

Note on Secure Base Behavior At Home and the Strange Situation

Bowlby-Ainsworth attachment theory is very specifically about the secure base aspect of close relationships (see Waters & Cummings, 2000). Within this framework, the concept "securely attached" means confident in a caregiver's or partners availability, responsiveness, and power to serve as a secure base in support of ordinary exploration and, when necessary, as a haven of safety in retreat. Secure infants are more able to use one or a few caregivers as a secure base from which to explore and as a haven of safety. For her Baltimore study, Ainsworth developed the following scoring system for assessing individual differences in the quality of infant secure base behavior under non-emergency circumstances at home. The Strange Situation was developed afterward to provide a more structured assessment setting. It's validity depends entirely on the mapping of behavior in the Strange Situation onto patterns of secure base use at home.

Ainsworth's evidence in support of this mapping is presented in a table at the end of this page. In the end, Ainsworth relied heavily on clinical judgment to translate her extensive behavioral observations into an evaluation of secure base functioning. The Attachment Q-set was developed to provide structure to observations of secure base behavior and to help formalize the definition and quantification of individual differences in secure base functioning. Vaughn et al. used it to successfully replicate Ainsworth's validation of the Strange Situation. Relevance to secure base behavior in naturalistic settings is central to the validity of the Strange Situation (and any other measures to be interpreted in terms of the Bowlby-Ainsworth security construct) whenever they are used in new ages or populations.

Background Comment

The following measure is reproduced from a mimeographed copy of the scales used to assess secure base behavior at home in Mary Ainsworth's Baltimore longitudinal study. Along with the four Maternal Sensitivity Scales, these represent the key descriptive insights of Ainsworth's work.

Although the scoring system was never considered entirely satisfactory (too subjective, required too much observation, and limited descriptive detail) Ainsworth, Bell, & Stayton (1971) used it successfully to validate the ABC Strange Situation classification system against home behavior. Their results, also reported in *Patterns of attachment*, are included here along with the home behavior scoring system. This is one of the most important findings from the Ainsworth labs because it explicitly links behavior in the Strange Situation to the behavior that Bowlby's theory actually addresses.

The Attachment Q-set was developed as a more satisfactory approach to assessing the same behavior. This was necessary in order to replicate Ainsworth's validation of the Strange Situation against home behavior and because the Strange Situation would need to be similarly validated across the full range of samples, ages, and cultures of interest in attachment research. In addition, where the Strange Situation failed, important studies could always be conducted using direct observations of secure base behavior at home (rather than inferring them from the Strange Situation). The link between secure base behavior at home and the Strange Situation in home reared middle class infants was indeed replicated by Vaughn, B. & Waters, E., 1990, *Child Development*, 61, 1965-1973, using the Attachment Q-set, a finding that was subsequently replicated and extended in a number of other laboratories.

Why is the link to home behavior so important?

Strange Situation classifications can be quite stable and have a wide range of correlates in early care and later competence and adjustment. But stability and wide range of correlates in later competence and adjustment are not sufficient to prove that a procedure is measuring attachment security. Even correlations with maternal care is not definitive. No theory predicts that maternal care affects only attachment security. And no theory predicts that only attachment security influences later competence and adjustment. So there are always alternative interpretations of measures that are stable, related to early care, and to later competence and adjustment. But only Bowlby's theory links them to secure base behavior at home. This is why we consider the link to home behavior to be the "gold standard" against which any measure of infant attachment security should be tested. It is the only way to know whether the Strange Situation is valid in older age groups, infants who experienced significant amounts of day care, in other cultures, etc. This should always be established before interpreting the Strange Situation in such samples. In many cases it has not been.

Of course it might be possible to show that the "attachment security" construct is broader than just secure base behavior. In all likelihood both Bowlby and Ainsworth thought so. But Bowlby strategically chose to tie it closely to the secure base phenomenon because doing so allowed him to develop his control system motivational model and escape Freud's scientifically indefensible (and largely discredited) drive reduction motivation model. See Waters & Cummings (2000) (On-line articles section of this site) for an extended discussion of the central role of the secure base concept in attachment theory.

The same line of reasoning can be applied to the problem of validating the Adult Attachment Interview. Lots of

theoretical frameworks, including theories of general adjustment, anxiety, and stress and coping, might predict that such an interview would be related to marriage, parenting, and adjustment. But only Bowlby's theory would predict that it is related also to the components of marriage that we call secure base use and secure base support. See Waters, E., Merrick, S., Treboux, D., Crowell, J., & Albersheim, L. (2000). *Child Development*, 71, 684-689 for evidence that AAI classifications are related to ones ability to use mother as a ssecure base in infancy.

See also Crowell, Treboux, Gao, Fyffe, Pan, & Waters (*Dev. Psych*, 2002, 38, 679-693) for evidence that the AAI is also related to the ability to use (and serve as) a secure base in marriage. These are important evidence linking adult attachment representations assessed via the AAI to the Bowlby-Ainsworth construct

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CRITERIA FOR CLASSIFICATION OF ONE-YEAR-OLDS IN TERMS OF THE BALANCE BETWEEN EXPLORATORY AND ATTACHMENT BEHAVIOR AT HOME

Mary D. Ainsworth (1970)

This classification was originally intended to focus on the extent to which the baby can use his mother as a secure base from which he can explore the world, and, as such, was to be concerned with the balance between exploratory and proximity-seeking behavior--that is, between moving away from the mother to explore the physical environment and moving toward the mother. The basic concept was that the child who can use his mother as a secure base for exploration can move away from her freely, and yet tends to return to her from time to time, on his own initiative, to play at her feet or to make contact with her briefly before moving off again. Although he can be-come intent upon his exploratory activities, he is by no means oblivious to his mother, but keeps track of her whereabouts, and may occasionally interact with her across a distance.

The original conceptualization was simple in its structure. The infant who used his mother as a secure base would show a nice balance between proximity seeking and exploratory behavior. Deviants in one direction would show an emphasis on exploratory behavior at the expense of proximity-seeking behavior, while deviants in the other direction would show an emphasis on proximity-seeking behavior at the expense of exploratory behavior. Our attempts to apply a classificatory system to our case material brought a number of complexities to light. Although "secure base" babies could be identified

relatively easily, the deviants could not be comprehended on the continuum of simple moving towards versus moving away from the mother.

The first consideration was the smoothness and affective quality implicit in the repeated shifts from exploration to proximity-seeking and back to exploration. Some infants over time showed a quantitative balance between exploration and proximity seeking, but the transition between these behaviors was sometimes not smooth and the affective quality of the proximity seeking sometimes seemed disturbed. Therefore it was not merely a matter of the relative proportion of time in which each of the behavioral systems was displayed but the affective quality of the attachment behavior itself.

Secondly, it became evident--in some cases more than in others--that the smoothness and affective quality of the shifts from exploration to proximity seeking was contingent upon the mother's behavior, and it seemed unwise to leave the dynamics of mother-infant interaction out of consideration. In some cases the contingency of the infant's behavior upon the mother's seemed very situational, so that sometimes the infant could behave very much in the ways specified as criteria of the "secure base" phenomenon, although at other times the attachment-exploration balance was disturbed and these disturbances clearly followed upon changes in the mother's behavior. In other cases, there seemed a

more pervasive disturbance of the smoothness and affective quality of the attachment-exploration balance. To be sure, in these cases the mother's behavior also seemed implicated in the disturbance, but somehow in a more chronic way, as though the pattern of interaction had become established to such an extent that temporary alterations in the mother's behavior could not affect the child's behavior enough to enable him to use her as a truly secure base.

Third, it became apparent that we were concerned not with proximity seeking, but also with the child's organization of attachment behavior as a whole, and that especially one could not leave out of consideration his; contact-seeking and contact-maintaining behavior, or, indeed his behavior when actually held by his mother. Again here it was not merely a matter of frequency of contact-seeking behavior but of the affective quality of contact-interaction.

Finally, it had been assumed that attachment behavior would be heightened under some unusual circumstances, and that the attachment-exploration balance should be judged in terms of the child's usual behavior in his familiar home environment. But it emerged that some of these infants responded with heightened attachment behavior to changes under even familiar everyday conditions, and in particular the mother's leaving the room evoked anxious following and/or distress in some infants but not in others. Separation anxiety in the familiar home environment seemed linked to disturbed attachment-exploration balance rather than to the "secure base" phenomenon--at least in this sample of this age-group. Although the initial plan was for several judges independently to assess narrative accounts of separate visits, and although this procedure resulted in a clear consensus in regard to a majority of cases some babies were found to behave very differently from one visit to another (and this was particularly the case with infants whose behavior was closely geared to the contingencies of maternal behavior, most specifically, babies of Group II.) Our initial experience led not only to a revision of the classificatory system but also to a conclusion that classificatory judgment should be based upon all available home-visit data rather than upon visits considered separately. In regard to the classification procedure itself, five main groups are identified and several subgroups. The following are the criteria for deciding into which group or subgroup a given infant should be classified.

GROUP I: The baby uses his mother as a secure base from which he can explore the world. There is a smooth balance between exploratory and attachment behavior.

Subgroup Ia: 1. The baby can move away from his mother, even out of sight into another room, busily interested in trying out locomotor skills or in exploring the properties of the environment and the objects and other people in it. 2. He is by no means oblivious to his mother while exploring, but keeps track of her whereabouts, even though he may not look at her frequently. He may occasionally interact with her across a distance, with a smile or a vocalization, or by showing her things as though inviting her to share his interests. He is likely to gravitate back to her from time to time, either to play for a while at her feet, or to make contact briefly, before moving off again. 3. He may seek to be picked up, but he does not necessarily want to be held more than a few moments before wanting to be put down again on the floor. Nevertheless, while in physical contact with his mother, he usually gives clear signs of enjoying it. He may sometimes squirm to get down so as to continue his exploratory play, but he rarely if ever shows real ambivalence or displeasure. On the contrary, when held by his mother, regardless of which of them initiated the contact, he tends to respond positively to her, and to show "active contact behavior," such as scrambling over her, exploring her person, embracing her affectionately, and the like. 4. If his mother moves about from room to room, he may follow her, but he tends not to be distressed by these minor everyday separations in his familiar home environment.

Subgroup Ib: 1. Like the Ia baby, a Ib baby can move away from his mother to exercise locomotor skills or to explore the properties of the objects of his environment. 2. Like the Ia baby, he keeps track of his mother's whereabouts and occasionally interacts with her across a distance. He differs from the Ia baby, however, in tending somewhat less to gravitate back to his mother, and in moving about actively with less proximity-seeking behavior. 3. He tends to be somewhat less actively positive in his response to his mother while being held by her than are Ia infants. He is, however, less frequently indifferent or ambivalent to physical contact than are babies of other groups. The chief reason for classifying him in Group I is that he shows relatively little affective disturbance associated with transitions from exploratory to attachment behavior than do babies of other groups. 4. The Ib baby tends to show

slightly more separation anxiety than does the average Ia baby. When his mother leaves the room he is more likely to fuss and less likely to display active following without fussing. Nevertheless he shows substantially less separation anxiety than do infants in Groups IV and V.

GROUP II: The baby can, on occasion, use his mother as a secure base from which he can explore, but the shift from exploration to attachment behavior and back again is sometimes not smooth, and in some instances may show clear disturbance of affective quality. At times when the balance is disturbed, it seems to be in reaction to maternal behavior, for at times there seems to be a mismatch between the infants' wishes for contact, proximity, and/or interaction, and those of his mother.

Subgroup IIa: 1. The baby clearly uses his mother as a secure base when she is accessible-but she can ignore him for long periods. 2. When his mother is psychologically accessible, he welcomes her response and interaction, and can also show some independence in play--and indeed he behaves like an infant of Subgroup Ia. When his mother is psychologically inaccessible, however, he tends to importune her with heightened attention-seeking behavior, which may emphasize attempts to engage her in interaction across a distance, and this behavior may be cheerful and charming rather than angry and ambivalent. On occasion, with continuing maternal inaccessibility, he may abandon efforts to initiate interaction with his mother, and play quite independently, ignoring her. 3. His contact seeking and his behavior when in contact with his mother tend to be unambivalent, and resemble that of the Group I baby, perhaps especially that of the Ib infant. 4. When his mother moves about from room to room his behavior is variable. Sometimes he follows her with no distress, much like a Ia infant; sometimes he seems quite independent and ignores her departure; sometimes, however, he seems to overreact to a minor, everyday departure with marked separation anxiety.

Subgroup IIb: 1. When his mother is accessible and non-interfering, the IIb baby can use her as a secure base from which to explore, and seems much like a Group I infant. On these occasions they seem attuned to each other. 2. On the other hand, when his mother, wanting physical contact with him, interrupts his play, he may show contact-resisting behavior, and if she persists in attempting unwanted contact he is likely to become very "independent",

ignoring her and avoiding proximity to her. When he becomes "independent", his mother is likely to ignore him in return. If eventually, as he is likely to do, he seeks proximity or interaction with his mother while she is in an ignoring and rejecting mood, he tends to respond to her rebuffs with greatly heightened attachment behavior. Thus, on the one hand, he seems excessively independent and yet again he can be extremely importunate in seeking contact. 3. Seemingly as a result of the above-mentioned inconsistencies in his mother's behavior, the IIb baby is inconsistent in his response to physical contact. When mother-infant interaction is in tune, he responds positively, but perhaps with less clear cut enjoyment than a Ia baby; when the interaction is not in tune he shows contact-resisting behavior, or mingles contact-resisting with fussy contact-accepting behavior. 4. Especially when in a proximity-avoiding mood the IIb infant tends to ignore his mother's comings and goings. In general, he tends to show little distress in regard to minor, everyday separation situations.

GROUP III The baby does not seem to use his mother as a secure base. He explores very actively, but displays relatively little proximity-seeking behavior and does not seem much concerned with his mother's whereabouts.

1. As implied above, this baby can and does explore actively and "independently". He certainly can move away from his mother, including ventures out of sight, busily occupied with exploring objects or with practicing his locomotor skills. 2. He may to some extent keep "visual tabs" on his mother, but tends to have a take-it-or-leave-it attitude toward her presence. He tends to be less interactive across a distance than a Group I baby, and indeed may not respond to his mother's attempts to interact with him or to direct his activities. He may occasionally gravitate to his mother, and may even make contact with her, but this is less frequent than it is with Group I babies, and is easily discouraged if his mother does not acknowledge him. 3. More than infants in other groups he lacks interest in being picked up; he may well squirm to get down again after very brief holding; he tends to lack active contact behavior even when he accepts contact; he tends not to protest when he is put down. 4. He seems to be able to adapt himself readily to his mother's absence from a room, or even from the house. He may or may not protest her departure momentarily, but he soon resumes his own activity, as though he has built up some kind of capacity for

occupying himself with things, and some kind of defense against being ignored or left alone.

GROUP IV: The baby does not seem to feel that his mother is a secure base. He "explores" actively, and he seeks contact and/or proximity on occasion, but the balance between these two sets of behaviors is disturbed, and to a greater extent than in the case of Group II.

Subgroup IVa: 1. The baby is certainly interested in his own exploratory activity, and may sometimes seem as independent as a Group III baby. His "exploration tends to be hyperactive, however. He tends to move quickly from one thing to another, and seems more preoccupied with his own locomotor skills than in the quiet, constructive manipulation so often seen in infants of Groups I and II. 2. Nevertheless he tends to keep visual tabs on his mother, and seeks proximity to her and/or contact with her more frequently than do Group III babies. 3. In regard to his response to physical contact with his mother, he may be inconsistent--sometimes apparently enjoying being held by her and responding positively, but sometimes seeming indifferent, and sometimes ambivalent. His inconsistencies do not seem as clearly contingent upon shifts in his mother's behavior as do those of Subgroup IIb. For example, he may seek to be picked up, and then seem indifferent, or squirm to get down, whereas a IIb baby might be indifferent or squirm when his mother initiated the contact, but not when he himself initiated it. 4. He tends to be distressed when he loses track of his mother, or when she leaves the room--certainly more than do Group I or Group III babies.

Subgroup IVb: 1. This baby can and does move about actively away from his mother, but does not give the impression of being as "independent" as either Group III or Subgroup IVa. 2. He seeks proximity to his mother; if she moves he tends to follow her. 3. He also actively initiates contact with his mother, and yet often seems markedly ambivalent if his mother responds by picking him up. Ambivalence may be shown in the following ways: (a) having actively sought contact with his mother, he may resist being picked up and/or struggle to get down; (b) having been picked up, he may not respond to his mother positively, but rather may look away from her or ignore her, or squirm to get down; or (c) having squirmed to get down or having resisted being picked up in the first place, he may protest or resist release. He both wants contact and resists it.

This ambivalence is often evident in a single contact episode and is not (as with Subgroup IIb) a matter of seeking contact sometimes and resisting contact at other times. 4. If his mother leaves the room he tends to follow her, and if prevented from following he tends to become distressed. He shows more separation anxiety than infants of other groups.

GROUP V: The mother does not seem to function as a secure base for the baby. He tends to be passive either in seeking proximity/contact or in exploration or in both. When he is confined, and sometimes even when given floor freedom, he tends to engage in stereotyped, repetitive, autoerotic activities. Babies in this group differ in the frequency and degree in which they show passivity. Some are passive only intermittently, while others are strikingly passive.

Subgroup Va: 1. When on the floor, the Va baby is variable in his behavior. Sometimes he may move about actively, and when he does so, he is likely to head for forbidden areas and pay little attention to his mother's whereabouts or commands. He may, on the other hand, sit for fairly long periods, passively watching, or chewing, or sucking on something. In either case he may appear to be "independent," but on the other hand he may at other times seem anxiously concerned with his mother's whereabouts. Like Group IV babies, and perhaps to an even greater extent, he shows an imbalance between and lack of integration of exploratory and attachment behaviors. 2. He is infrequently active in seeking proximity or contact with his mother; he is more likely merely to signal his wish or to wait passively. Nevertheless he may occasionally show active proximity/contact seeking. 3. Having been given contact he tends to accept it, usually passively, although there may occasionally be some positive response or active contact behavior. 4. Sometimes he seems concerned with his mother's whereabouts, and may then protest her comings and goings and he may follow her if free to do so. At other times he pays little attention to her comings and goings.

Subgroup Vb: 1. This baby is so passive that he explores little or not at all. He seems unable to engage in sustained, independent activity that is truly exploratory in nature. He requires his mother's participation to become active, and even then he is not much interested in exploring the properties of objects. When his mother is non-participant, his locomotion is depressed and his exploration tends to be

limited to looking about. 2. He is equally unable to make an active effort to seek proximity or contact with his mother. He may approach her, but tends not to clamber up or touch her. He is more likely to wait passively until his mother comes to him, or to signal his desire by fussing or crying. 3. When picked up, he is likely to brighten up, as though "turned on" by his mother. He seems to enjoy being held, but he tends to be passive while in contact. He tends to be passive also when put down he does not actively resist release and indeed rarely even protests. 4. Separation anxiety is conspicuous. It is marked chiefly by crying or fussing, and is unlikely to give rise to active search or following. 5. Autoerotic behavior such as rocking or sucking tends to occur, especially when the baby is being ignored or is alone-but it is not as conspicuous as in Subgroup Vc.

Subgroup Vc: 1. This baby's "exploration" tends to consist of stereotyped, repetitive activity and is not apparently concerned with discovering the properties of objects. 2. He is concerned about his mother's

whereabouts, but, although he may approach his mother when he is free to do so, he lacks clear-cut proximity-promoting behavior when confined. He does not reach, nor does he give directed, clear signals. 3. Nevertheless he wants contact with his mother. Having achieved it he may show some active contact behavior of a stereotyped, repetitive sort. He may also show a peculiar kind of aggression, in which he hurts his mother seemingly without anger, without appropriate stimulus, and without apparent intent to hurt. When put down, he does not actively resist the termination of contact, but rather accepts it passively. 4. This baby shows some separation anxiety. When free to follow his mother he may do so; when confined he fusses in an undirected sort of way. 5. He is conspicuous for stereotyped autoerotic activity, especially when confined and ignored. This is perhaps the chief reason why he is classified in Group V. In other features--especially his hyperactive "exploration" and his aggression to his mother--he resembles the babies of Group IV.

Relation of Secure Base Behavior at Home to Strange Situation Classifications

Secure Base Beh. At Home	In Strange Situation						Total
	B3	B1/2	A2	A1	C1	C2	
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I	8	-	-	-	-	-	8
II	1	3	-	-	-	-	4
III	-	1	2	-	-	-	3
IV	-	-	-	3	1	-	4
V	-	-	-	1	1	2	4
Total	9	4	2	4	2	2	23