



*The*  
**University of Oklahoma**

*Oklahoma City Campus - Health Sciences Center*

**DEPARTMENT OF HEALTH ADMINISTRATION**

College of Public Health

March 4, 1983

Ms. Alison Hill  
Mattel Electronics  
5150 Rosecrans Avenue  
MS 302-14  
Hawthorne, CA 90250

Dear Ms. Hill:

This is a follow-up to our telephone conversation of March 3, during which we discussed the role which Mattel might play in sponsoring research on alternative uses of Intelelevision technology.

The purpose of our project is to determine if video games can be used as part of a program to increase daily living skills, improve manual dexterity and positively affect social and psychological functioning of aged residents in long-term care facilities. We propose to determine the effect of video games on physical, social and psychological functioning by performing a controlled experimental study covering the course of a one-year period. We intend to select eight to ten long-term care facilities in the southwest. The facilities will be carefully matched in order to guarantee similarities in the mixes of age, sex, sociodemographic characteristics and general health status of residents. Residents of all of the facilities will have their daily living skills assessed, will be subjected to motor function skill analyses, and will be evaluated as to general social interaction. Half of the facilities will then be identified as the "experimental" group in which video game terminals and color television screens will be placed in a prominent location in the recreational area. Recreation and other staff will be specially instructed on the use of the terminals, and the video games will be introduced as part of recreational therapy. At periods of three, six, nine and twelve months, daily living skills, motor function and social interaction will be measured in the experimental sites and in the "control" sites in which video games have not been installed. This matched group experimental design will help to ensure the scientific validity of findings concerning the actual effects of the video games on the specific social, psychological and physical functions being measured.

For experimental purposes, "null hypotheses" are being tested which posit no expected changes between the two groups. We believe that this project will provide Mattel Electronics with scientific data which it could use to develop video game programs to address the needs of special populations such as the aged and disabled.

The potential audience for therapeutic/recreational use of Intelelevision technology among the aged is really quite broad, and can be classified into three general groups. The institutionalized aged in long-term care facilities represent a substantial proportion of people in the population. There are approximately twenty-two million people 65 years of age and older in the United States. At any one time, approximately five percent of that population is institutionalized in long-term care facilities. However, 25-30% of all elderly persons are institutionalized in long-term care facilities at some time in their lives. The second general category relates to special programs for the elderly, such as day-care and multi-purpose senior centers which are sponsored by public and private organizations throughout the United States. The third category is that of living centers for the well elderly. The potential market for therapeutic applications of Intelelevision technology is quite literally millions of people in tens of thousands of public and private sector institutional and living facilities throughout the United States. Findings from this project can be used by Mattel to adapt existing Intelelevision technology and programs to meet the needs of older persons.

As a condition of sponsorship, we would agree to the dissemination by Mattel of all information and findings relating to this project.

In order to most effectively demonstrate the possible correlations between video games and effects on social, psychological and physical functioning, we would ask that Mattel Electronics supply terminals and game cartridges for use with the experimental population. At this time, we believe that a minimum of two video game systems should be installed in each of four to five long-term care facilities, and in at least one adult day-care center located in the Oklahoma City area. We would, therefore, request a minimum of twelve to fifteen terminals and sets of cartridges from Mattel. We would require the use of these cartridges for a period of at least twelve and no longer than eighteen months. We would report periodic findings from our monitoring efforts to Mattel, and Mattel Electronics would be acknowledged as a sponsor of the study in all publications and presentations which might be made.

I have enclosed for your information, a brief abstract of this proposal, including vitaes for myself and the other research scientists who would be involved in the project.

I have, by-the-way, spoken with Paul Eckelard in Wisconsin and it is my belief that work which we are proposing would both complement and build on the work which he is currently doing.

Please feel free to call me should you have any questions. I look forward to hearing from you very soon. I can be most easily reached at (405)271-2114.

Very sincerely,

Jay Wolfson, Dr.P.H.  
Assistant Professor  
Department of Health Administration  
and Senior Researcher  
Long Term Care Gerontology Center

JW/jj



*The*  
**University of Oklahoma**  
*Oklahoma City Campus-Health Sciences Center*

**LONG TERM CARE GERONTOLOGY CENTER**  
College of Public Health

August 22, 1983

Mr. Robert Chang  
Vice President, Product Engineering and  
Development  
Mattel Electronics  
5150 Rosecrans Avenue  
Mail Stop 801-13  
Hawthorne, CA 90250

Dear Mr. Chang:

This is a follow-up to our telephone conversation of several weeks ago. For your information, I have attached a copy of the original proposal which we sent to Mattel requesting support for research into the effects of video games on aged residence of long term care facilities. I am very sorry that we were not able to correspond with you at an earlier date. I feel that we could have accomplished a great deal of pilot work up front, rather than working now to adapt the Intelelevision technology to this very significant population.

While the standard Intelelevision hand control unit is very difficult to use, Intelelevision graphics and visual effects are superior. That is the principle reason for the selection of Mattel for this research.

As you can see from the proposal, our initial request for support was not entirely met. Consumer Relations at Mattel was only able to supply two master components and one set of selected game cartridges. While the small number of cartridges may be useful in conducting a very preliminary pilot study, I'm sure you can appreciate the scientific validity problems we would have in conducting a bonafied experimental study.

As our pilot effort continues, we are very convinced that a larger, more carefully controlled experiment can provide extremely valuable information about specific modifications to Intelelevision technology that will make it easier to use and more attractive to the elderly population. The scientific findings on the effects of Intelelevision on social interaction, daily living functions and motor functions also promise to be quite worthwhile.

As you may know, the population of the United States is aging. The fastest growing segment of the aging population is the group seventy-five years of age and older. Long term care, day care, communal living and tiered communities for the aged are increasing at an astounding rate. This phenomenon has only



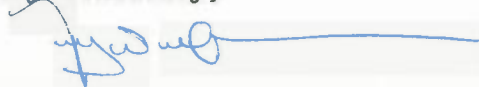
Mr. Robert Chang  
August 22, 1983  
Page 2

begun. The post-war baby boom, which is the largest single birth cohort in history, is moving steadily toward the golden years, and as this occurs, society is becoming increasingly concerned about aging issues.

Mattel has a long history of manufacturing and marketing home based entertainment - mostly for the young. I would like to discuss with you some very specific activities that could be designed to obtain important scientific information about the aging, and ways we can work together to position Mattel in this rapidly expanding market.

I look forward to speaking with you again very soon.

Very sincerely,



Jay Wolfson, Dr.P.H.  
Associate Professor and Senior  
Researcher, Long-Term Care  
Gerontology Center

/kr



*The  
University of Oklahoma*

*Oklahoma City Campus-Health Sciences Center*

**DEPARTMENT OF HEALTH ADMINISTRATION**  
College of Public Health

12 September 1983

Mr. Dave Chandler  
Mattel Inc.  
5150 Rosecrans Avenue  
Hawthorne, California 90250

Dear Mr. Chandler:

We received a grant from Mattel Electronics to determine the effects of video games on aged residents of long-term care facilities. In addition to in-kind support consisting of games and equipment, we were to work with Mattel engineers to develop existing technologies to meet the special needs of the aged.

Unfortunately, I was never able to find anybody to work with at Mattel. Shortly after the grant was made and the research begun, each person I had spoken with at Mattel left. When I finally made contact with Mr. Chang - his expression of interest was very high. For some reason, he and others outside of public relations knew nothing about our research - and he felt that it opened a number of exciting product development, public relations and research doors for Mattel.

I was recently informed that Mattel Electronics is no more, but that you could be of assistance with the grant we have and the work we are doing.

I have attached copies of some of the correspondences with Mattel - and I really think that opportunities for mutually beneficial collaboration remain - despite the present non state of Mattel Electronics.

As a consequence of Mattel's original commitment to this project, we were able to secure additional grant support form the Zenith Corporation and a large, regional long-term care corporation. It would be a shame to abandon this important project.

I look forward to hearing from you very soon.

Very sincerely,

Jay Wolfson, Dr.P.H.  
Associate Professor and  
Senior Researcher, Long Term  
Care Gerontology Center

JW/tm



MATTEL ELECTRONICS

DAVE CHANDLER

9-22-83

Charlene Mangano

Here are the copies  
the letters we discussed.

Alma

9-23-83

Called Dr. Wolfson to say we are ready to proceed  
with having his Dr. come out for a discussion, he proposed sending  
2 people:  
- Medical Engineer

Project Director

Will get back to me no later than Monday with  
proposed schedule.

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September 27, 1983

TO: Distribution  
FROM: Dave Chandler  
SUBJECT: Visitors from University of Oklahoma

Dr. Jay Wolfson and Mark Bressler (biomedical engineer) from the University of Oklahoma, Health Sciences Center, will be here Thursday, October 6.

They are entering a research program to determine the effects of video games on aged residents of long-term care facilities. Mattel has agreed to supply Intellivisions and software to them for this project. We will receive documentation of the results and will be able to advertise our participation if we choose.

At this meeting, we will discuss characteristics of hand controllers and software that would be desirable for the aged. They probably will want some modified or different controllers. We have not agreed at this time to supply anything but the standard hardware. We will want to arrive at the appropriate software to supply from present programs for the experiment.

We stand to gain from the discussions valuable insights into characteristics of hand controllers and software which could make our products more suitable for this large and rapidly growing segment of our population.

The meeting will start at 1:00 p.m. in the Executive Conference Room of Building 2 (TRW) and is expected to continue through the afternoon.

Distribution

Hugh Barnes  
Charlene Margaritis  
Marjorie Brent  
Terry Valeski  
Gabriel Baum  
Richard Tuthill

Alan Nash  
Don Daglow  
Mike Minkoff  
Rick Timmins  
George Jump



AGENDA

University of Oklahoma and Mattel Electronics

October 6, 1983

Introductions

Review Agenda

Overview of Research Program

Discussion of Controller Characteristics

Discussion of Software

    Desirable Features

    Current Suitable Software

Wrap-up

    Next Step Agreements

September 27, 1983

*DAVE*  
*PER OUR DISCUSSION,*  
*CANCEL IF POSSIBLE,*  
*IF TOO LATE, NO PROBLEM.*  
*TX Hugh*

TO: Distribution

FROM: Dave Chandler

SUBJECT: Visitors from University of Oklahoma

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*Dave*



*The*  
**University of Oklahoma**  
*Oklahoma City Campus-Health Sciences Center*

**DEPARTMENT OF HEALTH ADMINISTRATION**  
College of Public Health

October 13, 1983

Dr. Dave Chandler  
Vice President  
Product Development  
Mattel Electronics  
5150 Rosecrans Avenue  
Hawthorne, California 90250

Dear Dave:

It was a pleasure to meet with you and have the opportunity to discuss our research interests and efforts.

The purpose of our visit was to discuss with Mattel key changes in the project, in terms of staffing and support, and to determine the steps to be taken in order to appropriately modify Intellevision hardware to facilities use by aged residents of long term care facilities. Toward these ends, Mike Bressler and I developed a series of approaches and you arranged to assemble representatives from several Mattel departments.

We now realize that Mattel Electronics will not be in a position to offer financial support - but I would very much like to pursue limited funding through the Mattel Fund.

The documentation we have prepared to date accurately reflects the goals of our research. In summary we believe that Intellivision technology can be adapted, with minimum engineering expense, to serve as a therapeutic and recreational input to the lives of millions of older Americans who reside in long term care facilities, communal living and retirement centers, and who use day care facilities.

To perform the research adequately, we will need a full-time project employee, at the rank of Research Assistant. We will also need at least two part-time student assistants to aid in data collection and analysis. Percentages of professional staff and travel to research sites should also be included as a viable cost.

We believe that the combination of research findings, public relations and market opportunities make this project especially attractive.

To carry out the research in best form, the following project budget is recommended:



Personnel

Project Director	Dr. Jay Wolfson	10%	\$ 5,000.00
Biomedical Engineer	Mark Bressler	30%	10,000.00
Social Psychologist	Dr. Hiroko Akiyama	20%	5,000.00
Project Staff:	Dr. John Skinner	15%	Our Cost Share
	Dr. Joseph Holtzman	10%	Our Cost Share
Research Assistnat	To be named	100%	15,000.00
Student Assistant	To be named(2)	50%	10,000.00

(Total Cost Share= \$12,495.00 including fringes)

Equipment and Supplies

Engineering Supplies	1,000.00
Additional Televisions (Cost Share= 3,000.00)	
Miscellaneous	500.00

Other

Travel	1,000.00
Phone	500.00
Computer Time	1,000.00
Postage	100.00
Duplication	250.00
Fringe Benefits	8,550.00
Indirect Costs (10%)	5,740.00

Total Requested Budget.....\$ 63,640.00

Total  
 Oklahoma University  
 Cost-Share 12,495.00

In-kind Cost Share  
 Total Estimated  
 From other  
 Corporations 7,000.00

We believe that it will be possible to pursue some additional sources of outside funding from local companies in addition to the commitments we have already received.

Dr. Dave Chandler  
Page Three  
10/12/83

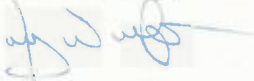
If the Mattel Fund could grant the total requested budget amount of 63,400.00, or a portion thereof, we will be in a position to conduct a highly valid, scientific study with useful results available within a six month period.

If you think that any additional supporting documentation would be helpful, please advise me.

In the meantime, I will begin the marketing approach from my side, and will prepare to continue our pilot effort.

Again, it was a great pleasure to meet you, and I do hope to be able to work with you and Mattel in the future.

Very sincerely,

A handwritten signature in blue ink, appearing to read "Jay Wolfson", is written over a rectangular area that has been redacted with a light-colored marker.

Jay Wolfson, Dr.P.H.  
Associate Professor

JW/tm

October 26, 1983

TO: Deanna Xavier

FROM: Dave Chandler

SUBJECT: University of Oklahoma Research Program

Charlene Margaritas suggested that I send the enclosed letter directly to you. I will also send copies of previous communications with University of Oklahoma which will provide much more background on the program. We have sent them 18 Intellivision Master Components for use in their program and a number of cartridges from which they will select those which they believe will be useful in their program. It is expected that we will then supply them with enough of the cartridges they select for them to use in their program.

As implied by Dr. Wolfson's most recent letter, when he and Mike Bressler were out here on October 6th, we indicated that Mattel Electronics would not likely be in a position to supply any financial support to their program even though their program looks like it should be valuable and of interest to us.

If you have additional questions about this feel free to contact me or Charlene.



cc: Charlene Margaritas