personal development." Personal development is stunted to the extent that false consciousness is engendered by the presentation of adolescence theories as objective and neutral accounting of reality as "prescriptive norms of development encourage increased conformity to the social trend described" (Broughton, in press, p. 158).

The ideologies of adolescent developmentalists certainly are not isolated within the university walls. For example, G. Stanley Hall's influence on the Boy Scouts and YMCA movements are well documented (Kett, 1977). Hall's students played a large role in the Campfire Girls' early formation (Macleod, 1983). The developmental ideologies of the 1890s depression became a substantial rationale for treating youth differently than adults. Legislators, too, have been influenced. For example, in 1938, Mr. Schneider, a legislator from Wisconsin, referred to the "tender years" (p. 9260) of youth as his rationale for supporting the minimum age law for laborers (*Congressional Record,* 1938). Those tender years went as high as age 18 in some aspects of that bill. The IQ tests, upon which much of the World War II ideologies were formed, found their way into military training centers (Kett, 1977).

The convergence of ideologies during depression and then during wartimes is all the more provocative when one realizes how divergent were the scientific topics of study across historical time. For example, World War I theorists were often preoccupied with actual labor of youth in food production, military training, and apprenticeship (see the appendix). In contrast, by World War II the research emphases were on paper-and-pencil testing, not on labor. In addition, the editorial board changed completely from the first to the second war. Yet the theorists' ideologies converged in that youth were seen as adultlike and the stage of adolescence was theorized to be a relatively rapid progression. In both eras, as youth fought and labored, theorists directly or subtly said why this was developmentally appropriate. Even within a given era, the topics of discussion are diverse. For example, in World War I the topics for scientific scrutiny ranged from an analysis of a newspaper route, to music education, to training in electric wiring, to hobbies. Despite the diversity, there is a statistically significant consensus that emerges, stereotyping youth in accord with the economic demands of the society.

The field of adolescent psychology is not free from the societal influences that impinge upon legislators, educators, and parents in shaping American adolescents. In fact, there is a strong correspondence between the ideas of adolescent psychology and the legislation passed by the U.S. Congress. In times of war, child labor and education laws are often loosened or

abandoned. Consider, for example, the Massachusetts law of 1943: "An act providing relief to certain individuals and establishments from conditions resulting from the shortage of manpower due to the existing war." The Commissioner of Labor was free to suspend the prohibition of employment for minors (Massachusetts, 1943).

The first federal child labor law, in contrast, was passed in 1938. The scientists' ideologies match those of the nonscientific policy makers. This is not to say that one is the cause of the other. The point is that all are influenced by the same economic conditions.

Legislators are expected to react to changing social and economic demands in the kinds of bills they pass. The danger is in our failure to understand that scientific theories operate in a similar way. If we are oblivious to this, we may give too much credence to the theorist's idea. We may impute too much truth value to it. We may use the idea as an ultimate authority in determining social policy for youth. And, if those listening presume that the scientific theory holds more truth than the persuasion of the local legislator or parent, then they are less likely to argue, ponder, or consider other prescriptions for youth. The supposed truth value of science thus may become a subtle way to close our minds on youth. The study here calls into question the special nature of science as objective and truth finding when it comes to the large questions of what adolescents are really like and how they are best served. Science certainly makes its invaluable contributions to adolescent development, such as elucidating stage sequences or parent-child relations, but it seems less effective for the large questions examined in this research.

Some may argue that the biases uncovered here are the stuff of a bygone era. We have risen above it all with sounder designs, better tests, and faster computers. One must wonder, though, what Sidney Bijou, Boyd McCandless, Elizabeth Hurlock, or Heinz Werner would have said in the 1940s. Would *they* have said that they were more scientific and less biased than those of the Hallian era of the 1890s? They used better methods, they were analyzed by us here, and they, too, belonged to a biased era. Our analysis leads to one final musing: What are our current ideological stereotypes of youth and what societal/economic conditions are we trying to aid by holding such views?

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APPENDIX

A List of Articles Rated[5]

1890 Depression Articles

Hoyt, W. A. (1894). The love of nature as the root of teaching and learning the sciences. *Pedagog. Sem.* 3: 61-86.
Schallenberger, M. E. (1894-1896). A study of children's rights, as seen by themselves. *Pedagog. Sem.* 3: 87-96.
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