

Adolescents' Orientations for Development (*)

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During the last decade, developmentalists became increasingly aware of those patterns of change that may be conceived as the result of a person's own initiative or control (Lerner & Busch-Rossnagel, 1981, Brandtstädter, 1984; Silbereisen & Eyferth, 1986). Research on social and personality development in adolescent and adulthood seems to profit most when conceived in this view. In general, periods of transition (see Eichhorn et al., 1981) are especially interesting in the present context. The multitude of changes, both within the individual and within the social environment, lead to the mobilization of an individual's adaptive capabilities, and hence provide a fruitful point of departure for the study of self-regulation in development.

Silbereisen and Kastner (1987) described some

general principles of control over development in terms of self-regular principles of control over development in terms of self-regulation (Carver & Scheier, 1982). Individuals gradually form and revise orientations concerning goals of and steps in their future development that reflect normative social expectations, as well as personal aspirations and values. These *developmental orientations* function as a frame of reference for further action. If the actual state of an issue in development is perceived as deviating from these future-time perspectives, the person tries to respond by changing internal conditions or outer contexts in order to reduce the discrepancy. Such action may lead to an improvement in the match between orientation and state by, for example, increasing in the state of development, or decreasing the goals for the future. These changes, in turn, form the basis for future regulative loops in that domain.

The growing emphasis on self-regulation in development is paralleled by a renewed interest in the old concept of developmental tasks (Havighurst, 1952; see Oerter, 1986). One should bear in mind, however, that the latter conceptions of development are rather normative in nature, whereas by developmental orientations we refer to subjective future-time perspectives. In this respect, some other approaches may also be subsumed under the general header of developmental orientations. Thomae's (1968) *Daseinsorientierungen* seem to

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address rather abstract, long-term orientations, while little's (1983) personal projects are much more specific and short-term.

Given that subjective orientations for development play an important role as proposed in the general model, information on their gradual formation and behavioral impact becomes crucial for a better understanding of the principles underlying constancy and change across the life-span. Consequently, one would expect a large body of research on this issue. However, as recent reviews demonstrate (Oerter, 1986) this seems not to be the case.

In the remainder of this chapter, empirical data will be discussed that provide insight into changes of developmental orientations and their impact on personality and social development through adolescence. Most results presented come from the Berlin Youth Longitudinal Study¹. A large representative sample of adolescents and their families is taking part in this investigation. The following is organized in three sections: a) first, we will provide an overview on age-trends and sociodemographic variation in conceptions of actual state and future-time perspective in development; b) second, we will concentrate on the developmental issues of occupational preparation and intimate partnership. The aim is to explore the linkage between change in the actual state/future-time match on the hand, and change in a number of consequent variables on the other. Here, self-esteem, friendship conceptions, and social behavior will be addressed; c) given the evidence presented, we will indicate how this research may be linked to the broader field of research on coping in adolescence.

1. ACTUAL STATE AND FUTURE-TIME PERSPECTIVE IN ONE'S OWN DEVELOPMENT

Several studies were reported in the literature

¹ The principal aim of the study is the analysis of the role of problem behavior in normal adolescent development. Risk and protective factors within the individual, and within family, work and leisure contexts, are investigated. Studies are undertaken in Berlin and Warsaw (Poland). By 1989, one of the cohorts included will have been followed up every year from ages 11 to 18.

that aim directly at subjective conceptions about demands, ways of dealing with, and goals of achievements related to peer-integration and other «classics» among normative developmental tasks. Applying methodologies that vary from using standardized scales to narrative interviews, researchers learnt about such disparate items as techniques to make friends in discotheques (Silbereisen & Noack, 1988), adolescents' naive theories of job socialization and work (Oerter, 1984), subjective extension of future orientations in years from the actual point in time (Nurmi, 1987), or the conceptual net between several issues of development «that are important to become an adult»². Though it would be interesting to go into details of this research, its format does not fit well to the present aim.

A study of Dreher and Dreher (1984a, b), however, applied an approach that is relevant to our endeavor. They asked adolescents to judge the degree of accomplishment concerning ten issues of their own development. The sample (n=92) was comprised of younger students (average age: 14 years, 9 months) and older students (16 years, 9 months) who all attended grade 9 of a secondary school (*Realschule*)³.

² In their study on developmental orientations, Noack, Muchowski and Silbereisen (1987), had adolescents rate a variety of attitudes, skills, and abilities concerning their importance for attaining different future-time perspectives. Cluster analyses were used in order to elucidate the organization of developmental orientations in the light of their subjective demand structure. Thus, a strong interconnection of, for instance, peer-integration and the development of other-sex relationships was identified which corroborated results from field studies pointing to a functional linkage between these two domains of developmental orientation.

³ German school track names are retained in order avoid the misleading use of English names which refer to a different school system. In Berlin, *Hauptschule* includes grades 7 through 10 and is nonacademic; *Realschule* also includes grades 7 through 10 but is somewhat more academically oriented than the latter; *Gymnasium* includes grades 7 through 13 and is the traditional German pre-academic institution; *Gesamtschule* includes grades 7 through 13 and offers both academic and non-academic tracks. Although the transition from primary to secondary level after grade 6 is similar to many U.S. grade level organizational patterns, in the West German system it implies not only a change in the social ecology, but also a placement according to prior school achievement.

While the perceived degree of accomplishment was rated to amount between 50% and 60% for occupational preparation («Knowing what one wants to become one day, and what one would have to know or learn for that») and peer-integration, it was rated between less than 30% and 40% for intimate partnership («Having an intimate relationship with one's girlfriend/boyfriend»). Concerning occupational preparation, differences between the two age-groups disappeared from first to second measurement 15 months later at grade 10, the school leaving age for this educational track. Differences in the perceived state of intimate partnership, however, became more accentuated. In other words, friendship with the other sex represents an «on-time» domain of development, characterized by progressive change. Thus, the influence of «the clocks that time us» (Featherman & Peterson, 1986) is obvious.

Through this chapter we will differentiate between judgments of the actual state of development, on the one hand, and *future-time perspectives* concerning these issues, on the other hand. The latter refer to events to happen or steps to be accomplished in the course of the *following* year. As data were gathered once every year, even complex «developmental patterns» of change in the two aspects can be investigated.

1.1. Occupational Preparation and Intimate Partnership

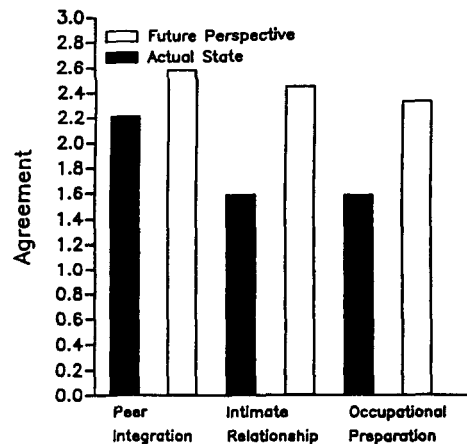
Based on experience from several pilot studies, statements concerning state and future-time conceptions were formulated on ten areas of adolescent development such as peer-group integration, physical maturation, autonomy from parents, occupational preparation or intimate partnership. In the Appendix, items are given for the issues of occupational preparation and intimate partnership. Though scores were attached for the purpose of statistical treatment, the statements in everyday language were thought to mark different categories of state and future-time perspective.

For ease of comparison with Dreher and Dreher's (1984a, b) 15-year-olds; in Figure 1 data are depicted on a subgroup of 438 7th through

9th graders (average age: 14 years, 5 months), drawn from all educational tracks in Berlin (West)⁴, who took part in the Berlin Youth Longitudinal Study. Mean scores of state and future-time perspective are shown for *occupational preparation, intimate partnership, and peer-integration*.

FIGURE 1

State (a) and future-time perspective (b) in peer-integration, occupational preparation, and intimate partnership. Means are shown for a group of n=438 students attending grades 7, 8 and 9, drawn from all educational tracks in Berlin (West)



The developmental state in peer-integration is considerably advanced in the adolescents' judgments. Yet there is not too much for further gain, as indicated by the scores nearly matching those attributed to the future. In contrast, occupational preparation and intimate partnership seem to represent much more virulent fields of change. Though their state is reported to be rather low, perspectives for the year ahead are nearly as pronounced as is the case for peer-integration.

This overall impression was qualified by the

⁴ Actually the sample was selected on the basis of class-rooms. As students of the targeted age-groups attend different grades, the classrooms were stratified as to represent the grade-level composition in the student population. Grades 5 through 6 from the early adolescence group, grades 7, 8 and 9 the middle adolescence group.

results of three-way analyses of variance with orientation (state vs. future perspective), year of measurement (first 1982, repeated 1983), and gender as independent variables. As expected from Figure 1, the main effect of orientation was significant ($p < .001$) for occupational preparation ($F = 136.89$) and intimate partnership ($F = 30.29$) only. However, all main effects of year and gender were also significant (peer-integration: $F_{\text{year}} = 137.30$, $F_{\text{gender}} = 4.46$; occupational preparation: $F_{\text{Year}} = 1.056.52$, $F_{\text{gender}} = 11.47$; intimate partnership: $F_{\text{year}} = 710.53$, $F_{\text{gender}} = 9.46$; $p < .001$). While means at second measurement were generally higher, gender differences were issue-specific. Females ranked higher in peer-integration and intimate partnership, males in occupational preparation. Concerning the magnitude of effects, gender ranks last.

Of greater interest in the present context are differences in the *change* of actual state and future-time perspective. In other words, we are looking for interactions. The only significant ($p < .05$ or smaller) interactions were observed with intimate partnership. Here, both the gender X orientation ($F = 18.29$) and the triple interaction year X gender X orientation ($F = 5.11$) were significant. A look at the pattern of means revealed that females show a rather steep increase across measurements in the state of partnership, and still a moderate increase concerning the future. Males, however, reported a *slight* increase in the future-time perspective only. Needless to say that on average females rated their level of intimate partnership higher than males. Thus, for males the mismatch between actual and future-time perspective became even more pronounced through the passage of the year.

What is the trend in the relationship between judgments of actual state and future-time perspective from early adolescence on? Unfortunately the data are not yet analyzed longitudinally. However, cross-sectional data of about 1,200 students in grades 5 through 9 showed that there was considerable variation between the issues in terms of level differences and of the magnitude of the difference between the actual state of development and its future perspective. With future perspective as well as

perceived state of peer-integration increasing at a comparable pace across adolescence, the slight discrepancy reported above basically exists throughout this age period. Concerning intimate partnership again increases can be observed in both, state and future perspective. As the development of the wish for a boyfriend or girlfriend, respectively, exceeds the concurrent changes of state up to age 14, the difference continuously increases up to this point in life. Change patterns of developmental orientations for occupational preparation follow a similar age-related patterning. Starting at a higher level of discrepancy between state and future perspective than is the case for the partnership, this ranking changes between ages 13 and 14 when the perceived state begins to catch up with aspirations. Thus, by middle adolescence the partnership issue has taken the lead in terms of urgency, that is, state and future perspective show highest discrepancies, among all developmental orientations.

There was an interesting exception that parallels results of studies conducted with different methodologies. Concerning physical maturation (that is, actual state and future-time perspective concerning «observable» events such as breast development), for females but not for males there was a mismatch opposite in sign to the others — the state of development is *ahead* of the future-time perspective starting at about age 14. In other words, following the onset of puberty, the perceived physical development takes place at a faster pace than the changes in the aspirations concerning one's physical appearance. With few opportunities to influence the state of development, adolescents' regulative interventions in this domain would have to involve adaptive changes of attitudes and behaviour. Similar findings come from studies on the influence of puberty on psychological functioning. Crockett and Petersen (1987) found that increasing pubertal status was related to a more positive body image for boys and decreased feelings of attractiveness for girls.

Though the equivalence of the response categories may be questionable, our results on a large representative sample seem to confirm and extend those reported by Dreher and Dreher (1984a, b). In middle adolescence, occupational

preparation and intimate partnership share similar profiles with respect to developmental state and future perspective — progress is urgent. If «focusing» one issue at a time were indeed the healthy flow of affairs in adolescent development, as Coleman (1980) proposed, the strains that may result from this double demand could put these adolescents at risk for the development of problem behavior (Silbereisen & Kastner, 1987; Labouvie, 1986). However, even multiple mismatch does not necessarily imply an impairment of personal control. Given the well-known restrictions in the social ecologies young people face (for instance, lack of apprenticeships and youthful unemployment; see Heinz, 1985), paradoxically enough those adolescents who strive to attain greater control of their lives by actively trying to reduce the mismatch may actually be at risk (Petersen, 1988 in press).

The analyses presented thus far were purely descriptive. They helped, however, to get a glimpse of the trends in orientations for development across adolescence. In the following, the emphasis will be shifted to associations between interindividual differences in these orientations and some personal and behavioral consequences.

2. TRANSITION INTO OCCUPATIONAL PREPARATION AND INTIMATE PARTNERSHIP

All analyses presented in the following sections share a «typological approach» in the measurement of transition. This is in accordance with the plea of many researchers (see Magnusson, 1985) for applying person-oriented instead of variable-directed methodologies. In a person approach, the individual is characterized by a pattern of variables, and development may be described as a lawful transformation of patterns across time.

Hence, instead of using the scores on state and future-time perspective directly, possible *patterns of change* were organized in a specific way. In principle, we had to assume 3 (state) x 3 (future-time) x 2 (measurements) = 81 patterns of change. This is certainly a mere hypothetical figure. The actual number of patterns is substantially lower as, for instance,

scores on state did not too often exceed judgments of future-time. The remaining 36 combinations are depicted in Table 1. Based on theoretical considerations, or guided by the distributions observed empirically, it may be advisable to further reduce the size of the cross-classification scheme by dichotomizing. This is also favorable in order to increase reliability. Depending on the criterion used, nine broader categories (marked A through I) will result. By way of example this is marked in Table 1.

TABLE 1
Categories of Transition

	Year 2	-/-	+/-	+/+
Year 1	1/1	2/1 2/2	3/1 3/2	3/3
-/-	1/1 2/1 2/2	A	B	C
+/-	3/1 3/2	D	E	F
+/+	3/3	G	H	I

Note: Codes such as «3/1» read as follows. The figure preceding the slash indicates the judgment of future-time, while the figure following the slash indicates the judgement of developmental state. Dichotomizing as shown here is an example (1, 2 = -, 3 = +).

The matrix representation makes it easier to distinguish ways by which attributes of transitional states may be defined. Consistent with the general model of self-regulation, the *first* way focuses on the patterns of change in *absolute goal distance* — increase, decrease or stability across time. Given this approach, a number of hypothetical equivalences emerge. As a look at Table 2 demonstrates, the diagonal arrays A, E and I form a single category with no change in the match of future-time and

actual state as the defining future. Similarly, arrays D and F represent a decrease in the distance across time, whereas B and H express an increase in the goal distance.

Though rather straightforward, this threefold categorization, is quite simplistic, neglecting, for instance, directions of changes. Consequently, a *second* way of conceptualizing transition was devised. Categories D and F, and B and H differ among themselves considerably in the basis of the change. In principle, either the goal is changed while the state of development remains unchanged, or the goal remains unchanged and the state undergoes change. As arrays C and G show, not mentioned yet, change may even affect both aspects, though possibly in different directions. Following the second way, patterns of change in *signed goal distance* are assessed. Thus, the goal/state match can be captured as to direction of change (for instance, B vs. H) and/or as to level, as in the case of E vs. I.

Though most desirable, the analyses accomplished thus far do not yet utilize a common format in analyzing the effects of variation in transition.

3. ASSOCIATION WITH SELF-ESTEEM AND FRIENDSHIP CONCEPTIONS

Self-esteem is seen here as a rather general indicator of psychological well-being. This view is corroborated by research on developmental psychoopathology that demonstrated high self-esteem as one of the factors responsible for invulnerability (Werner & Smith, 1982). Following Kaplan (1980; «Deviance in defense of self»), we hypothesize a link between failure in the pursuit of goals conforming to age-graded expectations and self-esteem. In a series of studies, Silbereisen and Noack (1988, in press), and Silbereisen and Reitzle (1987) could demonstrate the empirical relevance of this approach in understanding drinking among young people. However, there was no control of the degree to which the adolescents experienced frustration concerning developmental tasks.

3.1. Occupational Preparation

In her thesis Eger (1987) distinguished patterns of change in occupational preparation assessed as absolute goal distance. The distance in the judgments of actual state and future-time perspective could remain stable, become smaller or even larger. In general, adolescents' *self-esteem* is expected to profit from a decrease in target distance, and an increase in target distance is expected to diminish self-esteem, respectively. While this view should basically hold true, several qualifications can be made. Self esteem shows an increasing trend from early to late adolescence (O'Malley & Bachman, 1983). Though the successful mastering of steps in one's occupational preparation will contribute to this overall trend, the effects have to be analytically separated. As any change in self-esteem during the observed period could be a function of the prior level of self-esteem, this had to be taken into account as well.

Method. The sample consisted of 230 male and female students taking part in the Berlin Youth Longitudinal Study. The students attended grades 8 or 9 in 1982. They were chosen from a larger group because of complete data sets for the years 1982, 1983 and 1984.

Each level of goal distance in occupational preparation was comprised of a subset of the 36 potential constellations of change (see Table 1). Empirically, however, only a few categories were dominant. Concerning *decrease* in goal distance, a case in point is adolescents who manage to reduce their 1983 goal distance (future/actual: 3/2) in 1984 (3/3). A prominent case of an *increase* in goal distance is represented by a change from score 2/1 in 1983 to 3/1 in 1984. Here, the perceived state of development remained unchanged, but the aspirations increased. Finally, the group with *no change* is best characterized by adolescents whose distance from goal remained stable (in only a few cases there was a zero distance in 1983 and 1984).

Self-esteem was assessed with a short scale comprised of items such as «I'm satisfied with my self». The reliability and validity of the scale was repeatedly demonstrated (Silbereisen, Reitzle & Zank, 1986; Walper & Silbereisen, 1987).

Results. Data were studied using as analysis of variance design. The independent variables were occupational preparation (stable, smaller, larger distance from target), prior self-esteem (high, medium, low in 1982), and year of measurement (first 1983, repeated 1984). Self-esteem in 1983 and 1984, respectively, was the dependent variable.

Not surprisingly, both the main effects of prior self-esteem a year of measurement were significant ($F=41.66$, $p<.001$; $F=16.29$; $p<.001$). Whereas the first effect mirrors the wellknown stability of self-esteem (O'Malley & Bachman, 1983), the second points to an increase in self-esteem through the observed period of one year. However, the main effect of occupational preparation was not significant ($F=2.05$, n.s.). The only further significant effect ($F=2.88$, $p<.05$) was the triple interaction. Thus, the interpretation of the main effects needs caution.

The means revealed an interesting pattern of effects. These results are depicted in Figure 2. The categories stable/decrease in occupational preparation and high/medium prior self-esteem were collapsed in the graphic representation.

For adolescents high or medium in prior self-esteem, a stable or decreasing distance from the goal of occupational preparation is paralleled by almost no change in self-esteem; an increase in the distance from target is paralleled by a slight decrease in self-esteem across time. This trend is in support of the hypothesis. However, adolescents low in prior self-esteem show quite a different picture. With stable or decreasing distances from target being paralleled by positive changes in self-esteem, an even more pronounced increase in self-esteem holds true for those with an increase of the distance from target. In other words, the relationship between transition into occupation and self-esteem seems to be reversed for those low in self-esteem.

How to resolve these opposing findings? Consider differences in the social ecology of the adolescents. Depending on the educational track they attend in school, transition into occupation is «at stake» for some, off-time for others in the sample. More specifically, students of lower secondary tracks (*Hauptschule*, *Realschule*⁵) were close to leaving school after

grade 10, while students of the higher secondary track (*Gymnasium*⁵) still have time ahead as they will leave after grade 13. Consistent with this line of argumentation, the group showing the unexpected increase of self-esteem consisted mainly of students attending higher educational tracks. Restrictions in the size and composition of the sample did not allow to analyze this further.

There is an alternative worth considering. The seemingly paradox increase in self-esteem could be related to other issues of development that may have served self-enhancing functions in exchange. Experiencing the strains of a growing mismatch between goals and state of occupational preparation, adolescents could, for instance, have successfully turned their efforts towards more promising objectives such as changes in the field of interpersonal relationships. This possibility is of great theoretical interest but still needs exploration.

3.2. *Intimate Partnership*

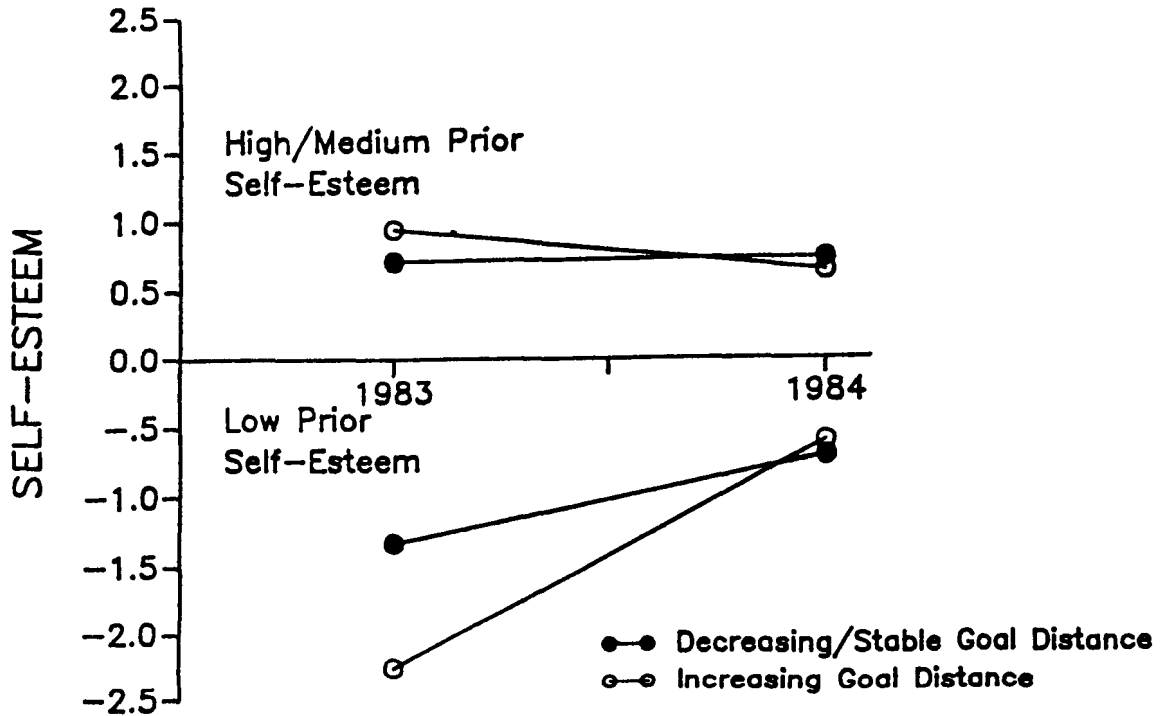
In a paper entitled «Transition into Dating», Caspi and Silbereisen (1986) reported analyses on the relationship between *self-esteem* and dating patterns. What they meant by the latter term is easily explained with reference to Table 1. The dating patterns analyzed are represented by four arrays in the lower right corner. More specifically, variation in signed goal distance was the principle guiding the selection. Adolescents in array E (see Table 1) showed a high premium on other-sex intimate partnerships, though they were not involved in such relationships («*unfulfilled*»). Their counterparts are represented by adolescents in array I who had the same future-perspective, but at the same time were involved in an intimate partnership («*fulfilled*»). The group in field H could not manage to keep their fulfilled status maintained at first measurement; instead, their actual state got reduced a year later («*losers*»). Finally, F is comprised of adolescents, though unfulfilled at first measurement, who could realize the high premium they placed on intimate partnerships («*gainers*»).

As revealed by analysis of variance ($F=1.34$, $df=5$, $p<.25$), there was no difference in self-esteem at first measurement (1982) when the

⁵ See footnote 3.

FIGURE 2

Interaction between transition into occupation (stable/decreasing vs. increasing goal distance), prior (1982) self-esteem (high/medium vs. low), and year of measurement (1983, repeated 1984). Categories were pooled for graphic representation. Shown are means of the combined groups (n for ANOVA cells varies between 10 and 39)



adolescents (n=286) were on average 14.5 years old. As expected from earlier studies (O'Malley & Bachman, 1983), self-esteem increased in all groups. The magnitude of the change, however, was dramatically different as shown in Table 2. While both the unfulfilled and the losers showed about 25% change in terms of standard deviation, it was about 70% of a standard deviation in the case of gainers and fulfilled. It should be noted that larger portions of the sample were not covered by the dating pattern investigated so far thus aiming at pure transitional patterns.

Caspi and Silbereisen's (1986) study provided the starting point for similar analyses on *conceptions of friendship*. Influenced by Selman's (1980) and Youniss's (1980) work on social relationships, a questionnaire on friendship concepts became part of the regular

assessments in the Berlin Youth Longitudinal Study.

In her thesis, Luck (1987) could show that the instrument indeed assessed two different aspects of friendship we were interested in. With the scale on *friendship guided by reciprocity*, the tendency is measured to conceive shared activities and symmetrical treatment as major element in friendship relations. An example is «Without a friend I have nobody with whom I could go swimming or go to the disco». In contrast, *friendship as mutual understanding* refers to the tendency to conceive shared thoughts and ideals as crucial for other-sex friendship. An example is «A friendship develops, if I find somebody who holds attitudes similar to mine». Rather dramatic differences in these aspects of friendship were observed across adolescence. Whereas the

TABLE 2
Mean Self-Esteem 1982 and 1983

Transition in Intimate Partnership 1982/83	1982		1983		Change	Change %by SD
	AM	SD	AM	SD		
Unfulfilled ^a	1.53	.67	1.69	.66	.16	24.2
Gainers ^b	1.39	.57	1.88	.56	.49	74.2
Fulfilled ^c	1.59	.66	2.02	.52	.44	66.6
Losers ^d	1.63	.61	1.79	.57	.17	25.7

Note: Table after Caspi & Silbereisen (1986). ^a High premium on intimate relationship, but not involved. ^b Realized high premium at time 2. ^c High premium on intimate partnership and involved. ^d Lost earlier fulfilled status at time 2.

agreement with the concept of friendship guided by reciprocity decreased between 11 and 16 years-of-age, the agreement with friendship as mutual understanding increased.

Concerning the relationship between the transitional patterns in intimate partnership and friendship concepts, it can be assumed that friendship concepts mirror changes in experiences as expressed in the dating patterns. As a decrease in the distance from target indicates a growing familiarity with other-sex relationships, those adolescents should have had some experience with shared thoughts and values. Hence, this group was expected to show an increase in their appraisal of friendship as mutual understanding. It is not clear whether an increase in target distance should be paralleled by a decrease in the agreement with mutual understanding. Instead, the adolescents could keep and even exaggerate their positive evaluation of friendship as mutual understanding. However, one could also argue that a declining appraisal of mutual friendship may have been one of the reasons why these adolescents failed in transition to intimate partnerships.

Method. The data were drawn from the 1983 and 1984 waves of the Berlin Youth Longitudinal study. Concerning the patterns of transition, Caspi and Silbereisen's (1986)

definition of the groups was extended in order to represent not only a segment of the sample⁶. The group called fulfilled remained the same (I in Table 1), the gainers are now comprised of F (as before) and C. Similarly, the category of losers includes H (as before) and G. In addition, «movers» (B) were introduced. Here, the future-time perspective is raised, though the actual state remained low as in the prior year. Finally, adolescents in the calls A and D are called «prematurers» for ease of communication. They share low values in both aspirations and actual state.

Following the hypotheses outlined, fulfilled and gainers were expected to show either no change or increases of their friendship concepts. Concerning the level of friendship appraisals, prematurers should rank low. For both groups showing a change towards a mismatch of actual state and future time perspective (movers, losers), predictions are difficult. While the growing interest in other-sex relationships as shown by the movers could be expected to go along with a higher evaluation of mutual understanding, losers may devalue this aspect of friendship as a result of their negative experiences. The latter assumption, however,

⁶ The coding of transitional groups used in Luck's analyses covered 71% of the original sample.

remains rather speculative. As the concept of friendship guided by reciprocity shows a decreasing trend across adolescence anyway, it was assumed that change during the observed time-span would be concentrated on mutual friendship.

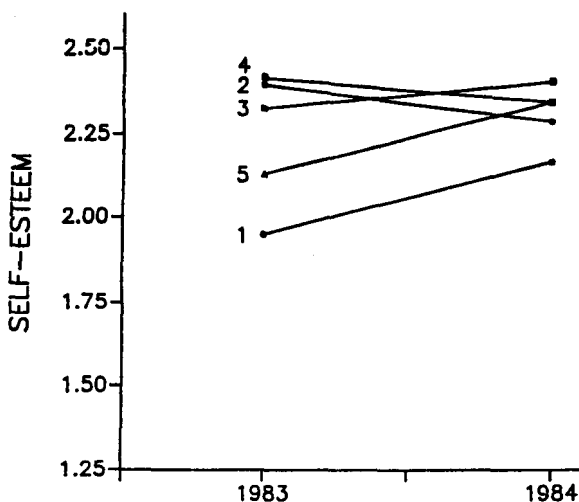
Results. The data were analyzed using a three-way multivariate analysis of covariance with the independent variables dating pattern (fulfilled, etc), gender, and year of measurement (1983, repeated 1984). Dependent variables were the two aspects of friendship concepts. Age was partialled out because of the rather strong correlation with friendship concepts.

As expected, the main effects were significant (dating pattern: $F=6.72$, $p<.001$; gender: $F=8.33$, $p<.001$; year: $F=14.69$, $p<.001$). Furthermore, the interaction dating pattern x year was significant ($F=2.85$, $p<.01$). A look at univariate F-tests showed that this interaction effect was especially due to friendship concepts based on mutual understanding.

The following discussion will be restricted to the interaction. For convenience, a graphic representation is given in Figure 3.

FIGURE 3

Interaction between dating pattern and year (1983, repeated 1984) on generalized friendship concept. 1: prematurers; 2: loser; 3: gainer; 4: fulfilled; 5: movers (see text)



As can be seen, there is an opposite trend between two clusters of dating patterns. While the group of prematurers, movers (both $p<.05$), and gainers (n.s.) showed an increase in their appraisal of mutual understanding as basis of friendship, losers ($p<.05$) and fulfilled (n.s.) showed a decrease. In contrast (not shown in Figure), almost all dating patterns were paralleled by a decreasing trend in friendship guided by reciprocity. Thus, effects of dating experience do not superimpose the generally falling trend in this aspect of friendship. Not surprisingly, prematurers showed the lowest level of all groups at first measurement. However, their increasing trend resembled that of the movers. It may well be that a socio-cognitive «readiness» precedes the actual interest in other-sex contacts.

In sum, then, for some patterns of transition we could confirm associations with change in self-esteem and friendship concepts. Though the equivalence of the typological approaches used in the studies is in question, the findings underscore the impact of developmental orientations for personality development. However, results on occupational preparation and intimate partnership show differences that may be indicative of considerable topic specificity.

Thus far, change across time in the match between actual state and future-time perspective was related to dependent variables capturing internal characteristics of a person. In the following section, we will demonstrate the relationship between developmental transition and change in *behavioral* variables.

4. BEHAVIORAL CONSEQUENCES

From systematic observations in leisure contexts of adolescents one can assume (see Silbereisen & Noack, 1988) that public settings such as discotheques, shopping malls and other meeting places of young people offer potentials for development. Interviews conducted with adolescent visitors when entering these settings lead to the view that «development» is more often than not the implicit goal of the visit — they are searching for opportunities to make friends.

As the files of Berlin Youth Longitudinal Study cover data on leisure places highly frequented by adolescents, we were able to run analyses on the linkage between visits at places and transitional patterns in *intimate partnership*. More specifically, it was asked whether adolescents whose goals for the near future were not matched by the actual state of partnership, would indeed show a consequent change in the quality of the settings where they mainly spent their leisure time.

By quality we mean the impact of an ecology in terms of opportunities for a specific issue in development. As a first approach to such qualitative differences of leisure environments we distinguished *private* homes from *public* settings such as discotheques, ice-skating rinks or pedestrian zones. The latter were conceived of as being more development-prone for partnership transition than the former. Based on earlier field observations and interview studies, public settings can be described as providing a variety of opportunities to share feelings and thoughts concerning partnerships with age-mates as well as to observe and try out actual approaches towards the other sex. This may not be true for every instance of public settings, but certainly holds up in comparison to private homes (that, certainly, may be more relevant at later stages of partnership development).

Method. Data on a sample of 349 adolescents (average age: 13 years) with complete data on three waves were used. In contrast to previous analyses discussed in this chapter, the dependent variable, too, was defined in terms of transition, that is, change in preferences for neutral and development-prone settings across time. Partnership transition refers to data collection in 1982 and 1983, context transition to 1983 and 1984.

In order to assess partnership transition, judgments of actual state and future-time perspective were dichotomized. This time, «no» (1) was coded as one alternative (-), and both scores 2 and 3 were coded as the other alternative (+). Aiming at the prediction of context choice, the transitional patterns were grouped according to two criteria, match of actual state and future perspective as result of

the transition, and level of partnership orientation. Three groups were distinguished: Adolescents who reported no intimate partnership at both points in time («*naives*», A, D, and E in Table 1) were juxtaposed to those who enjoyed an intimate partnership at least at the time of second measurement («*maturers*», F and I). A third group («*imbalanced*», B and H) was defined by adolescents who reported changes resulting in their future-time perspective at the end of the year being higher than actual state of development. As this may result from quite different friendship biographies (increase of future aspiration versus loss of partnership), this differentiation may not be advisable for future analyses addressing other target variables. In the present case, the third category was of particular theoretical importance, as changes towards a mismatch were expected to lead to changes of context. The restriction in the size of the sample did not allow to further differentiate.

Bearing these definitions in mind, the hypotheses can be summarized. Those with no experience of an intimate partnership at all were expected to show a preference for private homes. Adolescents who share the emergence of as yet unfulfilled wishes for other-sex friendships, however, should favor a consequent move from private to public settings deemed more prone for development in this issue. Finally, we thought that those being together with a boyfriend or girlfriend would prefer the public settings in their leisure.

Results. The data were organized as contingency tables, and analyzed using χ^2 -statistics. Results are shown in Table 3.

There were significant variations in the distribution of context transitions among the groups differing in partnership transition ($\chi^2=26.6, p<.001$). As the differences between observed and expected values show, this overall effect is especially due to four cells. More imbalanced subjects than expected by chance change preferences from private to public contexts. More adolescents of the naive group are among those who prefer private homes for their leisure time. Finally, while the maturer group is underrepresented in private settings,

TABLE 3

Contingency between 1982/83 Partnership Transition and 1983/84 Context Transition

Transition in Partnership 1982/83	Transition in Context 1983/84			
	H ^a → H	H → P	P → H	P → P
Naive ^b	46 ^e (33.6)	17 (22.7)	38 (34.5)	64 (74.2)
Imbalanced ^c	12 (13.0)	17 ^e (8.8)	11 (13.4)	24 (28.8)
Maturers ^d	13 ^e (24.4)	14 (16.5)	24 (25.1)	69 ^e (53.9)

$\chi^2 = 26.6, p < .001$

Note: ^aH = Private Homes, P = Public Contexts. ^bNo experience with intimate partnership ever. ^cFuture-time perspective higher than actual state at time 2. ^dIntimate partnership at time 2. ^eIndicates cells with significant contribution to overall χ^2 . Expected values given in parentheses. $n=349$ adolescents (average age: 13 years).

these adolescents are overrepresented at public places.

In order to analyze whether the expected pattern also holds up when considering shorter periods of time, Noack (1987) used data for 1983 and 1984 only, hence looking at concurrent instead of consequent effects between the transitions. In part the hypothesis could also be confirmed for the one-year interval with the naive group showing a clear dominance at private contexts and the maturers being underrepresented there. The imbalanced adolescents, however, did not show the assumed context change. They were even slightly underrepresented among those turning from private homes to public contexts, while the maturers did show this change more often than could be expected by chance. The results show that the time frame under scrutiny substantially matters. The concurrent analysis so-to-speak seems to tap the emergence of behavioral consequences resulting from changing orientations for development.

Some qualifications are necessary at this point. Interpretations concerning the direction of effects must remain speculative when considering data on concurrent changes. Thus, the experiences provided by a home context, for instance, could be responsible for the lack of interest in partnership. Secondly, it is particularly the young female adolescents who follow the tracks described above. With boys facing fewer restrictions concerning their geographical range of action than girls (Silbereisen & Noack, 1986), transitions in their orientation towards the other sex seem to influence their choice of leisure places to a lesser degree. And finally, it has to be kept in mind that the categorization of transitions used here only provides for a rough sketch of the postulated processes. More in-depth knowledge concerning the physical lay-out, rules, activities and topics of conversation at adolescents' leisure contexts could help determining their developmental potential which, in turn, would allow for more fine-grained distinctions. Thus,

more clarity could be reached as to whether the choice of leisure places figures as a behavioral aspect of regulative processes in the pursuit of developmental orientations.

5. CONCLUSION AND PROSPECT

Acknowledging the role of cultural expectations often addressed as developmental tasks as a reference point for changes taking place during adolescence, we tried to draw attention to young people's perceptions of their state of development and their future time perspective delineating goals for change. A series of studies was conducted in order to elucidate the association of these developmental orientations with adolescents' internal changes such as in self-esteem and friendship concepts, as well as on the choice of leisure places which was conceived of as an active attempt at self-regulation. In the following we will concentrate on intimate partnership only.

An emerging mismatch in developmental orientations concerning partnership is associated with characteristic change in self-esteem, friendship concepts, and choice of preferred leisure place. A case in point is the transitional group referred to as losers. Adolescents who reported a loss of a partnership while at the same time keeping up the goal of having a girlfriend or a boyfriend, showed a decrease of self-esteem as well as a devaluation of friendship concepts based on mutual understanding. In the year following the loss, they tended to seek out new contexts for spending their leisure time, namely public settings which offer presumably better opportunities to bring about a change of their partnership status. Changes of developmental orientations towards a match also show effects on the variables under scrutiny. This type of transition as exemplified by the group of gainers who manage to attain their goals results in an improved self-esteem. Similarly, the appreciation of mutual understanding as the basis of friendship shows as increasing trend. As could be expected with matching state and future perspective, adolescents do not show consequent shifts to new leisure settings.

Stable configurations of future perspective

and perceived state of affairs provide a more difficult case. Balanced constellations typically are paralleled by stable or increasing self-esteem. Imbalance seems to go along with slightly negative changes of self-esteem or no changes at all. With regard to context preferences again no changes were observed; the actual where of leisure, however, was dependent on the state of development.

How should we conceive in more detail the processes manifested in the association between adolescents' reported developmental status (absolute and signed goal distance, respectively), on the one hand, and the observed change in the target variables, on the other hand? Though it is obvious that one may have nearly as many answers to this question as there are theoretical models proposed in developmental psychology, referring to *coping approaches* (Lazarus & Launier, 1978) may be a fruitful heuristic. Following this perspective, development can be described in analogy to other (short-term) adaptations that aim at demands that cannot be resolved by routine responses but require a new level of psychological functioning (Olbrich, 1984). Seen in this vein, indicating the match between actual state and future-time perspective may be understood as a means to assess the demands adolescents have to face according to their own opinion. The transitional patterns could be characterized, then, as mirroring constancy and change in the demands across time. It is well known that studies on coping more often than not lack a precise definition of the strains and challenges to cope with. As already expressed by the term subjective, and as evident from the item formulation (see Appendix), the demands are put in evaluative terms and hence may come close to what is known as (primary) appraisal in ordinary coping research.

As usual with attempts to transfer concepts between domains of research, there is a risk of exaggerating the parallels. Letting this caveat aside for the moment, the analogy is helpful in gaining a better understanding of the present results. The fact that we found effects of a mismatch in the domain of intimate partnership on *change* in preferred leisure settings could be interpreted as a way of coping with the demands. We may speculate further that this

should be followed by a decrease in the mismatch and, in turn, would result in an increase of self-esteem and change in friendship concept. In other words, the match between actual state and future-time perspective is seen as both dependent and independent variable. However, the studies reported above basically focused on developmental status as an independent variable. Even though our interpretation took the possibility of bi-directional effects into consideration, this was not actually tested. Only a design capturing change in both developmental orientations and a given target variable across several points in time would allow to disentangle the assumed reciprocal effects. Given that the time-span between the waves of measurement were adequate for the pace of development in intimate partnership, our data provide the basis for the study of such processes.

The present data point to a differentiated pattern of consequences. An emergent discrepancy between future perspective and perceived state has a negative impact on self-esteem when taking place in the domain of intimate partnership, whereas similar change in orientations concerning occupational preparation, adolescents' self evaluation was observed to only slightly decline or even rise.

Analyses of the suggested type form part of our future-time perspective with the Berlin Youth Longitudinal Study.

REFERENCES

- Brandtstädter, J. (1984). Personal and social control over development: Some implications of an action perspective in life-span developmental psychology. In *Life-span development and behavior*, Vol. 6, (P.B. Baltes, & O.S. Brim Jr., Eds.), pp: 1-32, New York: Academic Press.
- Carver, C.S. & Scheier, M.F. (1982). Control theory: A useful conceptual framework for personality-social, clinical, and health psychology. *Psychological Bulletin*, 92: 11-133.
- Caspi, A. & Silbereisen, R.K. (1986, September). *Transition into dating, Costs and benefits of adolescent self-esteem*. Paper presented at the IInd European Conference on Developmental Psychology. Rome: Italy.
- Coleman, J.C. (1980). *The nature of adolescence*. London: Methuen.
- Crockett, L.J. & Petersen, A.C. (1987). Pubertal status and psychosocial development: Findings from the early adolescence study. In *Biological-psychosocial interactions in early adolescence: A life-span perspective* (R.M. Lerner & T.T. Foch, Eds.), pp: 173-188, Hillsdale, N.J.: Erlbaum.
- Dreher, E. & Dreher, M. (1984, August). *Developmental tasks in adolescence*. Paper presented at the Inaugural European Conference on Developmental Psychology. Groningen: the Netherlands.
- Dreher, E. & Dreher, M. (1984). Wahrnehmung und Bewältigung von Entwicklungsaufgaben im Jugendalters: Fragen, Ergebnisse und Hypothesen zum Konzept einer Entwicklungs- und Pädagogischen Psychologie des Jugendalters. In *Lebensbewältigung im Jugendalter* (R. Oerter, Ed.), pp: 30-61, Weinheim: Edition Psychologie.
- Eger, M. (1987, August). *Berufsvorbereitung und Selbstwertgefühl bei Jugendlichen: Untersuchungen im Längsschnitt*. Unpublished Diploma Thesis, Technical University of Berlin, Berlin.
- Eichhorn, D.H., Mussen, P.H. Clausen, J.A., Haan, N. Honzik, M.P. (1981). Overview. In *Present and past in middle life* (D.H. Eichhorn, J.A. Clausen, N. Haan, M.P. Honzik & P.H. Mussen, Eds.), pp: 411-434, New York: Academic Press.
- Erikson, E.H. (1968). *Identity, youth, and crisis*. New York: Norton.
- Featherman, D.L. & Peterson, T. (1986). Markers of aging: Modeling the clocks that time us. *Research in Aging*, 8: 339-365.
- Havighurst, R.J. (1952). *Developmental task and education* (2nd ed.). New York : Plenum Press.
- Heinz, W.R. (1985). Wertewandel oder Antizipation von Arbeitslosigkeit bei Jugendlichen. In *Individuelle und gesellschaftliche Kosten der Massenarbeitslosigkeit, Psychologische Theorie und Praxis* (T. Kieselbach & A. Wacker, Eds.), Weinheim: Beltz.
- Kaplan, H.B. (1980). *Deviant behavior in defense of self*. New York: Academic Press.
- Labouvis, E.W. (1986). The coping function of adolescent alcohol and drug use. In *Development as action in context: Problem behavior and normal youth development* (R.K. Silbereisen, K. Eyferth & G. Rudinger, Eds.), Berlin: Springer.
- Lazarus, R.S. & Launier, R. (1978). Stress-related transactions between person and environment. In *Perspectives in interactional psychology* (L. Pervin & M. Lewis, Eds.), New York: Plenum.
- Lerner, R.M. & Buch-Rossnagel, N.A. (1981) (Eds.). *Individuals as producers of their own development: A life-span perspective*. New York: Academic Press.

- Little, B.R. (1983). Personal projects: A rationale and method for investigation. *Environment and Behavior*, 15: 273-309.
- Luck, H. (1987). *Freundschaft und Freundschaftskonzept von Jugendlichen*. Unpublished Diploma Thesis, Technical University of Berlin. Berlin.
- Magnusson, D. (1985). Implications of an interactional paradigm for research on human development. *International Journal of Behavioral Development*, 8: 115-137.
- Marini, M. (1984). Age and sequencing norms in the transition to adulthood. *Social Forces*, 61: 229-244.
- Noack, P. (1987). *Jugendentwicklung im Kontext. Zum aktiven Umgang mit sozialen Entwicklungsaufgaben in der Freizeit*. Unpublished Doctoral Thesis, Technical University of Berlin.
- Noack, P., Muchowski, E. & Silbereisen, R.K. (1987). Zur Strukturierung von Entwicklungsaufgaben aus der oerspektive von Jugendlichen. In *Berichte aus der Arbeitsgruppe Tüdro Judgendforschung, 94* (R.K. Silbereisen & K. Eyferth, Eds.), Berlin: Technical University of Berlin.
- Nurmi, J.E. (1987). *Developmental tasks and adolescents' future orientation*. Paper presented at the IXth Biennial Meetings of the International Society for the Study of Behavioral Development. Tokyo, Japan.
- Oerter, R. (1986). Developmental tasks through the life-span: A new approach to an old concept. In *Life-span development and behavior*, Vol. 7, (D.L. Featherman & R.M. Lerner, Eds.), pp: 233-271, New York: Academic Press.
- Oerter, R. (1984). Die Anpassung von Jugendlichen an die Struktur von Arbeit und Beruf. *Unterrichtswissenschaft*, 12: 127-147.
- Olbrich, E. (1984). Jugendalter — Zeit der Krise oder der produktiven Anpassung? In *Probleme des Jugendalters* (E. Olbrich & E. Todt, Eds.), Berlin: Springer.
- O'Malley, P.M. & Bachman, J.G. (1983). Self-esteem: Change and stability between ages 13 and 23. *Developmental Psychology*, 19: 257-268.
- Petersen, A.J. (1988, in press). Adolescent development. *Annual Review of Psychology*, 39.
- Selman, R.L. (1980). *The growth of interpersonal understanding*. New York: Academic Press.
- Silbereisen, R.K. & Eyferth, K. (1986). Development as action in context. In *Development as actions in context: Problem behavior and normal youth development* (R.K. Silbereisen, K. Eyferth & G. Rudinger, Eds.), pp: 87-108, Berlin: Springer.
- Silbereisen, R.K. & Kastner, P. (1987). Jugend und Problemverhalten: Entwicklungspsychologische Perspektiven. In *Entwicklungspsychologie* (R. Oerter & L. Montada, Eds.), pp: 882-919, München: Psychologie Verlags Union.
- Silbereisen, R.K. & Noack, P. (1987). Adolescence and environment. In *Ethnoscapes: Transcultural studies in action and place* (D. Canter, M. Krampen & D. Stea, Eds.), Guilford: Gower.
- Silbereisen, R.K. & Noack, P. (1988, in press). On the constructive role of problem behavior in adolescence. In *Person and context: Developmental processes* (N. Bolger, A. Caspi, G. Downey & M. Moorehouse, Eds.), Cambridge, Mass.: Cambridge University Press.
- Silbereisen, R.K. & Reitzle, M. (1987). *On the constructive role of problem behavior in adolescence: Further evidence on Alcohol use*. Paper presented at the IXth Biennial Meetings of the International Society for the Study of Behavioral Development. Tokyo, Japan.
- Silbereisen, R.K., Reitzle, M. & Zank, S. (1986). Stability and change of self-concept in adolescence: Self-Knowledge and self-strategies. In *Human memory and cognitive capabilities; Mechanisms and performances, Symposium in memoriam Hermann Ebbinghaus. Berlin, Humboldt University* (F. Klix & H. Hagendorf, Eds.), Amsterdam: North Holland.
- Thomae, H. (1968). *Das Individuum und seine Welt*. Göttingen: Hogrefe.
- Walper, B. & Silbereisen, R.K. (1987). *Personal and contextual risk factors in coping with economic hardship*. Paper presented at the IXth Biennial meetings of the International Society for the Study of Behavioral Development. Tokyo, Japan.
- Werner, E.E. & Smith, R.S. (1982). *Vulnerable but invincible: A study of resilient children*. New York: McGraw-Hill.
- Youniss, J. (1980). *Parents and peers in social development: A Sullivan-Piaget perspective*. Chicago: University of Chicago Press.

APPENDIX

Response Categories for State and Future-Time Perspective in Occupational preparation and Intimate relationship

Occupational Preparation

Future-time perspective:

Would you like to start getting prepared for your occupation in the near future.

That's not important to me right now. (1)

That's basically important but not right now. (2)

I'd like to be well prepared very soon. (3)

Actual State:

Are you already well prepared for your future occupation?

Not yet. (1)

I'm starting to think about it now. (2)

I'm already well prepared. (3)

Intimate Partnership

Future-Time Perspective:

Would you like to meet someone in the near future to fall in love with?

I don't care much about boyfriends. (1)

It's true I'd like to have a boyfriend but that's not that important now. (2)

I really would like to have a boyfriend who I'm in love with. (3)

Actual State:

Do you have a boyfriend you are in love with?

Not at this time. (1)

I'm in love. I'm sure he'll be my new boyfriend because we have already gone out a few time together. (2)

I've had a boy friend for a long time now. We are in love with each other. (3)