# Adolescents' Secondary Attachments to Celebrity Figures<sup>1</sup>

A. L. Greene<sup>2</sup>

West Virginia University

Carolyn Adams-Price3

University of Michigan

This study examined the influence of age, gender, and pubertal development on the personality attributions that adolescents make to age-appropriate celebrities. Sixty male and female 5th, 8th, and 11th graders completed a series of questionnaires describing the perceived maturity, attractiveness, and personality of six male and six female age-appropriate celebrities. Multivariate analyses of variance revealed that (a) adolescent found oppositesex celebrities more attractive than same-sex celebrities; (b) the perceived attractiveness of opposite-sex celebrities increased with grade, particularly among adolescent females; (c) androgynous celebrities were seen as more attractive than either sex-typed or cross-sex celebrities; and (d) adolescents' preference for androgynous celebrities increased with grade. Contrary to prediction, adolescent pubertal development was unrelated to celebrity attractiveness ratings. For 5th-grade girls, however, pubertal development positively correlated with the perceived maturity of all female celebrity figures, regardless of the celebrity's sex type (i.e., sex typed vs. androgynous vs. cross sex). These findings provide convergent support for the hypothesized role of secondary attachments in adolescent identity development.

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<sup>2</sup>Department of Psychology, P.O. Box 6040, West Virginia University, Morgantown, WV

<sup>&</sup>lt;sup>2</sup>Department of Psychology, P.O. Box 6040, West Virginia University, Morgantown, WV 26506-6040.

<sup>&</sup>lt;sup>3</sup>Institute of Gerontology, 300 North Ingalls, University of Michigan, Ann Arbor, MI 48109-2007.

A central aspect of identity development involves the adolescent's gradual disengagement from parental authority toward greater autonomy and self-definition. Blos (1967) describes this process as a second individuation, consisting of the "shedding of [immature] family dependencies, [and] the loosening of infantile subject ties in order to become a member of the adult world" (p. 163). Because these processes are often confusing, even contradictory for young adolescents, many turn to the peer group as a means of temporary self-definition (Blos, 1967; Erikson, 1968). Through their peers, adolescents are able to explore new social and sex role behaviors, obtain the sexual gratification precluded in family relationships, and develop the decision-making skills necessary for autonomous functioning in adulthood (Blos, 1967; Elkind, 1980; Erikson, 1968; A. Freud, 1946, 1958; Hartup, 1977). Peers thus provide an important "facilitating environment" (Winnicott, 1965) for the adolescent's transition to mature, adult identity (Erikson, 1968; Hartup, 1983; Youniss, 1980).

A similar role is thought to be served by the secondary attachment that adolescents form to popular celebrities (Davidson, 1973; Erikson, 1968; S. Freud, 1925; Muuss, 1988). Secondary attachments are defined as the fantasized relationships that adolescents project to distant figures, such as music or film celebrities. An important feature of such attachments is that the attributed qualities of the attachment object are greatly enhanced or idealized (Fromm, 1967). Within the context of identity formation, secondary attachments can be best understood as a means of affective transition from the nurturant, parental attachments of childhood to the more intimate, romantic attachments of adolescence and young adulthood (Erikson, 1968; S. Freud, 1922/1951, 1925).

Recently, Adams-Price and Greene (1990) obtained findings that provided support for this hypothesis. Sixty male and female 5th, 8th, and 11th graders were asked to describe a favorite celebrity and the kind of relationship that they would like to have with the celebrity. Two types of secondary attachment predominated in adolescents' responses: (a) romantic attachments or a wish to be the celebrity's romantic partner, and (b) identificatory attachments or a wish to be like or to become the celebrity. Both the type of attachment described and the characteristics attributed to the favorite celebrity, however, sharply differed by gender and age. Whereas males described identificatory attachments to a favorite male celebrity whom they perceived to be high in instrumentality (e.g., strength, aggressiveness), females described romantic attachments to a favorite male celebrity whom they perceived to be high in expressivity (e.g., warmth, nurturance). Regardless of the type of attachment described, however, 5th graders attributed greater expressivity to their favorite celebrities than did 8th or 11th graders.

In discussing their findings, Adams-Price and Greene (1990) concluded that the attributions that adolescents make to a favorite celebrity, including the type of attachment fantasized, reflect the emergent concerns that adolescents have about their own sexuality and identity. These authors also suggest that secondary attachments may be of particular salience among early adolescents whose identity has undergone change paralleling the transformations of puberty (e.g., Tobin-Richards, Boxer, & Petersen, 1982). Thus, the configuration of fantasized relationships may provide important insights regarding identity development during adolescence.

However, it remains to be determined whether the attributions that adolescents make to a favorite celebrity (the attachment object) also configure their perceptions of celebrities more generally. To the extent that secondary attachments are hypothesized to serve a transitional role in adolescent identity development (Adams-Price & Greene, 1990; Erikson, 1968; S. Freud, 1925), the previously observed patterns of attribution should generalize beyond a personal favorite.

A related question concerns the personality characteristics that adolescents attribute to celebrites and the manner in which such attributions may be differentially associated with perceptions of the celebrity's maturity and attractiveness. The importance of perceived maturity in this regard is based on the previously noted finding that male adolescents preferred identificatory attachments to male celebrities whom they also perceived to be older and higher in instrumentality than the attachment objects described by females (Adams-Price & Greene, 1990). Similarly, the perceived attractiveness of celebrities is of relevance. Attractiveness ratings, whether based on photographs of strangers or in-person contact, significantly predict personal interest and desire for romantic involvement (Brehm, 1985; Brislin & Lewis, 1968; Curran & Lippold, 1975).

To the extent that such romanticism also may reflect adolescents' personal concerns about identity and sexuality, perceived attractiveness should be highly related to the gender identity attributed to celebrity figures. For example, following the gender intensification hypothesis (Hill & Lynch, 1983; Josselson, Greenberger, & McConochie, 1977a, b), adolescents should perceive sex-typed celebrities to be more attractive than either androgynous or cross-sex-typed celebrities. However, as the psychological benefits of androgynous vs. sex-typed gender identity have been found to vary with gender (Massad, 1981; Spence & Helmreich, 1978), the above prediction should obtain only in males' perceptions of mature, sex-typed male celebrities. In contrast, female adolescents should find most attractive the celebrities whom they perceive to be androgynous, independent of the celebrity's attributed maturity.

Incorporating the age and gender differences reported by Adams-Price and Greene (1990), it further was predicted that (a) the perceived attractiveness of opposite-sex celebrities would increase with age, particularly among adolescent females; (b) females would perceive the androgynous male celebrity to be the most attractive; (c) males would perceive the sex-typed female celebrity to be the most attractive; and (d) the perceived attractiveness of androgynous celebrities would increase with age for both male and female adolescents. Finally, because pubertal development has been found to differentiate adolescents' self-perceptions (Tobin-Richards et al., 1982), it also was predicted that perceived maturity and attractiveness would be significantly associated among older and/more pubertally developed adolescents.

#### **METHOD**

# Sample

Sixty early, middle, and late adolescents participated in the study: 20 fifth graders (X=10.55 years), 20 eighth graders (X=13.37 years), and 20 eleventh graders (X=16.20 years). The sample was middle class and Caucasian, and stratified to obtain equal representation of gender and grade. Participants were randomly selected from a volunteer pool of 5th-, 8th-, 11th-grade students at the local elementary, junior, and senior high schools. All of the students originally approached completed participation in the study and all participants were reimbursed.

#### Instruments

Data were obtained through a self-administered protocol that consisted of (a) black and white photographs of 12 age-appropriate celebrities; (b) corresponding sets of the Personality Attributes Questionnaire (PAQ; Spence & Helmreich, 1978); (c) the Petersen Pubertal Development Scale (PDS; Petersen, Crockett, Richards, & Boxer, 1988; Tobins-Richards et al., 1982); and (d) a brief demographic questionnaire.

Stimulus Items. Black and white photographs of celebrities were used as stimulus items in the present study. Twenty-four celebrities were identified through a survey of entertainment agencies regarding the figures popular among 12-20 year olds. Photographs of individual celebrities were obtained by contacting the celebrities themselves or their publicity agents. To minimize variation in lighting and background, only black and white "head" shots were used.

Pilot testing was conducted to select a subset of photographs from the original set of 24. Sixty male and female college freshmen (X=18.7 years) rated the photographs using the PAQ (Spence & Helmreich, 1978). Because multiple ratings of each photograph were obtained, individual "scores" on each PAQ subscale were calculated from the median of mean PAQ subscale ratings. Following the median split method (Spence & Helmreich, 1978), celebrity photographs were assigned to gender identity categories (i.e., sex typed, androgynous, undifferentiated) based on the position of their PAQ subscale scores relative to the subscale medians obtained for the set of stimulus items (i.e., "sample" means for the M, F, and MF subscales were 2.51, 3.59, and 3.01, respectively). Based on the resulting classifications, 6 male and 6 female celebrity photographs were selected.

Similar procedures were followed for reducing the set of stimulus items in the present study. That is, students rated the 12 celebrity photographs, using the PAQ (Spence & Helmreich, 1978). Celebrities than were assigned to sex-type categories following the median-split method. Since none of the celebrities was perceived to be undifferentiated (i.e., low in femininity and masculinity), an additional category, cross-sex typed, was used to classify those celebrities whose perceived sex type was gender incongruent (e.g., a "feminine" male). Based on the resulting classification, 6 celebrity photographs, which systematically covaried sex type and gender, were selected for use as stimulus items in subsequent analyses: one sex-typed male, one sex-typed female, one androgynous male, one androgynous female, one cross-sex-typed male, and one cross-sex-typed female.

Personality Attributes Questionnaire. The PAQ (Spence & Helmreich, 1978) was used to measure the gender identity attributed to each celebrity. The PAQ is a 24-item, self-administered instrument, consisting of three subscales: Masculinity (M), Femininity (F), and Masculinity/Femininity (MF). Each subscale consists of eight personality traits, presented in 5-point bipolar format (e.g., 1 = very passive; 5 = very active). Items comprising the M subscale consist of personality attributes thought to be high in social desirability for males (e.g., independence). Items comprising the F subscale consist of personality attributes thought to be high in social desirability for females (e.g., gentle). Items comprising the MF subscale consists of personality attributes thought to vary in social desirability for either sex (e.g., cooperative-competitive).

Petersen Pubertal Development Scale. Adolescent pubertal development was measured using the 5-item, self-administered PDS (Petersen et al., 1988; Tobin-Richards et al., 1982). Five dimensions of pubertal development were assessed with this task: body hair, facial hair, voice change, skin change, and growth spurt for males; body hair, breast development, menarche, skin change, and growth spurt for females. Students rated themselves on each

dimension, using a 4-point bipolar scale (1 = no development; 4 = development complete).

Demographics. A brief 10-item demographic questionnaire was administered to all participants to obtain background information concerning age, sex, and SES (i.e., parents' occupational status and educational achievement).

## Procedure

Participants were tested in small groups. Each student was given a test protocol and instructed to (a) describe each of 12 celebrities using the scales provided, (b) rate the maturity and attractiveness of each celebrity, and (c) indicate their familiarity with each celebrity. In the final portion of the test protocol, students completed the PDS and the demographic questionnaire.

#### Measures

Pubertal Status. Pubertal development scores were computed by summing across the five items of the PDS; that sum was then divided by five to retain the original (1-4) response metric. Alpha coefficients obtained for the sample indicated moderate interitem reliability (.63, .62, and .51 for the 5th, 8th, and 11th graders, respectively).

Perceived Maturity. The perceived maturity of each celebrity was measured by two items, presented in 5-point bipolar format  $(1 = seems \ like \ an \ adult$  and  $5 = seems \ like \ a \ child$ ; 1 = mature and 5 = immature). Because these items were highly correlated (r = .89), maturity scores were computed as the mean of the two ratings.

Perceived Attractiveness. The perceived attractiveness of each celebrity was measured by student ratings on a single item presented in 5-point bipolar format  $(1 = very \ attractive; 5 = not \ attractive)$ .

Familiarity. Students' familiarity with each celebrity was measured by a single item presented in 5-point bipolar format (1 = definitely never seen or heard of before; 5 = have seen and heard of frequently).

## RESULTS

Perceived maturity and attractiveness were examined in separate 2 (subject gender)  $\times$  4 (grade)  $\times$  2 (celebrity gender)  $\times$  3 (celebrity sex type) multivariate analyses of variance (MANOVAs) with repeated measures on the

last two factors. Because significant grade and gender differences were obtained in pubertal development, this variable was included as a covariate in both analyses.<sup>4</sup>

# Perceived Maturity

Significant grade differences were obtained in the perceived maturity of celebrities [F(2, 48) = 3.56, p < .04]. Tukey post hoc comparisons indicated that 8th graders generally perceived celebrities to be less mature than either the 5th or 11th graders (1.69, 1.93, and 1.67 for the 5th, 8th, and 11th graders, respectively; p < .05). No significant subject gender differences were obtained and the Grade  $\times$  Subject Gender interaction was not significant. Table I presents the mean scores and standard deviations obtained in separate MANOVAs of perceived maturity and attractiveness. As indicated by the significant Subject Gender  $\times$  Celebrity Gender interaction [F(1, 49) = 5.38, p < .04], female adolescents perceived male celebrities to be more mature than female celebrities.

Table II presents mean maturity ratings and standard deviations obtained by celebrity sex type, gender, grade, and subject gender. As shown there, a significant Celebrity Gender  $\times$  Celebrity Sex type interactions emerged [F(2, 98) = 5.55, p < .005]. Tukey post hoc comparisons indicated that although the androgynous celebrities were perceived to be equally mature, the cross-sex-typed male was perceived to be more mature than the cross-sex-typed female, and the sex-typed female was perceived to be more mature than the sex-typed male (p < .05). The significant Grade  $\times$  Subject Sex  $\times$  Celebrity Gender  $\times$  Celebrity Sex type interaction indicated that adolescents varied widely in the maturity attributed to celebrities [F(4, 98) = 2.74, p < .04]. Among 5th-grade males, for example, the sex-typed female received the highest maturity ratings and the sex-typed male the lowest. Among 8th-grade males, however, the androgynous male celebrity received the highest maturity ratings and the cross-sex-typed female the lowest.

## Perceived Attractiveness

A significant Celebrity Gender  $\times$  Subject Gender interaction emerged in perceived attractiveness [F(1,53) = 5.90, p < .02]. Tukey post hoc com-

<sup>&</sup>lt;sup>4</sup>Mauchley Sphericity tests for the equality of variance-covariance matrices across levels of the between-subjects factors indicated that subsequent MANOVAs were appropriate (W = 0.98, ns, for maturity ratings and W = 0.95, ns, for attractiveness ratings; Hertzog & Rovine, 1985). <sup>5</sup>Note that lower scores reflect greater perceived maturity and greater perceived attractiveness.

Table I. Mean Perceived Maturity and Attractiveness
Ratings and Standard Deviations by Celebrity Gender
and Subject Gendera

	Males		Females	
Celebrity	(n =	: 30)	(n = 30)	
Perceived maturity				
Male stimuli	1.89	(.74)	1.62	(.54)
Female stimuli	1.68	(.64)	1.85	(.67)
Perceived attractiveness				
Male stimuli	3.10	(.89)	2.52	(.74)
Female stimuli	1.98	(1.03)	2.19	(.89)

<sup>&</sup>lt;sup>a</sup>Lower scores indicate greater perceived maturity and greater perceived attractiveness.

parisons indicated that students perceived opposite-sex celebrities to be more attractive than same-sex celebrities (p < .05). Moreover, the significant Celebrity Gender  $\times$  Subject Gender  $\times$  Grade interaction [F(2, 53) = 3.84, p < .04] indicated that the perceived attractiveness of male celebrities increased with grade for adolescent females. Finally, adolescents generally perceived female celebrities to be more attractive than male celebrities [F(1, 53)]

Table II. Mean Perceived Maturity Scores and Standard Deviations by Celebrity Sex Type, Celebrity Gender, Subject Grade, and Subject Gender<sup>a</sup>

Celebrity		Subject Grade × Gender					
	All (N = 60)	$\frac{\text{Males}}{(n = 10)}$	Females $(n = 10)$	Males $(n = 10)$	Females $(n = 10)$	Males $(n = 10)$	Females $(n = 10)$
Sex typing							
Males							
X	2.03	2.44	1.80	2.41	2.29	1.80	1.50
SD	1.10	1.59	.95	.97	1.11	.88	.75
Female							
X	1.69	1.19	1.20	1.77	1.93	2.05	2.00
SD	.88	.26	.48	.75	.93	1.24	.97
Androgynous							
Male							
X	1.64	2.25	1.45	1.41	1.71	1.90	1.22
SD	.90	1.34	.69	.54	1.11	.97	.44
Female							
X	1.66	1.31	1.65	2.00	1.50	1.50	1.83
SD	.93	.46	1.20	1.40	.65	.53	.79
Cross sex							
Male							
$\boldsymbol{X}$	1.56	1.56	1.35	2.00	1.64	1.35	1.44
SD	.81	1.05	.53	1.10	.75	.53	.73
Female							
$\boldsymbol{X}$	1.93	1.81	2.10	1.50	2.57	1.95	1.83
SD	.97	1.13	1.20	.84	.79	.96	.79

<sup>&</sup>lt;sup>a</sup>Lower scores represent greater perceived maturity.

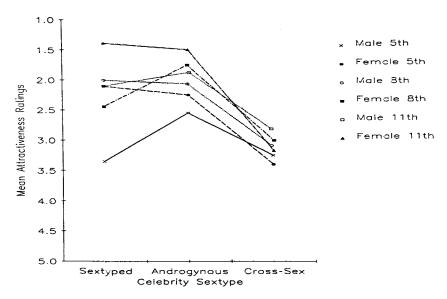


Fig. 1. Celebrity Sex Type × Subject Grade × Subject Gender interaction in perceived attractiveness.

= 18.84, p < .001]. No significant grade or subject gender differences in perceived attractiveness were obtained, however, nor did the Grade  $\times$  Subject Sex interaction obtain significance.

As shown in Fig. 1, a significant Grade  $\times$  Subject Gender  $\times$  Celebrity Sex type interaction emerged [F(4, 106) = 3.41, p < .02]. Tukey post hoc comparisons indicated that 11th-grade females perceived sex-typed celebrities to be most attractive and 5th-grade females perceived cross-sex typed celebrities to be least attractive (p < .05). As also shown in Fig. 1, the perceived attractiveness of androgynous celebrities increased with grade [F(2, 53) = 3.60, p < .04]. Finally, significant main effects of celebrity sex type in perceived attractiveness were obtained [F(2, 106) = 34.54, p < .001]. Tukey post hoc comparisons indicated that adolescents perceived androgynous and sex-typed celebrities to be more attractive than cross-sex-typed celebrities  $(2.01, 2.23, \text{ and } 3.12 \text{ for the androgynous, sex-typed, and cross-sex-typed celebrities, respectively; <math>p < .05$ ).

# Pubertal Development Effects

As predicted, MANOVAs indicated significant effects of the covariate, pubertal development, on perceived maturity [F(1, 48) = 5.49, p < .04].

Tukey post hoc comparisons indicated that adolescents who were more pubertally advanced also attributed greater maturity to celebrity figures (p < .05). Contrary to predictions, however, pubertal development was unrelated to perceived attractiveness.

## DISCUSSION

The present findings provide convergent support for and extension of the notion of secondary attachments (Adams-Price & Greene, 1990). Asked to rate the attractiveness of "age-appropriate" celebrities, adolescents overwhelmingly preferred opposite- to same-sex objects; a preference that, among adolescent females, significantly increased with age. Although the perceived attractiveness of androgynous celebrities increased with age, the most positive attractiveness scores were generated by adolescent females for male and female sex-type celebrities.

These findings indicate that the attributions that adolescents make to a favorite celebrity also configure their perceptions of, and preferences for, celebrity figures more generally. That males and females both preferred androgynous celebrities is congruent with the previous finding that both sexes described secondary attachments to celebrities whom they perceived to be high in agency as well as high in expressivity (Adams-Price & Greene, 1990). Gender differences in the characteristics attributed to a favorite celebrity were frequently a matter of degree (e.g., while female celebrities were significantly higher in perceived expressivity than in perceived agency, their PAQ Femininity and Masculinity subscale scores were both above the corresponding "sample" medians). Thus, young adolescents' affective needs for objects of identification, which in turn, may stimulate the attribution of particularly personality characteristics to a favorite celebrity (e.g., instrumentality or agency), also may inform the preferences that adolescents make among an array of age-appropriate celebrities. It is important to note that attractiveness ratings were unrelated to familiarity with the celebrities rated. Thus, the differential attractiveness of certain celebrities (with certain attributed personality characteristics) to certain adolescents transcends the familiarity hypothesis common in the literature on interpersonal attraction (Saegert, Swap, & Zagonc, 1973).

Based on the preference for opposite-rather than same-sex celebrities obtained in the present study, one may speculate that secondary attachment to a favorite celebrity provides adolescents opportunities for experimentation with the more sexual aspects of self-identity, at a safe remove from immediate consequence. That is, through fantasized romance with distant, presumably expressive and implicitly accepting, objects of identification, adolescents can explore preferences in the (hypothesized) other's personality and behavior. Such experimentation may later inform, at least initially, the

adolescent's expectancies of, and attachment to, more proximal objects such as peers. Both the earlier preference of females for romantic attachments to male celebrities, obtained in the previous study, and the greater preference of female adolescents for opposite-sex celebrities, obtained in this study, are congruent with this interpretation.

Although previous research has demonstrated the effects of pubertal timing on others' perception of the developing adolescent (Jones, 1957, 1965; Livson & Peskin, 1980; Steinberg, 1981), the corresponding impact of pubertal timing on the adolescent's perceptions of others has yet to be examined. These findings indicate, at least preliminarily, that early developing adolescent females may have greater affective need of attachment or identification objects in negotiating puberty, as compared to their on-time, same-sex peers (for a related discussion, see Petersen & Spiga, 1982; Petersen & Taylor, 1980; Simmons & Blythe, 1987; Tobin-Richards et al., 1982). This interpretation is congruent with adolescent females' earlier and greater facility with intimate relationships, as compared to adolescent males (Fischer, 1981).

In contrast to predictions derived from a gender intensification hypothesis, adolescents in this study overwhelmingly preferred androgynous celebrities. Only in females' ratings of sex-typed celebrities did the gender intensification hypothesis receive support. That support was qualified, however, by the observation that perceived attractiveness of androgynyous celebrities increased significantly with age. In interpreting these data, one cannot overlook the broader cultural context in which these adolescents have "come of age." Recent surveys indicate that profound changes have occurred in the gender boundaries and role expectancies of contemporary males and females (Roper & LaBeff, 1977; Veroff, Depner, Kulka, & Douvan, 1980). Thus, the preference for androgynous as opposed to sex-typed celebrities, may reflect the gradual instantiation of changing cultural norms rather than the intensification of sex role socialization following pubertal onset, per se (e.g., Hill & Lynch, 1983).

The present findings provide support for the notion of secondary attachments as an affective transition experience in the process of identity development for young adolescents. While informative, these findings have yet to address the romantic attachments that adolescents form to peers, however. Future studies would do well to examine those aspects of selection, personality attribution, and preference that characterize the adolescent's first experience of proximal, romantic attachment.

#### REFERENCES

Adams-Price, C., & Greene, A. L. (1990). Secondary attachments and self concept during adolescence. Sex Roles, 22, 187-198.

Blos, P. (1967). The second individuation process of adolescence. *Psychoanalytic Study of the Child*, 22, 162-186.

Blos, P. (1979). The adolescent passage: Developmental issues. New York: International Universities Press.

- Brehm, S. S. (1985). Intimate relationships. New York: Random House.
- Brislin, R. W., & Lewis, S. A. (1968). Dating and physical attractiveness: Replication. Psychological Reports, 22, 976.
- Curran, J. P., & Lippold, S. (1975). The effects of physical attraction and attitude similarity on attraction in dating dyads. *Journal of Personality*, 43, 528-539.
- Davidson, S. (1973). Feeding on dreams in a bubble gum culture. Atlantic Monthly, 232, 62-66.
   Elkind, D. (1980). Strategic interactions in early adolescence. In J. Adelson (Ed.), Handbook of adolescent psychology. New York: Wiley.
- Erikson, E. (1968). Identity: Youth and crisis. New York: Norton.
- Fischer, J. L. (1981). Transitions in relationship style from adolescence to young adulthood. Journal of Youth and Adolescence, 10, 11-14.
- Freud, A. (1946). The ego and the mechanisms of defense. New York: International Universities Press.
- Freud, A. (1958). Adolescence. Psychoanalytic Study of the Child, 13, 255-178.
- Freud, S. (1922/1951). Group psychology and the analysis of the ego. New York: Liveright.
- Freud, S. (1925). Three contributions to the sexual theory. Nervous and Mental Disease Monograph Series. No. 7. New York: Nervous and Mental Disease Publishing.
- Fromm, A. (1967). Ability to love. New York: Farrar, Stress, & Giroux.
- Hartup, W. W. (1977). Adolescent peer relations: A look to the future. In J. Hill & F. Monks (Eds.), Adolescence and youth in prospect. Guilford, England: IPC Press.
- Hartup, W. W. (1983). Peer relations. In E. M. Hetherington (Ed.), Handbook of child psychology, vol. 4: Socialization, personality and social development (pp. 103-196). New York: Wiley.
- Hertzog, C., & Rovine, M. (1985). Repeated-measures analysis of variance in developmental research: Selected issues. *Child Development*, 56, 787-809.
- Hill, J., & Lynch, M. (1983). The intensification of gender-related role expectations during early adolescence. In J. Brooks-Gunn & A. C. Petersen (Eds.), Girls at puberty. New York: Plenum Press.
- Hill, J., & Steinberg, L. D. (1976). The development of autonomy during adolescence. Paper presented at the Symposium on Research on Youth Problems Today, Fundacion Faustino Orbegoza Eizaguirre, Madrid, 1976.
- Jones, M. C. (1957). The later careers of boys who were early- or late maturing. Child Development, 28, 113-128.
- Jones, M. C. (1965). Psychological correlates of somatic development. Child Development, 36, 899-911.
- Josselson, R., Greenberger, E., & McConochie, D. (1977a). Phenomenological aspects of psychosocial maturity in adolescence. Part I: Boys. Journal of Yough and Adolescence, 6, 25-56.
- Josselson, R., Greenberger, E., & McConochie, D. (1977b). Phenomenological aspects of psychosocial maturity in adolescence. Part II; Girls. Journal of Youth and Adolescence, 6, 146-167.
- Livson, N., & Peskin, H. (1980). Perspectives on adolescence from longitudinal research. In J. Adelson (Ed.), Handbook of adolescent psychology. New York; Wiley.
- Massad, C. (1981). Sex role identity and adjustment during adolescence. *Child Development*, 52, 1290-1298.
- Muuss, R. E. (1988). Theories of adolescence. New York: Random House.
- Petersen, A. C., & Spiga, R. (1982). Adolescence and stress. In L. Goldberger & S. Breznitz (Eds.), Handbook of stress: Theoretical and clinical aspects. New York: Free Press.
- Petersen, A. C., & Taylor, B. (1980). The biological approach to adolescence: Biological change and psychological adaptation. In J. Adelson (Ed.), *Handbook of adolescent psychology*. New York: Wiley.
- Peterson, A. C., Crockett, L., Richards, M., & Boxer, A. M. (1988). A self-report measure of pubertal status: Reliability, validity and initial norms. *Journal of Youth and Adoles*cence, 17, 117-133.

- Roper, B. C., & LaBeff, E. (1977). Sex roles and feminism revisited: An intergenerational attitudes comparison. *Journal of Marriage and the Family*, 39, 113-120.
- Saegert, S. C., Swap, W., & Zajonc, R. B. (1973). Exposure, context, and interpersonal attraction. Journal of Personality and Social Psychology, 25, 234-242.
- Simmons, R. G., & Blyth, D. A. (1987). Moving into adolescence: The impact of pubertal change and school context. New York: Aldine de Gruyter.
- Spence, J., & Helmreich, R. (1978). Masculinity and femininity: Their psychological dimension, correlates and antecedents. Austin, TX: University of Texas Press.
- Steinberg, L. (1981). Transformations in family relations at puberty. *Developmental Psychology*, 17, 833-840.
- Tobin-Richards, M., Boxer, A. M., & Petersen, A. C. (1982). The psychological significance of pubertal change: Sex differences in perception of self during early adolescence. In J. Brooks-Gunn & A. C. Petersen (Eds.), Girls at puberty: Psychosocial perspectives. New York: Plenum.
- Veroff, J., Depner, C., Kulka, R., & Douvan, E. (1980). Comparison of American motives: 1957 versus 1976. *Journal of Personality and Social Psychology*, 39, 1249-1262.
- Winnicott, D. W. (1965). The maturational processes and the facilitating environment. New York: International Universities Press.
- Youniss, J. (1980). Parents and peers in social development. Chicago: University of Chicago Press.