This paper reports the results of an ongoing study of individuals' ego control and ego resiliency. The study began with 130 subjects in 1969 when the subjects were in nursery school. At the most recent assessment, 104 participants still remained. Ego control is defined as the degree and kind of control individuals exert over their impulses, and ego resiliency as individuals' ability to modify their characteristic level of ego-control. An ego-resilient person tends to be resourceful and adaptive when confronted by new situations. An individual who is not ego-resilient tends to become inflexible when confronted by new situations, and is slow to recoup after stress. The study assessed individuals' ego control and resiliency when the subjects were 3, 4, 5, 7, 11, 14, 18, and 23 years old, by means of experimental measures, interactional procedures, self-evaluations, creativity tests, and clinical interviews. Results indicated a consistency in ego resilience across time for boys and a consistency in ego resilience during early childhood and adolescence, but not between these two periods, for girls. Results also indicated a consistency in ego control for both boys and girls. (ME)
EGO-RESILIENCE THROUGH TIME

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An essential and continuing problem of life, of existence itself, is adaptation to new and changing circumstances. In our common trade as psychologists, we have observed how widely individuals vary in their effectiveness of adaptation, in their ability to equilibrate and re-equilibrate in response to their ever-changing being and the ever-changing world. Indeed, if one lives an introspective life, it will be observed that at times one is much more resourceful and adaptively effective than at other times. Because of such recognitions, a central conceptual preoccupation of the field over the years has been with how to most fruitfully theorize about the factors underlying human adaptability.

A serious historical account of efforts to conceptualize adaptability or equilibrative capacity in psychological terms would well be worth the while but of course is not feasible here. However, a few words about some of the ways adaptability has been viewed or "explained" may be helpful in providing context for the theme of this symposium and, in particular, the substance of my own remarks.

Over the years, there have been two basic approaches to the characterization of adaptability. The first approach, pragmatically concerned with societal requirements, has focused on the dimension of adjustment; the second approach has been more abstract, more conceptual, and has elicited notions regarding human adaptability deriving from more theoretical perspectives.
The term, "adjustment," impresses me as a conceptually undemanding (even innocuous) lay-person's way of saying whether an individual is getting along or not getting along in the world as it is. Such "adjustment" is not without importance, of course. Ultimately, such adjustment must be taken into account when a person's adaptability is considered. But the term, adjustment, seems also to imply a conformance to conditions and values which, from a psychological standpoint, may not mean psychological health in any positive sense. As Thoreau implied in his remark about lives led in quiet desperation, an "adjusted" person may not be a happy person but rather a person who has settled for less. A related recognition is that a person may be adapted but not adaptable. The individual may have sought and found or fortuitously encountered a niche in which to abide and perhaps hide, one that suffices, one that keeps despairs and anxiety within tolerable bounds. This kind of static adaptation is not what we should mean by adaptability. So, being adjusted, being adapted is not quite the way to think conceptually about adaptability and psychological health.

There has been recognition of the inadequacy of the short-sighted but understandable societal preoccupation with "adjustment" and the atheoretical view of "mental health" as meaning simply and solely the absence of "symptoms." In reaction, various concepts have been brought forward as useful, more or less abstract ways of characterizing human adaptability. Here, I am thinking of, for example, such constructs as ego-strength, emotional stability, coping, competence, self-efficacy, hardiness, self-regulation, effortful control, social intelligence, emotional intelligence, and "left brain interpreter" among others. These concepts have been of diverse intellectual origin and have employed
different terminologies but all have been proposed to encompass the quite remarkable phenomenon of human adaptability.

Although our time today is to be devoted primarily to a presentation of findings from three longitudinal studies, I suggest that it might well have been more useful to set empiricism aside for at least awhile and to instead discuss and closely analyze the various terms or concepts that have been used in psychology to characterize human adaptability, to evaluate the ways these terms relate, and the ways they do not relate.

Almost a century ago, Thorndike (1904) remarked on an error in psychological thinking labeled as "the jingle fallacy." The "jingle fallacy" refers to the situation where two phenomena indeed quite different are labeled equivalently. A contemporary example might be the labeling as "hardiness" of both a measure based on responses to a questionnaire and a measure based on infrequency of physical health problems. Although both might be called "hardiness," these two measures are by no means equivalent and indeed are fundamentally different conceptually.

Several decades later, Kelley (1927) added the "jangle fallacy." By the "jangle fallacy," he meant that two things in psychology that carried different names or labels were often the same. Contemporary examples of the jangle fallacy might well be the various alternative labelings of whatever it is that underlies adaptability through time. To what extent is the diversity in our terminology a consequence of authentic differences in conceptualization and to what extent is the diversity simply reflecting the jangle fallacy? Our thinking and communication would be greatly improved, I suggest, by closer conceptual analysis of the implications of
alternative (and competing) terminologies. Our field would also benefit from a calibration of our respective concepts. Studies and findings now not comprehended as intrinsically related could be then recognized as integratable and therefore cumulative.

These propaedeutic recommendations having been uttered, let me now turn to fulfill my contractual obligation for this symposium, to convey some of the theoretical basis relating to the problem of adaptation - formulated forty years ago by my late wife, Jeanne, and me - on which our longitudinal inquiry was founded and to present some relevant findings.

Psychodynamic theory is centrally concerned with impulse, a primitive notion viewed as energizing the organism. But if the individual starting out in life as an infant is to become adaptively tuned to the surrounding psychosocial environment, impulse cannot be allowed free rein; the capacity to control or modulate impulse must be developed by the child. By so doing, the potentially-dangerous and potentially-enticing world beyond the child becomes less fearsome and more achievable. Adverse consequences are not triggered; pleasing consequences become more likely. Such impulse control develops over time via the maturation and experientially derived construction of various personality structures.

Examples of such personality structures (orientations implemented by behavioral routines) include delay of gratification, inhibition of aggression, caution in unstructured situations, what Freud called "experimental action" (i.e., internal cognitive manipulation of anticipated, alternatively possible behaviors so as to foresee consequences) whenever feasible, affective constraints oriented to
prevent loss of love and abandonment, and so on. Common, and essential, to the functioning of each of these specific structures is the control of impulse. It is this common denominator of the various specific personality structures - impulse control - that we meant by the construct of ego-control. And because people reliably differ in their personally characteristic degree of ego-control, we were led to view individuals toward one end of the ego-contro. continuum as "undercontrollers" and individuals toward the other end of the continuum, as "overcontrollers."

I talk about ego-control before I talk about ego-resiliency because the two constructs are integrally connected in our thinking and the meaning of ego-control must be registered first before the idea of ego-resiliency can be brought forward. Also, when I present some of the findings from our longitudinal study, you will see that understanding ego-resiliency over time benefits from an understanding of ego-control.

The various personality structures (mechanisms, routines, schemata, etcetera) involved in impulse control are interrelated and invoked sequentially as the individual responds to and acts upon the flux of experience, facing different contextual demands and different contextual opportunities. The interrelations and sequencing may be effective or ineffective in maintaining the personality system of the individual within the bounds of psychological viability. Psychological viability for the individual entails a tolerable anxiety level, a tolerable mesh with situational impingements, and a tolerable level of impulse expression. The linkages of these structures that keep the personality system within tenable bounds or permit the finding again of psychologically tenable adaptational modes are what we meant by the construct of ego-resiliency. The learning by the child of impulse control
per se, of behavioral inhibitions, of compliance to parental prescriptions, of reflexive, unthinking deference to internalized proscriptions is developmentally advancing for the child when it occurs. However, such inhibition or compliance does not represent an adaptively desirable developmental endpoint. Adaptability in the long-term requires more than the replacement of unbridled impulsivity with categorical, pervasive, rigid impulse control. This would be over-control of impulse, restriction of the spontaneity that provides the basis for creativity and interpersonal connection. Instead and ideally, dynamic and resourceful regulation and equilibration of impulses and inhibitions must be achieved. It is this regulation of ego-control that we mean by the construct of ego-resiliency.

And because people reliably differ in their degree of dynamic resourcefulness in maintaining a personally sufficient adaptational system, we were led to view individuals toward one end of the ego-resilience continuum as ego-resilient and individuals toward the other end of the continuum as ego-brittle.

The constructs of ego-control and ego-resilience represent abstractions, condensations, simplifications intended to encompass the observable phenomena of motivational control and resourceful adaptation as relatively enduring, structural aspects of personality. In our initial thinking so many years ago, we saw these constructs as related to some useful recognitions achieved by psychodynamic theory and as generative constructs.

The idea of over-control carries the behavioral implication of constraint and inhibition, of indirect rather than direct expression of needs and impulses, of a tendency to delay gratification unduly, to show minimal expression of emotion, to be categorical and overly exclusive in processing information, to be perseverative, undistractible, less exploratory, relatively conforming, with narrow and
...changing interests, to be relatively planful, and to be made uneasy by and therefore avoidant of ambiguous or inconsistent situations. The idea of undercontrol carries the behavioral implication of expressivity, spontaneity, the manifestation of needs and impulses directly into behavior, the tendency toward immediate gratification of desires, the ready manifestation of feelings and emotional fluctuations, a tendency to be overly inclusive in processing information, to have many but relatively short-lived enthusiasms and interests, to be distractible, more ready to explore, less conforming, relatively comfortable with or undiscerning of ambiguity and inconsistency, to manifest actions that cut across conventional categories of response in ways that are (for better or for worse) novel, and to live life on an ad hoc, impromptu basis. In this conceptualization, extreme placement at either end of the ego-control continuum implies a consistency in mode of behavior that, given a world which insists on varying, can be expected to be adaptively dysfunctional.

The notion of ego-resiliency refers to the dynamic capacity of an individual to modify a characteristic level of ego-control, in either direction, as a function of the demand characteristics of the environmental context; it has implication for the individual’s adaptive or equilibrative capabilities under conditions of environmental stress, uncertainty, conflict, or disequilibrium.

Behaviorally, an ego resilient individual can be expected to be resourceful before the strain set by new and yet unmastered situations, to analyze the “goodness of fit” between situational demands and behavioral possibilities, to flexibly invoke the available repertoire of problem-solving strategies (problem-solving being defined here to include social and interpersonal problems as well as cognitive problems), to maintain integrated performance while under stress, to be better able to resist...
sets of illusions, to be engaged in the world but not subservient to it, to constructively detour around barriers that are encountered. An individual who is ego-brittle can be expected to have only a small adaptive margin, to become rigidly repetitive or behaviorally diffuse when under the stress of having to deal with new situations, to become anxious when confronted by competing demands, to be relatively unable to resist the directive effects of sets or illusions, to be slow to recoup after stress, to be disquieted by changes in either the personal psychological environment or the larger world, and to find it difficult to modify personal tempo in accordance with reality considerations.

It should be noted that our definition of ego-resiliency is a particular, theory-dependent one. In recent years, the term, resiliency, without the prefixing term, ego, has come into another, less formal, and more popular use. Resilience in this latter sense is a descriptive label applied to children or individuals who appear to have adapted and functioned surprisingly well given circumstances of living judged to be unusually adverse psychologically. I wish to suggest that our conceptualization of ego-resiliency may be able to provide the theoretical underpinnings for understanding such "invulnerable" individuals, such "stress-resistant" "survivors."

With this historical conveyance of how we came to our constructs, and how we mean them, I can turn to describing our longitudinal study, now over twenty years old, that has sought to evaluate the developmental course of ego-resiliency and ego-control from early childhood to, so far, young adulthood. We did not believe then nor do I believe now that our two constructs were, by themselves, sufficient for a full theory of personality but we were convinced that ego-resiliency and ego-control were fundamental dimensions of personality with implications for many
behavioral domains and that the ultimate theory of personality would have to include two concepts very much akin to our notions of ego-control and ego-resiliency. These constructs had not been studied developmentally before and therefore, we were interested in doing so.

We began with 130 children drawn from two nursery schools in Berkeley during the years, 1969 - 1971. Extensive individual assessments were conducted at ages 3, 4, 5, 7, 11, 14, 18, and most recently at age 23. The research is continuing. Another assessment is scheduled when the subjects are about to turn 30 (1996-97). At age 23, still continuing with our study of lives through time, we have 104 study participants.

Assessments were individual and involved 10 to 15 hours per subject on each occasion. Procedures were many and diverse and cannot be recounted here. They included many experimental measures, interactional procedures, self-evaluations, creativity tests, clinical interviews. A number of our published papers bring forward the specifics of our various assessments. I will declare as an observation and not as a boast that there probably is no other sample in psychology that has been so extensively assessed and for so long a time.

We have used a number of ways to operationalize the constructs of ego-resiliency and ego-control. During the early years, the collection of Test or experimental data was emphasized; later on, of necessity, as subjects became interiorized, T-data became difficult or impossible to meaningfully obtain and so our emphasis shifted appreciably to the use of S-Jt-report measures. Throughout the years, however, the collection of Observer-data was feasible and was gathered. There was good correspondence between T- and O-, and between S- and O-data,
which we have reported elsewhere. I will be reporting here on some Q-data findings.

During each of our assessments, a number of observers had experience with each subject in a variety of contexts. When nursery school or elementary school teachers were involved, these contacts extended over especially long periods of time but at least several hours of interaction were always involved. From three to six assessors were available at each assessment age. Each observer, independently, offered a personality description of the subject. These descriptions were expressed via the Q-sort procedure using a comprehensive standard set of Q-items so as to achieve comparability of language usage both in terms of content and in the intensifiers or modifiers used. Then, the separate and independent Q-sorts available at a given age were democratically composited, to achieve a reliable consensuality. These composited Q-sorts for each subject were available at the various ages, from age 3 through now age 23. It is crucial to know that, for each assessment, entirely different sets of personality judges were used so that the Q-composites at one age are entirely independent of the Q-composites at another age.

To develop ego-control and ego-resiliency scores for our subjects, prototype or criterion definitions were used. Reliable prototype definitions of ego-control and ego-resilience were established. Then, the actual Q-composites of subjects were related to these prototypes to evaluate their degree of congruence. If a subject's actual Q-description was relatively congruent with a criterion definition, that subject can be said to be relatively high on the criterion dimension. Such congruence scores were calculated with respect to ego-control and ego-resiliency for all the subjects at the various ages. This approach was attractive.
because it permits evaluations of these dimensions through time where as T-data composites of ego-control and ego-resiliency were available only during early years and S-data ego-control and ego-resiliency scores were available only during later years when subjects could seriously respond to serious questionnaires. Also, aggregated O-data are not subject to some of the problems besetting the questionnaire approach.

Now to some findings from this cumbersome, prolonged, life-consuming effort.

A natural and important question: What is the continuity of ego-resiliency over time? Are children who are relatively ego-resilient or relatively ego-brittle at an early age relatively ego-resilient or relatively ego-brittle at later ages, in middle childhood, adolescence, and young adulthood? This is NOT a question about what is so often unfortunately called, "stability." The individuals may change and indeed do change. 23-year-olds are more resilient than 3-year-olds so they have not been "stable." Our question really is, Do these individuals tend to maintain their relative position with respect to ego-resiliency? To what extent, despite all the individually different life experiences accruing over time, do children tend to preserve through adolescence and into young adulthood their relative order with respect to the implicative dimensions of ego-resiliency? The same question can be asked regarding ego-control: to what extent do children maintain their relative order over time with respect to ego-control? There has not previously been reasonable developmental information regarding such questions. Indeed, at the time we started our study, in the late 1960's, the received view of psychologists was that little or no continuity of personality functioning existed from early childhood into the later years (see Mischel, 1968; Kagan, 19xx).
Table 1 presents the intercorrelations, uncorrected for the lowering effect of attenuation, of the observer-based ego-resiliency indices for the two sexes separately and also the intercorrelations of the ego-control indices. These two matrices will repay study because the data on which they are based are quite unusual, even unprecedented in the study of personality development.

Regarding ego-resiliency, there are consistently positive correlations for the boys or young men throughout the years. Many of the correlations are at a level psychologists would consider quite high. For males, this evidence clearly indicates that individual differences in ego-resiliency are identifiable from a very early age and largely continue over the following 20 years.

The ego-resiliency correlations for the girls present quite a different picture, however. The correlations between adjacent time periods are reasonably positive and even high. In the early childhood years, there is reasonable ordering consistency. From adolescence on, there is reasonable, even quite impressive ordering consistency. But between these two periods, there is really no relation: For girls, being resilient (or brittle) during the childhood years carries no implication for being ego-resilient (or brittle) in adolescence and beyond. There appears to be a sliding transformation over time, especially marked as girls enter puberty, that erases connection between level of ego-resiliency in the childhood years and level of ego-resiliency during adolescence and young adulthood.
What does this difference between the sexes mean? Is it yet another instance of how psychological findings bounce around and are difficult to replicate? Or is this difference between the sexes in the longitudinal pattern of ego-resiliency believable and therefore seriously implicative and warranting of interpretation? For added perspective, consider the findings surrounding ego-control.

Regarding ego-control, the correlations were consistently positive for both sexes. The size of these correlations is perhaps impressively high, considering attenuating factors, the great length of time involved, and life circumstances fostering personality change. This is strong evidence, replicated across the sexes, that from an early age individual differences in level of ego-control are identifiable and continue to distinguish people for at least the next twenty years and, from the evidence of other studies, for decades beyond (Block, 1971).

Considering the correlational results for ego-resiliency and ego-control for both sexes, in three of the four comparisons longitudinal continuity of individual differences is to be observed. In all four of the analyses, the same methodology was employed. I suggest, therefore, that it becomes difficult to attribute the discrepant ego-resilience results for girls to methodological or sampling fluctuations. The failure of ordering continuity of ego-resilience for the girls (in the larger context of ordering continuity for the boys and the ordering continuity of ego-control for both sexes) would appear to represent a real finding and not a vagary of our data. Some other findings from our longitudinal study further reinforce my view that this difference between the sexes in regard to their longitudinal patterns of resiliency continuity is truly based and not explainable away (see, e.g., J. Block, Gjerde, & J. H. Block, 1991).
What happened to the girls as they left childhood and moved into puberty? One clue may perhaps be provided by the relations between ego-resiliency and ego-control over time. For the boys, over more than 20 years from age 3 through 23, ego-resiliency and ego-control were essentially unrelated, the correlations averaging not quite zero (.02), with little variation. For girls, the relations between ego-resiliency and ego-control were essentially zero at ages 3, 4, and 7. However, at age 11, there suddenly appeared a substantial negative correlation between ego-resiliency and over-control. This relation diminished somewhat during the subsequent adolescent years and by the early twenties becomes quite low again. But during the pre-adolescent and adolescent years, ego-resiliency in girls appears to be appreciably related, but reciprocally, to over-control. During this re-formative period, ego-resiliency in girls went along with a lessening of over-control.

How is this connection between ego-resiliency and ego-control to be developmentally explained? Speculation is required here; my own interpretation goes along the following lines. The literature on the differential socialization of the sexes indicate that females grow up in a more structured and directive world than males (J. H. Block, 1983). Girls experience more parental supervision, more restrictions on exploration, more emphases on maintaining proximity, and more frequent (often unnecessary) help in problem-solving situations. These various sex-differentiating influences combine to create a more canalized and predictable environment for girls than for boys, whose encounters with the world outside the home are both more extensive and less managed. These formal differences in the learning environments provided to girls as compared with boys can be expected to have cumulative, powerful, and generalizing effects on the adaptive
strategies invoked when the world in which one has been living changes in fundamental ways.

The onset of puberty, of internal transformations that transform also how the world reacts to one's strangely different, yet much the same self is such a fundamental change. Because of the differential socialization of the sexes (and, likely too, because of the earlier age at which girls physically mature), the changes catalyzed by puberty may well present a larger and more abrupt adaptational problem for girls than for boys. For girls in particular, the necessary changes require restructuring of previously sufficient modes of adaptation, an emergence from the cocoons of security and restriction in which they have grown up.

The ability to achieve this restructuring is, of course, encompassed by the construct of ego-resiliency. But also, the leaving of previous adaptations and the absence of perseveration are indicators that the individual is not, or no longer, over-controlled. Thus, girls confronting adolescence who display resiliency in their adaptive modes necessarily have moved away from over-control, thus accounting for the empirical relations we have observed.
### The Longitudinal Consistency of Ego Undercontrol from Age 3 to Age 23

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### The Longitudinal Consistency of Ego Resiliency from Age 3 to Age 23

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**Note:** Results for girls are above the diagonal; results for boys are below the diagonal. Ns for girls range from 39 to 52; Ns for boys range from 37 to 50. *p < .05. **p < .01. ***p < .001.