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Research on Deafness and Higher Education: Discussion Based on an Overview of Research

By: Berth Danermark¹

Abstract

The research conducted mainly by researchers at NTID has contributed in an important and valuable way to our understanding of the problems involved in this issue. However, about 90 percent of hearing-impaired students are attending institutions outside Gallaudet or NTID. What is needed is knowledge about the conditions for the deaf and hard-of-hearing students in mainstreamed colleges and universities. From what is known about the changes regarding labor market, demography, and educational system the lack of knowledge about deaf and hard-of-hearing students in this setting seems serious. The research task should be to find the social mechanisms that underlie the educational process in terms of integration and attrition. The mechanisms in motion could be found if we focus on the "Deaf World" and the "Hearing World" and the "Educational Community."

Introduction

The following discussion is based on an overview of research on persistence or withdrawal and academic and social integration of hearing-impaired students in postsecondary education.¹ In the overview it was concluded that the model presented by Tinto (1987) and remodeled in order to fit the population was a fruitful point of

departure. In this paper I will further discuss the model and point to some issues which could be further developed regarding studies on withdrawal or persistence. Concerning the research about academic and social integration, I stress the importance of indepth studies of the process, whereby the educational community is 'invaded' by the deaf world and the hearing world. In doing so the research has to be more theory-based than what seems to be the case today. I give some examples of theoretical point of departure for future studies addressing these issues. However, the paper starts with some methodological comments regarding the research outlined in the previous paper.

Some Methodological Comments²

Here I distinguish between immanent and transcendent comments. The first refers to questions like selection of respondents and non-response rate, while the latter refers to more fundamental questions about epistemological and methodological aspects on the research.

Which is the empirical base for the findings? Of the 27 studies reviewed by Daanermark only five studies have sampled informants outside NTID or Gallaudet. The first is a study on loneliness, and it does not directly address the

question of withdrawal or integration (Murphy and Newlon, 1987). The second is a study of mainstreamed students at seven different colleges in the US. As mentioned above, due to the heterogeneity of the findings, it is difficult to generalize from these findings (Franklin, 1988). The third study included 60 students with a wide range of hearing loss. Sixteen of them were considered deaf and the others hard-of-hearing (English, 1993). The fourth study was directed towards programs throughout the country (Schroedel and Watson, 1991), and the fifth was a study of 33 mainstreamed students (Menchel, 1995).³ Accordingly, not much could be said about the situation for hearing-impaired students outside the specific setting which these two institutions represents.⁴

Another aspect of the question of empirical base is related to the choice of group of respondents. For instance, in the studies by Stinson, et al. (1987, 1992, 1995) the respondents were leavers after the first academic year. To draw conclusions from this study regarding the majority of withdrawers (those who do not fulfill the first year) seems hazardous.

The second comment concerns the sampling procedure. In the quantitative oriented studies the sampling procedure is in no case a random/stratified sampling or is it in any other way based on quantitative

method theory. Often the sample consists of students at hand, e.g. volunteers. There exists a risk of a substantial selection bias. However, this constitutes a huge problem, due to the distribution of hearing-impaired students. For instance, doing research among mainstreamed hearing-impaired students using quantitative methods raises the problem with sampling procedure, since the students are scattered all over the 3,000 universities in the US, with an average of about four students at each university. There is no central register from which a sample could be drawn.

The question of selection of informants in qualitative studies differs from selecting in quantitative studies. There are several models for choosing the informants, depending on the purpose of the study and the qualitative technique applied. In these studies many different ways were used to contact respondents.⁵ In general not much is said about the informants (characteristics, etc.), why they were selected in the way they were, and the impact on the conclusions which could be drawn from the study due to the characteristics of the population.

The non-response rate in many of the studies is substantial. However, only in one of the studies is there an effort to test the validity in the sample (MacLeod and Welsh, 1982). When the non-response rate is about 40 to 50 percent (which is not unusual), and taken together with the selection bias, one must be very cautious when drawing conclusions to a larger population than that studied.⁶

It is also worth mentioning that it is very rare that facts about the degree of hearing loss and the age of onset are presented. As a matter of fact, only in one study is this reported in more detail (Menchel, 1995). Since most of the studies are carried out with NTID or Gallaudet

students as respondents, we know for sure that the loss is 70 dB in the better ear, however some exemptions exists.

The transcendent comment takes its point of departure in the discussion of the limitations of an epistemology and methodology. Causal relations are seen as empirical regularities and studied through quasi-experimental analysis of empirical correlations. The causal analysis is geared to identifying the circumstances or events that affect quantitative occurrence. The view of causality as empirical regularities has rendered much criticism. The core of this criticism is that the objects of social science are of such a nature as to make seeking law-like regularities and predictions neither meaningful nor indeed feasible. This criticism has come first and foremost from hermeneutic interpretative scholars like Blumer (1969) and (critical) realists as e.g. Keat and Urry (1975), but during the last decade also from scholars inspired by postmodernism. In the concluding section of this paper I will further address this question.

Some Theoretical Comments

Tinto's model has engendered much attention among the researcher investigating the situation for hearing-impaired students in postsecondary educational settings. The model is developed with hearing students in mind. Therefore the model has to be modified to fit the population in focus here (see Barnhart, 1991, and Stinson and Walter, 1995).

In this context it could be feasible to interpret the model as a model of a decision making process. In such a perspective two important dimensions occur; first, the decision is influenced by both internal and external forces. As already mentioned, the model has been

criticized as not paying attention enough to external factors. Although Tinto addresses this issue, he does not focus on these factors. The model includes an external input and is discussed by Tinto as a factor influencing the student's goal and institutional commitments over time. Here we can point to at least three important external factors: one political, one economic, and one demographic. The first, and in this context perhaps the most important, is the legislation (The Education for All Handicapped Children, PL 94-142 and Section 504 of the Rehabilitation Act of 1973, P.L. 93-112) and the following increase of college and career programs for deaf students. The second important external factor is the restoring of the economy, resulting in a changing labor market. If the traditional labor market for non-academically educated people is shrinking, the impetus to getting higher education increases. It is plausible to assume that this factor will have an impact on the students' intentions, goals and commitments regarding higher education. This could be of special relevance when studying deaf students and their decision whether to enter or not and to stay or leave a university, since they are vulnerable to the current changes in the labor market. The third external factor of importance is the diminishing number of "available" students. This leads to a growing competition between colleges and universities, and as a consequence the institutions are paying more attention to attrition and are trying to improve the educational settings in different ways.

Second, since the outcome in the model is a decision to depart or not, I here argue that it is important to differentiate between voluntary and forced departure. In fact, Stinson and Walter (1987, 1992) discuss whether

persistence/withdrawal includes voluntary withdrawal as well as academic dismissal. However, they do this in a discussion of the lack of correlation between grades and withdrawal in their first study. They stress that there may be a bimodal distribution in the academic skills of withdrawing students due to the fact that some withdraw voluntarily and some do not. This is an important, but in the research reported here, often overlooked factor. This is surprising because Tinto pays much attention to the different outcomes when he criticizes the misuse of the concept "dropout." The departure decision comes about for many reasons. Often it has nothing to do with academic failure or dissatisfaction with the educational environment. Tinto (1987) writes "But leavers often do not think of themselves as failures. Many see their actions as quite positive steps toward goal fulfillment" (p. 3). It is also important to distinguish between

transfer, temporary leave, and permanent leave. From an administrative and management perspective all types of withdrawal are serious in a competitive environment, but from a student perspective only the forced temporary or, in some cases, permanent leave are grave.

The voluntary/involuntary dimension can be seen as a continuum, where the most forced decision is suspension and the most voluntary is the decision to take a break or leave college (in spite of the fact that there is no dissatisfaction), just because other options are more attractive. In most cases the withdrawal is a result of an individual's conscious decision. However, sometimes the decision could be characterized as forced, i.e., the cases when a student prefers to stay but has to leave for different reasons.

The distinction between internal/external forces can be applied to both voluntary/forced

withdrawal. Consequently, a four-field table results (Table 1). The table should be seen as a theoretical tool to distinguish between different types of withdrawals. Empirically, it could be difficult to separate the types of withdrawals since the decision, forced or not, is an outcome of an interplay among many factors. However, I argue that in most cases it is possible to find the most important factors, which makes it possible to categorize them according to this scheme.

Cells number 1 and 2 consist of students who decide to withdraw mainly because of pull factors, i.e., there are forces in motion outside the university which draw the student away from that particular university. Factors indicated in cell number two are, according to Tinto (1987), not as usual as many believe, at least not among hearing students. But one study (Schroedel and Watson, 1991) reported in the overview indicates financial problem as a major reason for leaving.

Table 1

Reasons deaf students leave college

	Voluntary Decision	Forced Decision
External forces (pull)	1 Other options more attractive, e.g., get a job Uncertainty of intentions Transfer to another college/university	2 Economical problems Parents sick
Internal forces (push)	3 Dissatisfied with the college Transfer to another college/university	4 Academic problems Social problem Forced to choose a major

If there exists a mismatch between the student's needs, interests, and preferences and the educational settings, the student might withdraw voluntarily. These cases are found in cell number 3. These factors, here called push factors, indicating that they are in general factors which push the student away from the university, could have their roots in both the academic system and/or the individual. For instance, a student does not find the academic life challenging enough.

Cell number 4 includes those students who have to leave because of dismissal. It also includes those who find themselves facing extensive social problems, such as isolation, or maybe worse, bullying. I have also indicated "Forced to choose a major" as an important push factor. Those students who are uncertain about their intentions, i.e., not sure about their goals, and wish a flexible system allowing them to stay without being forced to choose a major too early, are to be found in cell number 4. At some universities or colleges students are often forced to choose a major after only a few weeks. This is not a problem for mature and goal oriented students. However, for many students higher education is a way of maturing and finding their way to an adult life. This process is thoroughly discussed in the research about higher education (see e.g. Tinto, 1987). Studies in this overview suggest that to force students to choose a major before they know what to choose many times results in withdrawal. But, one has to note that these students often do not recognize the outcome of the decision (regarding withdrawal or not) as forced. They often see it as voluntary. They consider it their decision, but here I categorize these withdrawals as forced if the students would have preferred to stay but could not

because of an inflexible academic system.

The rationale and decision process behind each of the four cells are different and have to be treated as four different outcomes. What do we know about the distribution of withdrawals among the hearing-impaired regarding the four cells? The question is important because each cell requires its own set of interventions. As already touched upon above, some studies in this overview indicate that the decision is often voluntary and due to career reasons, e.g., related to goals and commitments. In these cases other priorities might be effective in programming increased persistence than if the main reasons are related to social and academic difficulties, which other studies suggest.

Finally, I would like to point to an important factor in Tinto's model which does not seem to have been targeted explicitly in any of the studies I have come across. If we shift focus a little and do not stress the *outcome* in terms of withdrawal or not, i.e., the decision making process, and focus on *socialization* into an educational setting, the question of integration comes to the fore. The shift of focus results also in emphasizing different types of interventions than if the outcome is the focus. Regarding deaf students, the focus will shift from support service to cultural access, i.e., how deaf students get access to the deaf culture at campus, internal cultural conflict, and external cultural conflict (Humphries, 1987).⁷ Participating is an important aspect of integration, but just one dimension.⁸

Being integrated into something is an interactive process described in the framework set up by Mead in his theory of Symbolic Interactionism. It is first and foremost a question of sharing the same norms and values, being members of the same community. Tinto (1987) describes

this in terms of 'social and intellectual membership in the academic and social communities of the college...' (p. 119). At issue here is a process of commitment and obligation, not of the self but to an educational community. Pascarella and Terenzini (1991) list a number of important values and norms involved in the academic environment: (i) cultural, aesthetic and intellectual, (ii) educational and occupational, (iii) gender role, and (iv) social and political.

This educational community is 'infiltrated' by two other cultures: one embraced by a hearing community and the other by a deaf community. Culture could be seen as what a group of people have learned and share, their universe of symbols and meanings which constitute their guide to action (Therborn, 1994). It is important to stress that for many deaf students it is not only a process of being integrated into an educational community, but also socialization into a deaf culture. This means that many deaf students face a double process of socialization when arriving at college.⁹ In their more hermeneutic oriented studies researchers like Foster, DeCaro, and Barnhart address this question. What seems crucial here is to further investigate the degree to which these two cultures (the deaf and the hearing) have shared norms and values *within* and *between* the two. Their integration into a shared educational community depends upon the possibility of creating bridges between the two cultures. A fruitful way to further develop this line of research, and according to my view one of the most important aspects for deeper knowledge in this field, is to turn to Heidegger and Habermas.¹⁰

The cultural communities dealt with here could be seen as Heidegger's discussion of "world."

From this perspective it is interesting to note that among deaf person the two communities are usually referred to as "Deaf World" and "Hearing World." The "world" can exist only on the basis of the accessibility of meaning. Scott (1994) writes "(n)ow community in any substantial sense must be 'worlded.' It must be rooted in shared meanings and background practices. These practices have purpose, have their own specific 'telos.' These practices involve other human beings. They also involve things ... that is, tools, 'gear', including language and informational tools" (p. 149). The ability to communicate is essential for developing successfully a common collective practice.¹¹ This is the focus of much of Habermas' writings. Taking Heidegger's discussion about the "world" as a point of departure, we can move further to Habermas and his claim that meaning cannot be separated from validity and see Habermas' contribution in terms of his "validity claims," which in turn make a learning process possible. I am convinced that we can get much better insight into the problems addressed here by making use of Habermas' discussion about the communicative practice of everyday life. Following the line of research suggested here the crucial nature of communication and language becomes obvious. According to Habermas (1990) languages serve three functions: (i) that of reproducing culture and keeping traditions alive, (ii) that of social integration or the coordination of the plans of different actors in social interaction, and (iii) that of socialization of the cultural interpretation of needs. Therefore, communication and hence language will be an object for research, i.e., how do people communicate, which linguistic concepts are available to them and so on.¹² At the same time,

doing research aimed at understanding the actor's actions means that factors such as the agent's beliefs, values, attitudes, and desires must be addressed. Since we are dealing with agents among whom there are modes of communication other than the spoken language, we have to be very aware.

Before turning to the concluding remarks I would like to come back to the issue raised above regarding the transcendent criticism; that about causality. The approach briefly outlined in this paper seems to stress the hermeneutic aspects, i.e. an interpretative understanding of subjective meaning and exclude an explanatory and causal approach. This is not the case. I strongly support the view that both explanation *and* understanding of social action are desirable and possible (see e.g., Keat and Urry, 1975). I am not going to discuss the methodological implication of this view (there is a growing literature trying to apply this way of thinking in methodological practices see, e.g., Sayer, 1992; Layder, 1994). Instead, my aim here is to very briefly give some ontological and epistemological rationale for my position.

I argue that the 'critical realism' developed by Bhaskar (1978, 1994) provides the philosophical ground for this view. In short, Bhaskar says that causal analysis is geared to uncovering the abstract properties that constitute social relations and structures, properties that act as causal mechanisms and contribute to the production of concrete events, patterns, and processes of reality. These properties or causal powers are abstract in the sense that they exist relatively independently of specific temporal and spatial context. This implies that the causal-explanatory methodology is 'abstraction.' By this is meant the epistemic process whereby we attempt to look behind the contingent and contextual order

to discover the essential, the absolute, the constitutive properties and structures. Since Bhaskar also emphasizes that 'desire' is an important causal factor, we also have to embrace an interpretative approach. The concept of 'desire' is closely connected to needs, wishes, norms, and values. This means that the concept of meaning becomes an object for causal research. It is not possible to grasp the agent's desire if we do not know the meaning of social action given by the actors (for a discussion, see Ekström, 1992 and Danermark and Ekström, 1995).

In other words, the research task is to find the social mechanisms that underlie the educational process in terms of integration and attrition. If students withdraw, we have to explain why. To do so we have to ask them about their 'desires,' to examine their beliefs, values, purposes, emotions, and so on since these partly determine the action. I have indicated above that the mechanisms in motion could be found if we focus on the "Deaf World" and the "Hearing World" and the "Educational Community." Thereby we have to focus on communication and language. Research can deepen our knowledge about these abstract mechanisms, but it cannot state how these mechanisms attain expression in the specific case. This can only be done by individuals who have knowledge of the concrete circumstances and the histories of the people affected. However, to develop this line of thought further is beyond the scope of the theme of this paper.

Concluding Remarks

By way of concluding I will stress at three factors: first, the importance of the previous research; second, the lack of accurate knowledge in this field; and third, suggestions for directions for future research.

The research conducted mainly by researchers at NTID has contributed in an important and valuable way to our understanding of the problems involved in this issue. Theoretical models like Tinto's model and the Ecological model mentioned in the earlier paper (Danermark, 1995) are of great importance for future research in this field. In short, taking into account that this was more or less an open field in the late 1970s, the theoretical, analytical, and methodological contributions are of significant value. It is interesting to look at the time and space dimension of the research. The research in this field had its peak during the late 1980s. Of the studies in this overview, almost two-thirds were published in the late 1980s (1987-89). Seven studies have so far been published during the 1990s, and among them three come from NTID. One reason for this decline could be that the NTID based research seems to have shifted foci. That the researchers at NTID choose to focus on other aspects seems rational, as it does not seem fruitful to repeat the studies they conducted during the 1980s, due to the contextual factors mentioned above.

As has been clearly demonstrated here, much of the research in this field has been done at NTID and to some extent at Gallaudet. The context at these two institutions is very specific. At the moment there are about 22,500 students characterized as deaf or hard of hearing enrolled at two-year and four-year postsecondary educational institutions (National Center for Educational Statistics, 1994). About 90 percent of them are attending institutions outside Gallaudet or NTID. What is needed is knowledge about the conditions for the 90 percent of the deaf and hard-of-hearing students in mainstreamed colleges and universities. With a few

exceptions this field of research does not seem to have attracted researchers. None of these studies give a more general overview of the state of affairs. They all focus on specific strata or questions, e.g., successful deaf students (Menchel, 1995) or support services (English, 1993). From what we know about the changes in society in general and especially regarding legislation, labor market, demography, and educational system over the last decades this is surprising. In a transformed society where access to the information and communication structures becomes fundamental, the losers will be those who do not have access to these structures. In this perspective it is more important than ever that deaf and hard-of-hearing people graduate from colleges and universities. Regarding the changes in labor market a plausible consequence is an increasing need for deaf and hard-of-hearing people to graduate since their traditional segments of the labor market are shrinking. Regarding the educational system the number of deaf and hard-of-hearing students is decreasing. Between 1984 and 1994 the decrease amounted to 26% (Allen, 1994).

The structure of the secondary education is also changing. Less and less hearing-impaired are attending high schools for deaf and attend local educational programs. With the experiences gained from mainstreaming in high school in combination with a changing labor market the number of deaf students attending mainstreamed programs or regular classes in ordinary colleges and universities is likely to increase.¹³ Therefore, the lack of knowledge about deaf and hard-of-hearing students in this setting seems serious. Saying this is not to underestimate the tacit knowledge existing at colleges and universities, but the lack of systematic investigation in the field is a shortcoming.

The research has demonstrated the potential of Tinto's theoretical model and could provide a useful point of departure for future research. However, in order to develop our knowledge about the issue at stake, I see doing 'more of the same' as a dead end. Instead, I see the potentiality of developing both a hermeneutic line of research and a causal approach, both indicated above. In doing so, much valuable insight could be gained from the research discussed here. The suggestions for direction of research raise an important question: can social science provide administrators and manager of colleges and universities with knowledge relevant to action? Most often there is an overestimation of the practical applicability of the research results. We have to realize that the field is very open and the research has just begun. Production of knowledge is a long-term activity. A conclusion from what I stressed above is that perhaps the most useful knowledge for administrators and others involved is knowledge about the fundamental mechanisms and not the knowledge of statistical correlation; the generalizability is both unsure and unknown. However, this puts some pressure on the administrators to understand and to be able to take into account how these mechanisms are manifested in a specific circumstance.

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Notes

¹See Danermark (1995).

²For elucidation, most of the comments made in this section should not be mixed up with criticism. Most of the studies are very well done and my comments are more related to the research context.

³Since I have excluded studies older than 15 years, I do not discuss the studies conducted in the 60s by e.g. Bigman (1961), Breunig (1965) and Quigley, Jenne and Philips (1968). For a presentation of these studies see Menchel (1993).

⁴Stinson and Walter (forthcoming) address this question discussing evidence from small programs for Tinto's model. Drawing on e.g. English (1993) they find indications that results many times are in accordance with findings from NTID.

⁵For example, announcements and randomly selected names from a list of deaf students.

⁶The non-response rate is seldom commented on and in many studies not much is said about the non-respondents. See e.g. Franklin (1988) who reports that 412 hearing-impaired students attended the colleges includes in his study. The number of respondents is 246. Nothing is said about the difference.

⁷This shift should not be interpreted as support service not being important. Still, it is sometimes not enough (see e.g., Humphries, 1987:43).

⁸Although anticipation is a complex issue regarding hearing-impaired students, no studies reported here further investigate type of activity in relation to mode of communication, e.g., individual athletic activities are more accessible for deaf students than team activities. However, this influences the level of interaction: practicing an individual activity (like swimming) or participating in a collective activity (like baseball).

⁹This presupposes that there exists a "critical mass" of deaf students at the college.

¹⁰Referring to both Heidegger and Habermas does not mean that I overlook the fundamental criticism by Habermas regarding Heidegger's 'ontological difference' between Being and beings.

¹¹The importance of this aspect is underlined by the result of this overview. As has been noted, a communication problem is a severe obstacle for integration. Integration has to do with the core issue here; belonging to a community and is therefore of special relevance and importance in this field of research and has to be further addressed.

¹²Much research has been done focusing on deafness and communication. However, studies focusing on communication per se from the perspective outlined here, i.e., post secondary education are rare. Among the few is Foster, Barefoot, and DeCaro (1989).

¹³It is difficult to forecast. This trend could be counteracted by the shrinking deaf student population.