

DOCUMENT RESUME

ED 139 604

SE 022 159

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 TITLE Cinderella and Science: Career Counseling and Girls.
 PUB DATE Feb 76
 NOTE 15p.; Paper presented at the annual meeting of the American Association for the Advancement of Science (Boston, Massachusetts, February 22-23, 1976).

EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.
 DESCRIPTORS *Career Planning; *Counseling; Elementary Secondary Education; *Females; Higher Education; *Science Education; Scientific Manpower; Sex Discrimination; Speeches

ABSTRACT The need for educational and career counseling for girls and women is described in this paper. Expectations, the "Cinderella syndrome", independence, and adolescence are discussed. Factors which reduce girls' aspirations and options are identified. Career counseling that concerns itself with strength, independence, role model equality, and sharing is emphasized. (DT)

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CINDERELLA AND SCIENCE:
CAREER COUNSELING AND GIRLS

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Invited paper presented at the Symposium on
Bicentennial Retrospectives and Prospectives:
Science Education for Women
American Association for the Advancement of Science
Annual Meeting, Boston, February 18-24, 1976

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I have had the marvelous experience recently of spending almost two years as the Director of an Office of Education funded project which provided technical assistance on sex equality. We held over 320 workshops nationwide, approximately six in every state and the District of Columbia. We interacted personally with 7,000 counselors, teachers and administrators on the question of sex equality in education, the meaning of Title IX and the need to understand that educators should not--could not--go on with business as usual in regard to the female half of their student population.

That experience confirmed for me the belief that the only way we are ever going to free girls and women to be all they can be is to call for a genuinely revolutionary change in our expectations for girls and women.

We have heard a good deal lately about counseling women to be able to deal with their multiple roles of wife, mother and career woman. We have heard about women's occupational development and how it is different from men's and how girls and women must be counseled to be prepared to deal with that difference. If you counsel women in that vein, i.e., differently on the basis of sex, it is possible that you might be in violation of Title IX. In any event, it is far removed from the revolutionary expectations or revolutionary counseling I have in mind. Perhaps, then, I had best define some terms.

As a rule, career counseling for girls falls into three categories, (1) Antiquated Career Counseling, (2) Liberated Career Counseling, (3) Revolutionary Career Counseling. They may be defined as follows:

Antiquated career counseling. Counselor to girl: Your scores in math and science are excellent. Why don't you get your degree in math education? That would only take four years, whereas medicine would take many more--probably longer than you want to wait before marrying. Furthermore, teaching, unlike other jobs, will let you be home at 3:00 when your children return home from school.

Liberated career counseling. Counselor to girl: Your scores in math and science are excellent. Perhaps you want to consider a career in medicine. You might be almost a pioneer. There aren't too many brain surgeons who are women. And brain surgeons, of course, can pretty much set their own schedule so you could plan to be home at 3:00 when your children return home from school.

Revolutionary career counseling. Counselor to girl: Your scores in math and science are excellent. Perhaps you want to consider a career in medicine. You might be almost a pioneer. There aren't too many brain surgeons who are women. It could be an immensely rewarding profession not only financially but in the great intangibles of power, prestige and honor. Period.

Revolutionary career counseling is needed to get girls and young women past what Coser and Rokoff have called the "cultural mandate" that holds women responsible for the care of the family and which views those who refuse this responsibility as "a disruption of the social order."²

If we are not willing to deal with this stereotype we are avoiding the core issue upon which all other stereotypes are founded. Either a little girl is brought up to believe that she also has the right to power, prestige and independence or she is not. Presently she is not.

There is a very easy way to learn how to do revolutionary career counseling--just repeat after me that you will assume that:

- o No girl is ever going to get married. Ever.
- o She is never going to have any children.
- o She is an orphan and will not be left anything by parents or doting aunts.
- o Because she will never marry, she will have no financial assistance from her husband to get her through life.
- o Because she will have no children, she will have no fall back to cushion her old age.
- o Because she will have no inherited nest egg, she will have nothing but herself to rely on to keep her from a dead-end job at best and poverty and degradation at worst.

What then should her education and career counseling be like in order to assure her an independent life commensurate with her abilities and interests?

In the fine print of Title IX is a most revolutionary passage that almost everyone has ignored. It is section 86.40 and it says in quiet, legal terms what my litany which you just repeated states somewhat more dramatically. Title IX in section 86.40 says that students shall not be treated differently on the basis of actual or potential parental, family or marital status. It is the "potential" which fascinates me. It has always been because of a girl's or a young woman's "potential" marital and parental status that she has been counseled differently than her brother.

The Cinderella Syndrome.

Americans have a powerful, nearly universal belief which undercuts and overlaps any girl's life plan. The belief is sometimes expressed overtly in the culture but is always present subliminally. It is a belief that every American girl is, or should be, named Cinderella. It is what I have taken to calling the "Cinderella Syndrome," and it goes like this: When Cinderella leaves school at whatever level, dropout, graduate or



post-doctoral fellow, she will be discovered by the Prince and married to him. She will then be so occupied by the Prince, the princesses and the princes that she will never need to work or want to work again. She and the Prince will live happily ever after until they are both 100 years old at which time they will both die on the same day.

We talk about career counseling for women--counseling for serious, on-going careers, that is--but we don't really mean what we say. The underlying presumption of a girl's life is still that she will grow up to be a wife and mother and that everything else will have to be subsumed under or scrunched around to fit the Cinderella Syndrome.

In career counseling; indeed, in all our relationships with girls and boys, we must actively close the book on the myth of Cinderella and the Prince, not only because these archetypes limit the possibility of independence and growth, but because they don't really exist. Fifty-four percent of American women between the ages of 18 and 64 are in the work force.³ The divorce rate is up 109 percent since 1962 and rising.⁴ Cinderella does not live with the Prince until they are both 100--he dies before she does and leaves her to grow old to be poor--two-thirds of the poor over the age of 65 are women.⁵

Independence.

Two hundred years ago Mary Wollstonecraft recognized that dependence should not be a woman's way of life. She proposed to do something about it through the educational system. She said that the only education of use to a woman was one which renders the woman "independent."⁶

That kind of independence is critical to any adult who wishes to be

responsible and in charge of her or his own life--regardless of whether or not that life is shared with another human being. It also may have overtones for intellectual achievement which must enter consideration if we want women in important scientific careers in large numbers.

The National Assessment of Education Progress reported in 1975 that girls do just as well as boys in math and science up to the age of nine. Somewhere between 9 and 13 a decline begins in math and science, among other things, and continues through age 17 and into adulthood.⁷ There was a great public wringing of hands when the news arrived. What, oh what, did this mean? Some of us thought we had a clue.

Ten years ago, Alice Rossi noted that the childhood model of the "good sweet girl" which the educational system encouraged was not going to produce any women scientists, or scholars, doctors or engineers.⁸

Twelve years ago, Eleanor Maccoby reported that the researchers who monitored the Fels study--a longitudinal study of gifted girls and boys--said that the simplest predictor of whether or not a girl would grow into an intellectual person was whether or not she had been "a tomboy at some point in her childhood."⁹

The Fels study also reported that the children whose I.Q.'s rose during elementary school were those children who were competitive, self-assertive, independent and dominant in interaction with other children. The children whose I.Q.'s declined during the same time were "passive, shy and dependent."¹⁰

It does not take a great deal of scholarly thought and research to figure out which list of adjectives reflects the historical and current

view of the accepted female role in school and elsewhere.

Support for the Independent Girl.

Just how many counselors, teachers and administrators, not to mention parents and peers, do you suppose there are who support and encourage a girl to be competitive, self-assertive, independent and dominant in interaction with other children? And how many do you suppose reward the "good sweet girl" who is quite likely to be "passive, shy and dependent?"

Louise Bachtold; in 1972, studied women listed in Who's Who in America who were biologists, micro-biologists and chemists ranging in age from 46-60. She found these women as a group to be more serious, confident, dominant, radical, intelligent, and adventuresome and less social and group dependent than women in the general population.¹¹

Listen to those words--confident, dominant, radical, intelligent, adventuresome, not group dependent. Do you believe that most career counseling, the school system or society as a whole, provide support for the intelligent, radical, dominant, not group dependent girl, teenager or woman? Mercy, those are the weirdos who must be toned down, found a boyfriend and taught that if they want to have friends, be popular and get married, they had better change their ways!

At elementary school levels, bad as that scene is, there is a little maneuvering room for the dominant, confident, radical, intelligent, adventuresome, independent girl. We do tolerate the tomboy.

Adolescence.

But then comes adolescence. Research has told us that female under-achievement begins as puberty approaches. Unless we are prepared

to believe that all female brains turn to butter at the onset of the menarche, then we have to ask what else is going on that causes this disaster. And what is happening as girls approach puberty is that the socialization to the expected "feminine" role shifts to pressure cooker dimensions. These pressures are being applied earlier and earlier to American girls, giving them less chance to build their defenses against them.

At puberty adult roles are being studied and adapted to. The Eli Ginzberg theory of occupational choice applies here--young people are trying on roles.¹²

Erik Erikson says that the critical problem of adolescence is the problem of identity. He speaks of one's meaning evidenced in the tangible promise of a career in view.¹³

We talk of generic adolescence as a time of asserting independence and finding one's own values but this does not really mean girls anymore than the generic "mankind" really means women. A girl at adolescence trades in dependence on her parents for dependence on male friends and eventually trades that in for dependence on a husband. Her self worth, society tells her, depends on which boy with how much status finds her worthy of his attention. The career she tries on is that of the wife at home as she waits passively by the phone for a call from a male that will tell her that she is "all right." Like the wife she is being trained to be, she is encouraged to flatter the budding male adolescent and to trim her talents carefully so that they will not outshine those of the boy.

And the boy has learned to expect her to do just that. In a large

survey of the Baltimore school system on sex role attitudes encompassing majority and minority groups and all socio-economic classes, boys and girls were asked, in the ninth grade, if they thought wives should have careers after marriage. The greatest difference in attitude lay between middle class boys who said "no" and middle class girls who said "yes." And the greatest disparity of all lay between those boys and girls of high I.Q. That is, the higher the boy's I.Q. went, the more likely he was to have already decided at age 14 that he wanted his wife at home.¹⁴ If I.Q. is any predictor of capability at all, the study is indicating that those girls with the most potential capability are the ones most likely to be married to persons who will not want them to utilize that capability independent of a wifely role.

If in the face of that message, a girl should have the temerity to pursue a career if only, as the euphemism goes, to have something to "fall back on" she had better be careful what she chooses. Studies have shown that the young adolescent girls expressing interest in engineering as a career were seen by both male and female counselors as "deviant" and in need of further counseling--not because they would need help to achieve their goal but because something was seen to be deviant about them and their goal.¹⁵

So counselors are telling girls that they're "deviant" if they aspire to certain careers and their male peers are telling them that they shouldn't aspire to any career at all.

Let us add to this pressure cooker stew which reduces girls' aspirations and options, Ann Oakley's research which indicates that girls who

are not relatively passive and inward directed are clearly seen as deviating from parental expectations about sex appropriate behavior and this deviation plays an important role in determining the pattern of referrals for "abnormal" behavior.¹⁶ With this as a reference point we can see that the dominant, questing behavior supported by the Fels study as indicating rising I.Q. and the string of adjectives used to describe the mature women scientists would then be seen as "abnormal."

Clearly, career counseling does not happen in a vacuum on Thursday afternoon at 2:00 in the spring of one's senior year of high school. Career counseling starts on day one. It is also very important to recognize that the careers of one half of the population are going to be mightily influenced by the attitudes of the other half of the population. Both sexes are getting messages about appropriate behavior for girls, and little boys actively demand that behavior at the earliest ages and are allowed to punish little girls who do not conform. On the playing fields of recess, the first grade boy generally feels quite comfortable telling a girl to get away, that HE is not going to play with girls. If he is not stopped in his tracks by the playground supervisor, he is learning that he can, with impunity, define parameters of what girls can do. Do not be surprised, then, when he is still doing it in the personnel offices, the seats of government and the board room 40 years later.

To put some perspective on the matter, it may help to consider what we think might be the outcome of an official policy allowing children on a playground consistently to put down, refuse to play with, ignore, make fun of, humiliate and ostracize members of minority groups. Yet we do this

routinely every school day to girls all over America, simply because they are girls. Who has not heard the boys' group say, "We don't want any girls playing. Girls are dumb and stupid and can't do anything anyway." Who has not seen whoever is on playground duty smile understandingly because "boys will be boys."

Imagine hearing a teacher say, "We want the Blacks to line up on this side of the room and Whites on this side and that is the way I want you to come in and out of the building all year." Imagine: "Today we are going to have a math game and we are going to play the Blacks against the Whites." Imagine: "If you don't behave, you'll have to sit with the Blacks." Imagine: "Good morning, Blacks and Whites."

If boys are supported and encouraged to believe that girls are the enemy, unworthy of participation in their games, a group from which adults feel boys must be segregated for the ten years that children spend in the obligatory school system of our country, there is no way to expect boys to suddenly turn about as adults and see female peers as equals. Women will remain--and have remained--the little girls that society has allowed and encouraged little boys to believe are inferior and unworthy--somebody to be shoved aside so that boys could play with boys.

I cannot emphasize strongly enough that I believe we have set up a whole psychological and educational system which trains girls to subservience, which trains boys to expect that subservience and which teaches that any female person who is strong and dominant is suspect, deviant, probably sick and clearly subversive.

Radical Counseling

I looked up the word "radical" in my dictionary and discovered that it comes from the Latin radicalis meaning "having roots" and having a definition meaning "proceeding from the root." I would urge all of us to become radical counselors of girls and to urge all girls to adopt the name "radical" in place of Cinderella and act on it without fear.

We all have a root--a core--a possibility. Some roots are nourished and others are not. It seems to me that societies both now and in the past have allowed girls to grow only into bonsai women. That is, however strong the root, the branches--the potential--of the bonsai women were pinched off, shaped, decorated, meant to fit into a home without too much trouble. That must stop.

We must disengage our thought processes from the idea that girls should be raised to accept subordinate roles even as loving and loved subordinates. And we must stop raising boys to expect them to be so. Instead we must encourage girls to that lovely list of adjectives which defined the mature woman scientist: serious, confident, dominant, radical, intelligent, adventuresome, not group dependent. And we are going to need to show boys how to get along with that kind of girl and help men not to be afraid of that kind of woman.

Career counseling must begin on day one and it should concern itself not with science or engineering but with strength and independence. If we do that, the careers will take care of themselves. We must talk and role model equality and sharing. We must encourage girls at adolescence to ask not what she should do to make herself subservient, but to ask instead what

kind of a boy needs her to be less in order to make himself more secure. We must give up the credentialing of women by whether or not they are "feminine" and if they are, we tolerate their intellect. No one expected Dr. Einstein to appear in leather jacket or loin cloth in order to assure us of his masculinity because otherwise we wouldn't listen to his ideas. We must stop talking about "masculinity" and "femininity" and talk instead about whole persons who use all of themselves.

Career counseling for girls must encompass the idea that it is important to aspire and achieve independent of "potential marital and parental status;" that it is only when a woman is truly independent that she can really decide whether the man she is choosing is worth being with because she wants to be rather than because she needs someone to "take care of" her, and probably most important that she maintain the financial independence that assures that she remains with a man because she wants to and not because her status and financial security depend on him.

When we have given girls the space and encouragement they need to grow freely and completely as independent persons, and boys the reassurance and support they need not to be threatened by that growth, freedom and independence, we will, I believe, have done more for the total quality of future life than any test tube scientific discovery could ever offer.

1. Sex Equality in Guidance Opportunities (SEGO) Project was funded by the U.S. Office of Education under contract to the American Personnel and Guidance Association from July, 1974 through January, 1976.
2. R. Coser and G. Rokoff. "Women in the Occupational World: Social Disruption and Conflict," Social Problems 18, 1971, p. 535.
3. U.S. Department of Labor, Employment Standards, Administration, Women's Bureau. Women in the Labor Force. August 1974-75, Washington, D.C.
4. U.S. Department of Health, Education and Welfare, National Center for Health Statistics. Provisional statistics, 1974, Rockville, Md.
5. U.S. Senate, Special Committee on Aging. Women and Social Security: Adapting to a New Era. Release date, October 27, 1975, Washington, D.C.
6. M. Wollstonecraft. A Vindication of the Rights of Woman. New York: W.W. Norton & Company, Inc., 1967. (Originally published in 1792).
7. National Assessment of Education Progress. Denver: Education Commission of the States, 1975.
8. A. Rossi. "Women in Science: Why So Few?", C. Safilios Rothschild, ed. Toward a Sociology of Women. Lexington, Mass.: Xerox College Publishing, 1972, p. 150.
9. E. Maccoby. "Women's Intellect," S. Farber and R. Wilson, eds. The Potential of Women. New York: McGraw Hill, 1963, p. 33.
10. Ibid., p. 33.
11. L.J. Bachtold. "Personality Characteristics of Women Scientists," Psychological Reports, 1972, 31, 391-396.
12. E. Ginzburg. "Towards a Theory of Occupational Choice," Occupations, 30, 1952.
13. E. Erikson. Childhood and Society. New York: W.W. Norton and Company, Inc., 1963.
14. D.R. Entwisle, and E. Greenberger. A Survey of Cognitive Styles in Maryland Ninth Graders: 4 Views of Women's Roles. Johns Hopkins University Center for the Study of Social Organization of Schools. Report No. 89, Baltimore: Johns Hopkins University Press, 1970.
15. J.J. Pietrofesso and N.K.L. Schlossberg. "Counselor Bias and the Female Occupational Role." Detroit: College of Education, Wayne State University, 1970 (ERIC Abstract CH 006 056).
16. A. Oakley. Sex, Gender and Society. New York: Harper Colophon Books, 1972, p. 40.