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FRACASSO ESCOLAR: ATRIBUIÇÕES CAUSAIS, CONCEPÇÕES PESSOAIS DE INTELIGÊNCIA E PERCEPÇÃO DO FEEDBACK, QUE RELAÇÃO?[1]

ACADEMIC FAILURE: CAUSAL ATTRIBUTIONS, PERSONAL CONCEPTIONS OF INTELLIGENCE, AND PERCEPTION OF FEEDBACK MESSAGES, WHAT RELATIONSHIP?

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RESUMEN

En este contexto, nuestro objetivo fue estudiar las relaciones existentes entre las atribuciones de causalidad, las concepciones personales de la inteligencia y la percepción de la información dada por los mensajes de los padres y los profesores en situaciones de fracaso escolar.

Los sujetos fueron 520 estudiantes del 5 al 9 º grado y la escuela secundaria del sistema educativo portugués, de 6 distritos de Portugal. Hemos creado los instrumentos para recoger datos relativos a la atribución causal de fracaso escolar y las percepciones de los mensajes de información dada por padres y maestros; personal concepciones de la inteligencia se evaluaron a través de El Personal Concepciones de la Escala de Inteligencia (Faria, 2001).

Uno podría concluir de los resultados actuales que existe un vínculo causal entre las atribuciones de fracaso escolar frente a la capacidad de esfuerzo, y de las entidades teoría de la inteligencia frente a la teoría incremental de la inteligencia. Los estudiantes que tienen más incremento de teorías vs los que tienen más entidad teorías recibir más estrategia orientada a la información y menos orientada hacia la persona de votos frente a la persona más orientado a la información y menos estrategia orientada a la información.

Palabras clave: fracaso escolar, las atribuciones causales a fracaso escolar, la percepción

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de mensajes de información de los padres y los profesores, personal concepciones de la inteligencia.

ABSTRACT

In a time in which people try more and more to prevent situations of academic failure, it becomes pertinent to study motivational, cognitive and social features capable of influencing academic achievement. In such a context, it was our goal to study the existing relationships among causal attributions, personal conceptions of intelligence and the perceptions of the feedback messages given by parents and teachers in situations of academic failure.

The subjects were 520 students attending school from 5th to 9th grade and high school of the Portuguese educational system, from 6 districts in Portugal. We built up the instruments to collect data concerning the causal attributions for academic failure and the perceptions of the feedback messages given by parents and teachers; personal conceptions of intelligence were assessed through The Personal Conceptions of Intelligence Scale (Faria, 2001).

One might conclude from the present results that there is a link between causal attributions for school failure to ability vs. to effort, and entity theory of intelligence vs. incremental theory of intelligence. Students having more incremental theories vs. those having more entity theories receive more strategy-oriented feedback and less person-oriented feedback vs. more person-oriented feedback and less strategy-oriented feedback.

KEY-WORDS: Academic failure, causal attributions to academic failure, perception of feedback messages from parents and teachers, personal conceptions of intelligence.

INTRODUCTION

Causal attributions have an important role in educational settings, since the type of causes the students use to explain their outcomes has important cognitive, motivational, emotional and behavioural consequences, determining future academic achievement (Weiner, 1980, 1986). This impact seems to be especially significant when someone has to explain the cause of an academic failure, that is, when we make causal attributions for failure (Dweck, 2002; McFarland & Ross, 1982; Weiner, 1986). These causal attributions have their origins in subjects' beliefs (Dweck & Elliot, 1983) and information they receive from others (Foote, 1999), so when causal attributions have harmful consequences the only way to change them seems to be by intervening on these beliefs and information. Our investigation aims to observe the relation between all these variables. Hence, to begin with, we have carried out a revision of the relevant theories and empirical research in the areas of academic failure, motivational constructs, causal attributions, personal conceptions of intelligence, and social feedback.

Today knowledge and success are taken as essential and compulsory to survive in the technological jungle of our societies. No one accepts failure with a smile, since we now live in very competitive settings. This competition is fuelled mainly by knowledge and information. Serrano and Fialho (2003) believe that today we are living in the "knowledge era", where the core economic resource of our countries, organizations and individuals is information and knowledge itself. Education has, therefore, assumed an imperative role, since it is the system where knowledge is most valorised and individuals have the opportunity to access to it. As a result, theories regarding an explanation for academic failure have become the main interest of many investigations (Abreu et al., 1983). Among the several explanations

hypothesized are the motivational constructs and belief-systems that are thought to lead students' actions, namely causal attributions, personal conceptions of intelligence or beliefs about the nature of ability, and social feedback they receive from important figures such as parents and teachers.

Motivational constructs such as causal attributions and personal conceptions of intelligence are part of the great extent of variables that are the subject of study of Personal Control Psychology. These constructs of psychological control are linked to the academic achievement of students, that is, the perception individuals have about their control over a certain situation will influence their final actions. The old vision of the machine man that conducted his actions propelled by needs or stimulus (behaviourist theories) was gradually replaced, in the field of personality and motivation, by a Godlike man that is a thinker, a judge and has some control over the situations (cognitive theories) (Weiner, 1991). Between stimulus and action it is now considered an internal variable (or cognition) that comprises these motivational constructs. Bandura (1986) believes that cognitions people hold about themselves are key-elements for the exercise of control, determining contexts and behaviours. Pina Neves and Faria (2003) also recognize an important role of these cognitions on educational settings and on students' achievement, influencing the initiation, orientation and finalization of their actions.

Causal attribution is one of those cognitive constructs and answers to the question "why did this happen?". The way people answer the "why?" question will carry strong implications for the individual future behaviour and motivation (Faria & Fontaine, 1995). These causal attributions are an internal or phenomenological event, that is, people can make very different attributions concerning the same situation - "truth, like beauty, lies in the eyes of the beholder" (Weiner, 1986, p.2). However, Weiner (1986) states that not always we look for explanations for all situations; causal attributions are more common to come out when we try to explain an unexpected, atypical and negative event. Thus, academic settings linked with failure are expected to be a very productive context for the development of causal attributions. Weiner (1980, 1986, 1988) introduced the attribution theory in academic and achievement settings with the aim of studying the explanations that people gave for success or failure in these situations. The way individuals deal with academic success or failure, and the way they explain its causes, will have important influence on motivation and future achievement situations (Weiner, 1985). Causal attributions can be classified into three main bipolar causal dimensions (locus of causality: internal or external cause; stability: stable or unstable cause; and controllability: controllable or uncontrollable cause) that will lead to different cognitive, emotional and behavioural consequences (Weiner, 1980, 1986). In literature three major consequences of causal attributions in achievement situations are considered: consequences on future expectations of success, emotions and effort. For instance, a student that makes a causal attribution of failure to ability will take his failure as something internal to him, stable and that he can not control, which will imply negative beliefs and feelings (the student will have lower future expectations of success and experience low control over the situations), and behavioural changes (the student will lack persistence, quit or avoid some tasks more easily, and have lower achievement). Investigators have found that individuals seem to make use of one main attribution style that they employ across situations (Matos & Serra, 1990; Morán, Barca & Muñoz, 2006). These attribution styles can bring a positive effect or a negative debilitating effect (Morán, Barca & Muñoz, 2006). One can consider and describe two major attribution styles in academic failure situations (Fontaine, 1990; Morán, Barca & Muñoz, 2006; Short & Weissberg-Benchell, 1989):

1) Students that do not get discouraged by a failure situation, and make external, instable and/or controllable causal attributions (difficulty of task, luck, illness) or controllable internal attributions (effort);

2) Students that show extreme sensibility to academic failure situations, and make internal but uncontrollable causal attributions (ability); this will imply low expectations of success, less instrumental behaviours and persistence during the achievement tasks, not engaging in threatening achievement situations, and, consequently, lower achievement results.

These attribution styles are similar to Dweck's and col. (Dweck & Elliott, 1983) achievement orientations. Dweck holds that causal attributions can be better understood referring to implicit theories that people hold. These theories are believed to be the antecedents of causal attributions.

Dweck and col. (Dweck & Elliott, 1983; Dweck & Leggett, 1988) hold that each of us has previous theories and beliefs to achievement situations which will determine different explanations and goals. People possess distinct personal conceptions about the nature of intelligence (entity versus incremental theories of intelligence), which will determine different achievement goals and orientations, and, as a result, different causal attributions. An individual holds an incremental theory of intelligence when he believes that intelligence is a dynamic set of knowledge open to development and modification through effort and personal investment. On the other hand, an individual that views intelligence as a stable and global trait, a concrete and limited in quantity entity, impossible to change or control, holds an entity theory of intelligence. In a study that aimed to integrate Dweck's theory and the attribution theory, Hong, Chiu, Dweck, Lin and Wan (1999) found that students that hold incremental theories of intelligence make more causal attributions for their failures to effort than entity theorists. In another investigation, Robins and Pals (2002) noticed a relation between entity theories of intelligence and causal attributions to ability. Butler (2000) has also found that entity theorists make more causal attributions to luck. Dweck (1990, 1999) presents the incremental theory of intelligence as the most constructive and positive for individuals, since the entity theory has proved to be less encouraging for learning and persistence. However, Faria (1998) regards entity theories of intelligence as also important in some settings, namely those that require immediate results; nevertheless, the author considers that individuals holding entity theories show greater vulnerability on failure situations. That is, entity theorists are found to be more often linked with withdrawal behaviours, low perseverance in the presence of difficulties, negative cognitions and affects, causal attributions to lack of ability, academic failure, grade retention, and school dropouts (Faria, 1996). Therefore an intervention to make theories of intelligence more adequate for students is required (Faria, 1996). It is important to mention that these theories are liable to modification, since they are responsive to context and experience, that is, they can be taught (Aronson, Fried & Good, 2002; Dweck 2002; Dweck & Leggett, 1988; Hong, Chiu, Dweck, Lin & Wan, 1999).

Implicit theories about intelligence can be modified by intervention, but they also change across development. When children are younger they do not differentiate between effort and ability, but cognitive development will convert their indiscriminate evaluation in a more specific and refined one (Nicholls, 1978; Nicholls & Miller, 1983). According to Dweck (2002) the most striking changes occur when the child is between 7 and 12 years old. We can say that younger children hold an analysis of

achievement similar to an incremental personal conception of intelligence (Fontaine & Faria, 1989), whereas older children seem to perceive ability as something more stable (Dweck, 2002). Dweck and col. (Bempechat, London & Dweck, 1991, in Dweck, 2002) have found that from the 5th grade on, children who see intelligence as an entity are more prone to explain their academic success through results (to have good grades) than by actions or behaviours (to pay attention in class), when compared with those who see intelligence as something more flexible. Although all individuals acquire, with development, the capability to differentiate between ability and effort, and to see intelligence as something more stable, they will adopt a particular personal conception of intelligence: whereas entity theorists believe that greater effort is associated with less ability, incremental theorists consider that effort can work as ability's developer (Dweck, 2002; Fontaine & Faria, 1989). Therefore, although individuals that possess an incremental theory of intelligence also consider ability as something relatively stable, they still believe that it is possible to develop. On the other way, entity theorists will only try to validate their intelligence, underestimating effort. Along with the developmental aspects, the social / contextual aspects must also be considered in the formation of causal attributions and personal conceptions of intelligence. Social contexts have a great influence in the formation of the personal conceptions of intelligence (Faria, 1997; Faria, Pepi & Alesi, 2004). Among these are the changes that occur over the years on the educational settings as children progress through school grades, which tend to become more and more demanding (Stipek & Daniels, 1988). These transformations are known to affect students' motivation and beliefs (Anderman, Austin & Johnson, 2002; Fontaine & Faria, 1989). Teachers have also an important share on the formation and modification of motivational aspects, namely on causal attributions (Weinstein, 1983, in Gagné, 1985). Foote (1999) has carried an investigation whose results showed a relation between teachers' messages of feedback and students' causal attributions. Family is another important social context; Pomerantz and Dong (2006) and Parsons, Adler and Kaczala (1982) believe that perceptions parents hold about their children's competence have an important impact on these children's academic success. It also seems that are a relation between the types of social feedback or criticism (strategy *vs.* person-oriented feedback) adults give young children and these children's achievement orientations (Kamins & Dweck, 1999) and personal conceptions of intelligence (Dweck & Lennon, 2001, in Dweck, 2002). It was found that strategy-oriented feedback lead to incremental theories of intelligence, as opposed to person-oriented feedback. Henderlong (2000) observed a correlation between type of praise and a more positive or negative attribution style. Mueller and Dweck (1998) have also found that students who receive positive feedback to ability exhibit negative achievement orientations and make causal attributions to ability when faced with failure. These results allow us to recognize that social feedback plays an important role on the determination of achievement goals and orientations, causal attributions, and personal conceptions of intelligence. Studies carried out in Portugal by Faria (1996) have found that students who hold entity theories about intelligence seem to be more prone to drop out school.

METHOD

The main purpose of this investigation is to clarify the relation between causal attributions, personal conceptions of intelligence, and social feedback. Considering that academic failure is worsen by certain causal attributions then it is important for us to know how to change this situation. To access this information we must study the antecedents of causal attributions, that is, personal conceptions of intelligence and social feedback.

Taking into consideration the revision of the literature made, we predict to find:

- a positive relation between causal attributions for failure to effort and incremental theories of intelligence;

- a positive relation between causal attributions for failure to ability and entity theories of intelligence;

- a positive relation between perception of strategy-oriented feedback messages from parents and teachers and incremental theories of intelligence;

- a positive relation between perception of person-oriented feedback messages from parents and teachers and entity theories of intelligence;

- a positive or negative relation between perception of feedback messages from parents and teachers and different categories of causal attributions.

PARTICIPANTS

Our sample was formed by 520 students (n=258, 49.6% boys; n=262, 50.4% girls) attending school from 5th to 9th grade and high school of the Portuguese educational system, from 6 distinct districts in Portugal. Subjects' ages ranged from 10 to 21 years old (M= 14.30).

MATERIALS

We built up the instruments to collect data concerning demographics, causal attributions for academic failure and perceptions of the feedback messages given by parents and teachers; personal conceptions of intelligence were assessed through the Personal Conceptions of Intelligence Scale (Faria, 2001).

QUESTIONNAIRE OF DEMOGRAPHIC AND EDUCATIONAL INFORMATION:

It was built to collect some demographic data, namely: sex, age, grade, attended course, school, district, and location. It also allowed to collect some educational past information about the subject, such as retentions, perception of success, and academic achievement.

QUESTIONNAIRE OF CAUSAL ATTRIBUTIONS EVALUATION:

The aim of this instrument was to measure causal attributions. It is composed of three open-ended questions that refer to causal attributions used to explain academic failure (first the student must identify its regular explanation(s) for academic failure; in another question he or she must point what he/she thinks is the most influential of two given causal attributions - intelligence or effort - in explaining academic failure) and perception of what is "a bad academic result" or academic failure.

PERSONAL CONCEPTIONS OF INTELLIGENCE SCALE:

This scale was built and validated by Faria (2001) and it evaluates personal conceptions of intelligence (incremental/dynamic vs. entity/static). It is constituted of two subscales: static (15 items) and dynamic (11 items). The scale used is a 6-range Likert Scale, where the maximum score (6) corresponds to total agreement with the items of the dynamic scale or to total disagreement with the items of the static scale. Taking into consideration the results on the complete scale (static and dynamic subscales) it is considered that someone possesses an entity theory of intelligence or static conception when its score is fewer than 78; scores above 104 are associated with an incremental

theory of intelligence or dynamic conception; subjects with scores between 78 and 104 are considered to possess an undifferentiated personal conception of intelligence.

STUDENTS' PERCEPTION OF PARENTS' AND TEACHERS' FEEDBACK MESSAGES SCALE:

This is a 5-range Likert Scale that collects data on the kind of feedback students perceive they receive from their parents and teachers when they are faced with academic failure (person-oriented feedback vs. strategy-oriented feedback). The scale is formed by 16 items (8 regarding parents and another 8 regarding teachers). An example of a person-oriented feedback item is: "You were not tailored to study" (emphasizes something that is stable in the person, a trace). On the other way an example of a strategy-oriented feedback item is: "Next time you should study more" (emphasizes the effort).

We have also made informative materials for the participant schools that should be given to the subjects after they finished filling in the data materials; the aim of those materials was also to change some erroneous beliefs related to causal attributions of failure.

RESULTS

CAUSAL ATTRIBUTIONS

From the analysis of the answers to the open-ended questions concerning the causal attributions that our subjects made in situations of academic failure, we have created 10 categories (*see table 1*). The results show us that our subjects mainly explain their academic failures with effort related attributions (64.9%). Other also cited causal attributions are those regarding personal factors (10.1%), and affective factors (9.9%). Ability attributions for failure stand in 4th place (4.4%). The less mentioned categories were the social/contextual factors and luck (both 1.9%), task difficulty and help or others interference (both 2.1%), and competence (2.5%).

Students make mostly internal (91.3%), unstable (83.1%), and controllable (79.7%) attributions for academic failure. When asked to choose between ability or effort to explain academic failures, the subjects mentioned effort more often as the main cause of academic failure (82.2%); ability was the choice of 6.2% of the respondents.

TABLE 1 *Causal Attributions' Categories*

CAUSAL ATTRIBUTIONS CATEGORIES	EXAMPLES	%
Ability	*"I'm not an intelligent person"*	4.4
Effort	*"Lack of study"*	64.9
Task Difficulty	*"Difficult task"*	2.1
Luck	*"Bad luck with the exam questions"*	1.9
Affective Factors	*"I hate school"*	10
Competence	*"I have difficulties in the Portuguese language"*	2.5
Help or Others Interference	*"Teachers are very demanding"*	2.1
Personal Factors	*"I can't focus my attention"*	10.2
Social/Contextual Factors	*"Many activities besides school"*	1.9

PERSONAL CONCEPTIONS OF INTELLIGENCE

The subjects of our study mainly hold incremental personal conceptions of intelligence (60.3%), whereas only a minority holds an entity theory about intelligence (1%). The others are considered to possess undifferentiated personal conceptions of intelligence (38.7%).

The results also show that, on the whole, there is a greater disagreement with the items of the static scale, whereas there is a large amount of agreement with the items of the dynamic scale.

STUDENTS' PERCEPTION OF PARENTS' AND TEACHERS' FEEDBACK MESSAGES

The most common feedback messages that our subjects seem to receive from parents and teachers on academic failure situations are strategy-oriented (79.5%). Only 23% of the subjects perceive person-oriented feedback messages from parents and teachers. On the whole, responses to person-oriented feedback items fall more often on the "it happens but little" category, while strategy-oriented feedback items fall more often on the "it happens" category.

Results reveal that the subjects perceive more strategy-oriented feedback from parents (81.3%) than from teachers (77%), despite the minimal difference of frequencies. On the other hand, teachers (26.2%) seem to give more person-oriented feedback when compared to parents (23.6%).

With the purpose of testing our predictions, we used some inferential statistics. HOMALS method was employed (see Lobo, 2007 and Figueira, 2001), and, as a result, four homogeneous groups were observed (see Lobo, 2007). Correlation was also used as a complementary source of information.

So, as a result from HOMALS analysis (the three main variables were analysed: attributions- nine levels; conceptions of intelligence- three levels; perception of person- and strategy-oriented feedback- five levels each), four homogeneous groups or dimensions were observed (see Lobo, 2007):

1st: Participants that make causal attributions of academic failure to ability or competence seem to hold entity personal conceptions of intelligence more often. These individuals also receive less person- and strategy-oriented feedback;

Another group is characterized by participants that make causal attributions to effort, to help or others interference or to social/contextual factors. They seem to receive more strategy-oriented feedback and little person-oriented feedback;

In another group, we find individuals making attributions to affective or personal factors, receiving more person-oriented feedback, and also more strategy-oriented feedback. These individuals mainly hold an undifferentiated personal conception of intelligence;

Finally, other participants make causal attributions to task difficulty or luck, hold incremental theories about intelligence and receive strategy-oriented feedback.

Bivariate correlation was also used as a complementary source of information. It confirmed some results given by HOMALS: we have found a significant negative correlation between holding incremental theories about intelligence and making causal attributions to ability ($r=-.19$, $p<.001$); that individuals holding incremental theories perceive less person-oriented feedback from parents and teachers ($r=-.20$, $p<.001$) and more strategy-oriented feedback ($r=.13$, $p=.003$) (significant relations).

Gender- and age-related differences were examined for the three main variables; it was only observed a statistically significant gender difference in perception of person-oriented feedback, with boys perceiving more person-oriented feedback than girls (Wilks' Lambda value=.98, F=2.35, df=438, p=.05; boys: M=2.19; DP=.76; and girls: M=1.9; DP=.76).

It was found a positive non-significant correlation between static and dynamic scales (r=.084, p=.059), confirming the disagreement with static items and agreement with dynamic items.

It was also found a statistically significant difference between strategy- (M=3.21) and person-oriented feedback perception (M=2.04) (t=-27.65, p<.001). The perception that parents give more strategy-oriented feedback (M=3.34) than teachers (M=3.17) also proved to be statistically significant (t=3.8, p<.001).

DISCUSSION

The subjects of our study explain their academic failures mainly by effort (64.9%), a result that is also found in Barros and Barros (1990) investigation on the causes of academic successes and failures. On the other way, some authors mention that besides effort the more usual causal attribution is ability; however, in our study this is only the 4th most cited attribution (only 4.4%). This could be explained by a need for protection by individuals who answered our questionnaires. We should also consider that we only observed attributions for failure, whereas other investigations have taken into account attributions for both failure and success, and that people make more causal attributions to ability when they have to explain situations of success (Nathawat, Singh & Singh, 1997). Another explanation for this result could be the importance teachers give to attributions to effort that could be transmitted to their pupils (Barros & Barros, 1990). Causal attributions to effort are a more positive way to react to academic failure, since these are internal, unstable and controllable causes. According to Perry and Magnusson (1989), although students who make this kind of attributions do not protect their self-esteem as much as individuals who make external attributions, they have the advantage that they can perceive themselves as responsible for an unstable and controllable failure. As a whole, our subjects also made more internal, unstable and controllable causal attributions. Although, we can also presume that some students who have been through many failure situations, have quit to strive and show less effort, therefore they can protect themselves in a better way by attributing academic failure to lack of effort, since this is a well accepted cause among both teachers and pupils.

Dweck (2002) points out both entity and incremental theories about intelligence as equally popular among individuals. However, the majority of the subjects of our investigation hold incremental theories, and only a minority possesses entity theories. Nevertheless, these results agree with Faria's (1998) realization that subjects more often say yes to incremental items. In our sample we have also found this agreement. Subjects also show more disagreement with entity items. This situation can be explained by the social desirability of the incremental theory in our society. Although, only a few subjects possess an entity theory of intelligence in our sample, a more substantial number has an undifferentiated theory. Probably some of these undifferentiated students possess entity theories but, with the pressure of social desirability to hold incremental theories of intelligence, their scores tend to be less static.

Like Hong et al. (1999) and Robins and Pals (2002) we have observed a negative relation between incremental theories of intelligence

and causal attributions of academic failure to ability; we have also found a positive relation between entity theories and causal attributions of academic failure to ability. Therefore, we realize that in Portugal there is, as well, a positive relation among incremental conceptions of intelligence and causal attributions of failure to effort, and a relation between entity conceptions of intelligence and causal attributions of failure to ability. In our study, more stable and uncontrollable causal attributions (attributions to affect and personal factors) seem to be linked positively with undifferentiated conceptions of intelligence; maybe this could be explained by disguised entity theorists that, therefore, do not make attributions of failure to ability directly. These subjects with undifferentiated conceptions of intelligence seem to receive also more person-oriented feedback, which is also linked in literature to entity theorists. However, our undifferentiated subjects also seem to receive a great amount of strategy-oriented feedback, which could explain their confusion and undifferentiated status.

Previous investigations (Dweck & Lennon, 2001, in Dweck, 2002; Mueller & Dweck, 1998) have showed us that person- and strategy-oriented feedback are related to the type of personal conceptions of intelligence individuals hold. In our study we have also observed this relation: incremental theorists seem to receive less person-oriented feedback and more strategy-oriented feedback. The observed link in our sample between the absence of any kind of feedback and an entity personal conception of intelligence can be better understood by the already known damaging effect of the lack of feedback (Henderlong, 2000; Van Werkhoven, Van Londen & Stevens, 2001). Just like Foote (1999), who used a sample of teachers, we have found that feedback received by subjects is not very usual (person-oriented feedback happens little and strategy-oriented feedback happens, but not very much or always) and that person-oriented feedback (that we can compare to Foote's negative ability feedback) is the less employed. The greater perceived use of strategy-oriented feedback by parents than by teachers (which are also the ones that seem to give more person-oriented feedback), can probably be explained by parents' tendency not to hold responsible their own child (Barros, 1993), therefore being less prone to formulate person-oriented feedback on their children's academic failure.

As for the relation between social feedback and causal attributions, we have only found a non significant relation among causal attributions of academic failure to ability and person-oriented feedback. Henderlong (2000) had found that strategy—oriented feedback would lead to more positive causal attributions of academic failure, which we could not observe.

FINAL CONSIDERATIONS

This investigation allow us to conclude that the analyzed constructs maintain important relations among them, warning us to the central role of personal conceptions of intelligence and social feedback in the determination of causal attributions, and, in the long run, of students' academic achievement.

The results have gotten allow-in concluding them that the pupils of 2º and 3º cycles and secondary education have, generally, make causal attributions of its pertaining to school failures to the effort lack. Its attributions for the failure are also characterized generally for its internality, instability and controllability, what it wants to say that these pupils take the responsibility for its failures and they see them as possible of modifiable, being given that unstable throughout the time and controllable for itself or others.

Our sample is characterized for a majority of citizens with dynamic personal conceptions

of intelligence; but 3 individuals present static conceptions of intelligence.

In what it respects to the messages of feedback of parents and professors, these seem centred themselves more in the processes of what in the traces, given that the fashion of the average category of the citizens of the sample with respect to centred messages of feedback in the processes corresponds "happens with me" and in the case of the centred messages of feedback in the traces corresponds to the category "happens little". Thus, one concludes that the citizens of the sample receive few times, of its parents and professors, feedback centred in the traces concerning its bad results and has to receive feedback centred in the processes.

This work is a preliminary study and even so if having found interesting results, the 4 standards or groups, from these three great blocks of variables, would be important, in next work, with sight to an good intervention, to perceive the relations of these profiles with the pertaining to school income, trying to perceive which of these standards are more good predictor of a good pertaining to school income. And, thus, after the observed relations should also warn us for the importance of interventions pertaining students' beliefs and teachers' and parents' knowledge about social feedback consequences.

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