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NAME OF AUTHOR/NOM DE L'AUTEUR GUILMETTE, Ann Marie

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IDENTIFICATION CLASS DIFFERENCES
AS DETERMINANTS OF THE PERCEPTION
OF HOSTILE OR NON-HOSTILE
ATHLETIC STIMULI

A Thesis

Submitted to the Faculty of Graduate Studies
through the Faculty of Physical and Health
Education in Partial Fulfillment of
the Requirements for the Degree
of Master of Physical Education

by

ANN MARIE GUILMETTE
E.P.H.E., University of Windsor, 1973.

Windsor, Ontario, Canada.

1974

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OF
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ABSTRACT

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Identification Class
Differences as
Determinants of the
Perception of Hostile Or
Non-Hostile Athletic
Stimuli, 1974,
84 pp.
(James Duthie)

This study explored whether differences in league or allstar identification class biased perception and binocular resolution toward hostile athletic stimuli, as opposed to non-hostile athletic stimuli. Subjects were twenty-six boys from Windsor West's Little League Major Division, aged 11, 12. A control group of thirteen boys and an experimental group of thirteen boys were tested before and after the treatment condition of allstar. In the binocular rivalry situation, a hostile athletic picture was tachistoscopically presented to one eye simultaneously with a non-hostile athletic picture shown to the other. Each subject saw twelve such pairs of slides shown in random order. A "hostile" score was computed for each subject based on the number of hostile pictures seen.

Results confirmed the hypothesis: at first testing (T_1), the control group and the experimental group did not perceive significantly more hostile athletic pictures than non-hostile athletic pictures; i.e. they were of the same league identification class and at retest (T_2), after the treatment condition allstar, the experimental group perceived significantly more hostile athletic pictures than non-hostile athletic pictures at the .01 level of significance i.e. they were of a different allstar identification class.

These findings substantiate transactional functionalism's theoretical position on perception. Responses to visual

stimuli depend upon previous action that has provided an individual with significates and assumptions about a situation. The experimental group, the allstar identification class, were aroused to assumptions about hostile athletic stimuli only after the treatment condition of allstar. These response variations and the specific conditions cited in this study are factors which would make future research in the area of youth sport organizations relevant.

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CHAPTER I THE PROBLEM

Statement of the Problem

Only through an integration of theories and practical research findings from studies in the area of physical education, psychology, organization and administration and sociology will an understanding of the function or role of hostility in sports be determined. The identification class construct (which is more general and comprehensive in nature than that of the ambiguous reference group construct) is used throughout this study as a more appropriate term (LaFave, 1972). Also, a subject possesses a given identification class if and only if that subject has some symbol by which he represents this identification class to himself (LaFave, Haddad and Marshall, 1970). The cultural influences associated with hostility in sports and athletics become the symbol by which Little League identification classes manifest themselves.

The avowed goals of the people and participants involved with Little League have long been better interpersonal relations, goodwill and cooperation (Little League Handbook and Manual, 1972). In order to understand the factors and outcomes that promote better interpersonal relations, goodwill and cooperation it is necessary to investigate those variables which would lead to interpersonal conflict and hostility.

Hostility is aroused by goal blocking and threat (Horwitz, 1958). In Little League both of these variables are evident at the allstar level. At this level considerably more emphasis is placed on winning and the necessity for beating the opponent. Successful participants at this level are

accorded many forms of social and material reinforcement. Allstar participants have traditionally represented the best players in a given community. They are endorsed by the community and the news media where their behaviour is highly publicized. The identity of the coaches, the sponsors, the parents and the community depend upon the success of this team. Much of the leagues resources are diverted into this restricted segment of the organization (University of Windsor, [CAR for CSM], 1974). Allstar teams must travel great distances to challenge other representatives from other communities; and many crests, trophies and banquets are awarded to the successful team. The allstar situation becomes a miniaturized semi-professional situation. The participants are the best, their success is highly regarded and beautifully rewarded. In his research Bandura (1969) states that children will readily imitate the behaviour of a role model, especially when the model's behaviour is rewarded. Violence and hostile intimidation of an opponent are accepted forms of behaviour for the highly publicized and overtly rewarded professionals and indeed for all other athletic organizations. At the allstar level it is posited that such behaviour is role modelled, part of the allstar's perceptual framework focuses on these acceptable forms of hostility.

For the allstar player there is acceptance of the situation and commitment to the cause; these participants

4.
become ego-involved (Sherif and Sherif, 1959). To the ego-involved allstar player, failure and the fear of failure provide not only a frustrating but a threatening and antagonistic environment. Familiarity with the sanctioned hostility for professionals and hostility caused by goal blocking and threat provide relevant cues to the allstar players which are productive of an allstar identification class. At the league level while the likelihood of hostile cues may be present at playoff time, where winning becomes socially more significant, there is generally throughout the season much less emphasis placed on winning (University of Windsor, [CAR for CSM], 1974). Also the loyalties of the community are more widely distributed so that overall for the league identification class the likelihood of relevant cues concerning hostility are reduced.

Where allstar and league identification classes reflect divergent socio-psychological models, response differences in the binocular rivalry situation become important. Binocular rivalry as described by Engel (1961) is a stimulus-ambiguity situation. In this study it was induced by means of a stereoscope which allowed the simultaneous presentation of two different images (one hostile, one non-hostile) to the monocular fields of the perceiver. The binocular rivalry situation creates a visual competition between the two eyes. This retinal competition was resolved by one image emerging as dominant in the visual field. In situations of stimulus-ambiguity as in binocular rivalry, perceptual response relies upon the functional value of the stimulus to the perceiver.

This principle of the transactional theory of perception (Kilpatrick 1951, 1951) when applied in the present study indicated that the dominant image emerging from the rivalry field would be the stimulus having the greatest meaning or value to the observer. Lacking relevant meaning, the other image tends to be suppressed either completely or partially (Engel, 1954).

An underlying assumption in this study is that, due to differing demands made upon the participants, allstar players are more ego-involved with hostility than are league players. The selective process of visual perception will then rely upon allstar players being more receptive to hostile stimuli and league players being less receptive to hostile stimuli. By computing response differences in the binocular rivalry situation this study investigated the perception of hostile athletic stimuli as a function of an individual's identification class.

Limitations of the Study

Having been selected as either hostile or non-hostile in nature by the judges, the slides were matched according to corresponding activities and presented in pairs. These activities were surfing, baseball, rodeo, football, hockey and tennis. So that perceptual dominance was not influenced by such differing physical properties as brightness, texture or form, the slides were matched with as few differences as

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possible. The activities represented in the pictures or slides were not necessarily selected on a culture preference basis and thus may not be representative of activities currently influential in Canada.

A second limitation involves the quasi-experimental nature of this study and the use of volunteer subjects from Windsor West's Major Division. These factors make the generalizability of the findings both restricted and limited (Rosenthal and Rosnow, 1969). Also the nature of the allstar team limits the size of any given sample. However, by investigating more than one group the sample size and thus significance of the findings would be increased. Overall the innovation of more sophisticated measurements would help to increase the power, significance and generalizability of future studies.

Although this study is limited in scope, it is hoped that it is a step towards encouraging research into the area of hostility in sports; and it is further hoped that future studies will investigate more the total complexity of youth sport organizations.

Definition of Terms

1. Hostility:

A potentially injurious or antagonistic tendency, a situation where injury occurs or there is an attempt to inflict injury.

2. Non-Hostility:

Lacking of hostility, a situation where no injury occurs or there is no attempt made to inflict injury.

3. Ego-involvement:

Refers to "The arousal of a situationally relevant ego-attitude, whose participation in ongoing psychological activity generates modes of behaviour that are more consistent, more selective, and more characteristic of the person in that respect." (Sherif and Sherif, 1969, p. 337).

4. Identification class:

The cognitive set of elements which reflect the attitudes of the subject. (LaFave, Haddad and Marshall, 1970).

5. League:

Those boys who play baseball within their own community league, those boys who do not play allstar.

6. Allstar:

Those boys who are chosen to represent their community in competition against boys from other community leagues.

7. Stereoscope:

An optical instrument used to combine two pictures of the same object taken from slightly different points of view; thereby giving the impression of a single picture having depth. For present purposes photographic slides are used.

8. Alternation:

The continuous coming and going of the left and right

monocular field image during a viewing exposure of long duration.

9. Binocular (retinal) rivalry:

A stimulus-ambiguity situation; the simultaneous stimulation of the eyes by two sufficiently different patterns to make fusion of the images impossible and create a visual competition between the eyes.

10. Binocular resolution:

The outcome or actual perception of a dominant stimulus in the binocular rivalry situation.

11. Monocular dominance (dominant image):

That image which consistently exerts its presence in the respective field, according to the verbal response of the perceiver. The other monocular image is suppressed either partially or wholly. (Engel, 1956)

CHAPTER II REVIEW OF THE LITERATURE

Theoretical Background

To determine the functioning of perceptual selectivity it is first necessary to consider the genesis of theories in perception. Initially theories in perception were intent upon explaining how and why we perceive things the way we do.

The sensory-tonic field theory of Werner and Wapner (1952) proposed the incorporation of the perceiving organism's tonic state, along with the sensory aspect, as vital to perception and meaning. Methods of spatial placement and perceived motion, although supporting the theory, proved too narrow for generalization to other perceptual phenomena. Demonstration of the link between the tonic situation with meaning in perception have, so far, not been adequate. A common deficiency among existing theories has been the lack of clear explanation of the assignment of meaning in the perceptual process. What an object, event or situation signifies is clearly a relevant cue to response, particularly in social situations.

Further attempts were designed to show that events are perceived through and organism's structuring of perceptual material. Tichener and Boring (Allport, 1955) advocate similar core-context theories. Tichener's core-context theory (Allport, 1955) emphasized a focal group of sensations called the "core". Accompanying this sensory core is the "context" or secondary sensations supplied by past experiences. Different individuals all possess the same core; however,

One's context, and thus the meaning of perception is looked upon as an individual quality associated with differing past experiences. Boring's core-context theory (Allport, 1955) implied that meaning in perception is solely derived from the context; the core is devoid of any meaning. While Titchener and Boring added to the theoretical framework of perception neither theory accounts for any dynamic interaction between an individual and the physical and socio-psychological environment.

Gregory (1966) calls for a groping towards the organising of sensory data into objects. The seeing of objects involves many sources of information beyond those meeting the eye when we look at any given object. It generally involves knowledge of the object derived from previous experience. Objects have pasts and futures that become an embodiment of knowledge and expectation; they are far more than patterns of stimulation. For Gregory (1966) perception could not be determined simply by stimulus patterns but rather by a dynamic searching for the best possible interpretation of all available data.

As yet there is still little known as to how man is physiologically capable of perception. However, it is known that man does perceive, he is capable of attaching meaning to events. The explanation of meaning in terms of "significate" and "sign" of the significate (Osgood, Suci and Tannebaum, 1957) is integral to the present study and its underlying

theoretical basis. Words as symbols that represent objects and the object itself are clearly different stimuli; however, the sign (word) should elicit behaviour similar to that which the significate (actual object) brings forth (Osgood, Suci and Tannebaum, 1957). Signs functioning as cues and representing real objects, events or situations, are meaningful in perception, if they elicit responses that are similar to those produced by a significate object.

Allport (1955) suggests that man's constant interaction with external stimuli in the external environment is reflective of perceptual set; perceptual set being man's willingness to perceive the world the way it is. Sherif and Cantril (1947) contend that any social environment includes values or norms which vary in their uniformity and their duration. What the individual is and what he feels himself to be are largely conditioned by the particular constellation of values he learns and that become a part of him. For the purposes of this study, man perceives the world not only the way it is but also he perceives the world the way he is. Perceptual set here refers to both internalized and externalized values that are assigned to objects, events or situations (Sherif and Sherif, 1969).

An occurrence does not become an event until some significance is given to it; an occurrence only becomes an event when the happening has significance (Hastorf and Cantril, 1967). Out of all the occurrences going on in the

environment, a person selects those that have some significance for him from his own egocentric position in a total matrix. Tagiuri and Petrullo (1958), state that a perceiver regards an object as having the potential of representation and intentionality. Relevant meaning is attached to occurrences when priorities are established for the internalized values. Sherif and Sherif (1969) explain that for persons highly involved in an issue, the threshold of acceptance for relevant stimuli is heightened while the threshold of rejection is lowered; probably proportional to the degree of their involvement or commitment to an issue and individual intensity. Relevant meaning is assigned to internal values based on a degree of familiarity and ego-involvement for any particular occurrence.

For Hastorf and Cantril (1967) a societal event is the sharing of significances. Man is socialized through social situations (Helanko, 1957), Relevant meaning is assigned to external conditions based on cultural memberships, particular social expectancies and the sharing of externally socialized values.

The theoretical approach labelled transactional functionalism (Kilpatrick, 1951, 1961) is followed for the present study. Central to this approach is a dynamic interrelationship between an organism and environmental cues. Perception, as a response to a fixed stimulus is discarded; during perception a "transaction" between observer

and environment is held to occur. The nature of an object or situation can only be assessed by considering both observer and the perceptual cue. Experience plays an important role in perception. Past actions which have satisfied the organism's purposes have resulted in significances being attached to these actions. Unconscious "assumptions" are built around significant environmental cues; these serve as directions for present and future actions involving identical or similar stimulus-cue patterns. Perception becomes guided by one's unconscious assumptions of probable significance for action (Hastorf and Cantril, 1967).

Differences in past experiences will thus produce variance in assumptions, and thus, perception. However, despite each man's experiences and significances attached to such, universal assumptions and perceptions are possible when common purposes and actions have existed among individuals. Perceptions based on social motives, norms and values, especially when these are associated with identification classes, may elicit a common or class response.

Ames's experiments (Ames, 1961) and those of others (Kilpatrick, 1961), although not always employing real life situations or significates, nevertheless used the sign of the significate as the behavioural cue. A sign, for example a picture, has meaning which transcends the limits of the cue itself and reaches the reality of the significate. Experiments by Ames gave support to transactional functionalism;

a rotating trapezoid appeared to subjects as a rectangular window, despite the fact that the retinal image was shown to be trapezoidal (Ames, 1961). Past experiences associated with the rectangular shape of environmental objects at differing viewing points have resulted in the unconscious assumption that the perceived trapezoidal relates to these and is therefore rectangular. This is the most likely significance of the one cue as related to familiarity, experience and purpose of the organism in his/her environment. Similar findings have been observed in experiments employing cue-ambiguous patterns. Points of light, equidistant from the subject yet unequal in brightness intensity, resulted in subjects perceiving the brighter light as nearer. The subjects assumed that the lights were of equal brightness, and therefore, the objectively brighter source was nearer. Subjects responded subjectively from assumptions accumulated from past experiences in similar situations (Kilpatrick, 1961). A binocular rivalry study by Bagby (1957) gave support to the position of the transactional school. Subjects from different cultures perceived those stimuli representing experiences specific to their own culture and environment; familiarity predisposed the subject's resolution of the rivalry situation. Engel (1956), using the rivalry situation, predicted outcomes in line with the degree of familiarity subjects possessed about certain stimuli.

Hastorf and Myro (1959) demonstrated that when the two

monocular stimuli have meaningful content, what is seen by the observer is no longer merely a function of the formal stimulus properties; the contradictory information of the two monocular stimuli operate such that the observer perceives that content which is most meaningful or the most important for him. More importantly Pettigrew, Allport and Barnett (1958) advocate that although familiarity is clearly an important deciding factor in the resolution of binocular cues, responses also are representative of a heightened concern and deep involvement in the issues.

The Toch and Schulte study (1961), Shelley and Toch (1962) study, Berg and Toch (1964) study and the Moore (1966) study all lend further support to transactional functionalism as an explanation of perception, and to the value of binocular rivalry as a means of investigating situational problems. Binocular rivalry as described by Engel (1956) is essentially a stimulus-ambiguity situation; in the present study a stimulus overload was induced and resolution was determined by the probable significances, ego-involvement and familiarity of certain hostile athletic stimuli for members of Little League identification classes.

An Overview of Little League Baseball

The avowed goals of the Little League baseball organization have long been better interpersonal relations, cooperation and goodwill (Little League Handbook and Manual, 1972). Little League baseball offers its participants the

opportunity to get involved in organised sports. The participants are reportedly the major concern of the organization. Overall development of each participant is emphasized. Little League baseball affords boys the opportunity to develop their physical skill, have some fun and get involved socially with other boys.

The avowed goals, however, often conflict with actual goal attainment. Organizations and their personnel lose effectiveness, efficiency and morale when the goals, methods and procedures of professional athletics are confused with those of amateur sport (University of Windsor, [CAR for CSM], 1974). The allstar situation resembles more closely professional athletics than does the league situation. The University of Windsor, [CAR for CSM] (1974) study showed that results established by observation techniques revealed a discrepancy between avowed goals and actual objectives by exposing behaviour associated with demands for excellence and winning; behaviour normally associated with the goals of professional athletics. The demands for excellence and winning are greatly increased in the allstar situation.

Allstar players have traditionally represented the best players in a given community. They are chosen because of their excellence at the physical skill level. Anyone who registers with the Little League baseball organization is assigned to a team in the league situation. At the allstar level only a select few are chosen to play. The

Little League Handbook and Manual (1972) states that every player must play at least some portion of each and every game. At the allstar level this is not the case. The coach of the allstar team is not obligated to play each player in a game; he may choose those players from his squad that he feels will do the best job for him. While losing a game at the league level may decrease a team's standing, it does not eliminate a team from further competition. At the allstar level, loss of a game is much more final; losing a game disqualifies the team from any further play (Little League Handbook and Manual, 1972).

Horwitz (1958) states that hostility is caused by goal blocking and threat. The University of Windsor, [CAR for CSM] (1974) study states that conflict arises from blocking the achievement of ultimate goals or missions of an organization and the incongruity between structures and individuals. It also showed that when the emphasis on winning and excellence was increased at tournament time there is an increase in the observable hostility. (University of Windsor, [CAR for CSM], 1974). At the allstar level, where the emphasis on winning and excellence is at its greatest, it is posited that there will be less goal attainment, and less task fulfillment will be an inevitable outcome.

In the allstar situation the community image is inextricably mingled with team success. The players are

no longer the focus of attention. Their success no longer reflects their own achievements and they become responsible to the organization, to the coaches, to the community and to their sponsors. Subsequently, large portions of the organization's resources are diverted into this limited segment of overall service for its members (University of Windsor, [CAR for CSM], 1974). Their success is rewarded socially by an increase in status and prestige within the community and materially by crests, trophies and banquets. Not only is there goal blocking in the allstar situation, but the degree of threat is heightened for the allstar players; the community, league and sponsors are all dependent upon these players to be successful. An underlying assumption in this study is that in relation to the goal blocking and threat, league and allstar players will be ego-involved with hostility and the intensity of this relationship will be greater for allstar players than for league players.

Albinson (1972) states that in professional athletics there is considerable emphasis placed on beating the opponent; rough play, aggression and the use of any tactics are employed as techniques to gain victory. Bandura (1969) states that children will readily imitate the behaviour of a role model especially if the model's behaviour is rewarded. The highly publicized and overtly rewarded professionals become a comparable role model for Little League players. It is posited that these players become familiar with the

acceptable forms of hostility emphasized by professional athletics. Allstar players will associate more closely with this hostility in that the allstar situation is more similar to the professional situation.

The purpose of this study is to demonstrate the effect of identification classes, with their differential hostility values on binocular resolution and the perception of specific hostile situations, using transactional functionalism as the theoretical model. As a research tool binocular rivalry facilitates investigating perceptual selectivity of hostile athletic stimuli in league and allstar identification classes.

The main research hypothesis of this study is: A subject's identification class will determine perception and resolution of certain hostile athletic stimuli in a binocular rivalry situation.

CHAPTER III METHODOLOGY

Hypothesis

The appropriate operational hypothesis derived from the main research hypothesis is:

1. The perception of hostile athletic stimuli (HAS) will be greater for the experimental group (E) than for the control group (C).

The statistical hypothesis becomes:

1. A) $H_1 : EHAS > CHAS$
B) $H_0 : EHAS = CHAS$

where EHAS is the perception of hostile athletic stimuli for the experimental group and CHAS is the perception of hostile athletic stimuli for the control group.

The Subjects

The source of data for the study derives from a finite universe. Of the eight leagues within Windsor District Five Little League, one was randomly chosen for this study. The population consists of boys aged 11 and 12 within Windsor West's Major Division. One independent sample consisting of 26 boys from this population volunteered as subjects for the research situation. These boys were selected with the help and influence of the convenor, coaches and managers within that division. All boys were tested during league play. When it was known which boys would play allstar, this sample for computational purposes was divided into two groups, one the control group and one the experimental group. During allstar play both groups were tested again. Had any of these boys been familiar with the binocular rivalry technique they would have been

excluded from this study.

Prior to the study proper 52 student volunteers naive to the purpose of the experiment served as judges of the content of the photographic slides. These students were of the same age group as the subjects used in the experiment.

The Test Instrument

This study used a conventional "View-Master" in place of Engel's (1956) modified stereoscope. "View-Master's" operate on the principle of binocular fusion of the separate monocular fields, producing a single fused image. Alterations were made so that the viewer could accommodate two 35 mm. slides in a single viewing exposure.

When the original viewer was split at the seam, the handled disc rotator and the spring were removed. The original guides in the viewer were filed away. Small plastic guides were molded on a black form so as to accommodate the two 35 mm. slides. This form was then inserted between the front and back sections of the viewer. The inserted slides would fit securely between the guides of the mold and thus proper placement of each image in front of its respective monocular field would be ensured.

To facilitate removal of the slides after viewing and to prevent a slide from being inserted too far into the apparatus, two small plastic T's were inserted at the base of the mold. Two optical cubes with a single light source were then attached to the front section. When these modifications were completed the front and back sections

were refitted. To ensure against any outside light source the viewing chambers were wrapped securely with electrician's tape. The entire modified apparatus was then mounted to an adjustable crossbar and attached to a retort stand. The light source was wired to a separate timer and controlled by an on/off switch. Two exposures of this modified apparatus can be seen in Plate I.

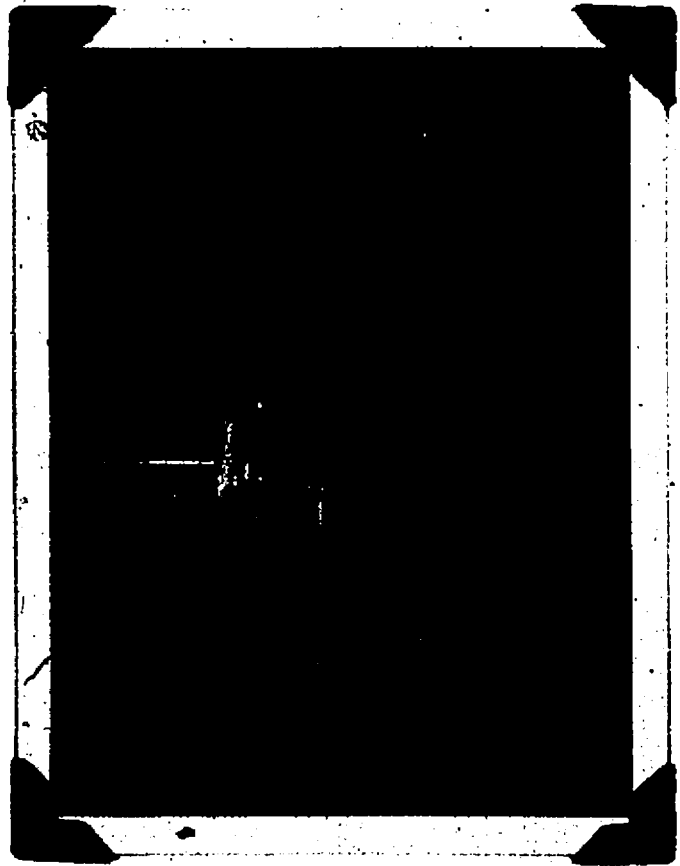
Stimulus Materials

The original 68 slides were selected by the experimenter. The seventeen activities represented were baseball, tennis, football, hockey, riding, basketball, swimming, curling, track and field, skating, lacrosse, dance, surfing, golf, fishing, rodeo and sailing. These activities are not specifically representative of Canadian culture but they do represent a varied cross-section of athletic and sporting events. They were chosen because they are publicized by the mass media, are more prevalent in organizational form and attract both participant and spectator interest.

Operationally a hostile athletic stimulus is one which depicts injury or an attempt to inflict injury. The 68 slides represented a collection of stimuli that were to be judged as either hostile or non-hostile events, situations or scenes. They were judged by a panel of 52 students at Edith Cavell school in Windsor. Appendix D represents the score sheet used by these judges. The slides were numbered and presented in random order. Before the slides

PLATE I

The Apparatus : A Modified View-Master



Front View



Side View

were projected the judges were told:

"You are going to see 38 activity slides, on the score sheet provided you see the numbers from 1 to 38. Next to each number is a column marked H for hostile and a column marked NH for non-hostile. Hostility is injury or an attempt to inflict injury. When you look at the slide, put a mark next to the number for that slide when you have decided for yourself whether it is hostile or non-hostile."

The slides were shown slowly and each number was called for each slide. All slides were shown twice.

The next step in the selection of slides to be used for this study was a tally of the judge's scores. In all, 20 hostile slides and 30 non-hostile slides received a 75% majority of support. Then the slides were paired according to activities so that a preference toward an activity would be deterred in the binocular rivalry situation. Eventually, 7 pairs of slides were found to appropriately match.

The final decision for selection was based on content similarity, picture quality and brightness. Every attempt was made to reduce differences that might influence choice in the binocular rivalry situation. All slides were black and white so that no colour preference would be detected. One pair of slides was intentionally matched as lie slides. Both pictures presented to the monocular fields were hostile in nature. Any subject not identifying that pair as hostile would be excluded from the experiment. The final activities represented were surfing, baseball, rodeo, football, hockey and tennis. Final choices and their pairing arrangements

are illustrated in Plate II.

Illustration 1 outlines the actual presentation format. For pair 1 the hostile surfing slide was presented to the left eye field of the observer. The right eye field for this pair then represented the non-hostile surfing slide. In pair 2 the non-hostile baseball slide was presented to the left eye field while the right eye field was exposed to the hostile baseball slide. In pair 3 the order was again reversed. To control for any right or left eye dominance effect the number of hostile or non-hostile slides shown to each eye was equated as best as possible. All slides were kept in a small file box and could be removed or returned without disturbing the original presentation format.

Pair 1 is identical to pair 3 except that the order of presentation has been reversed. For pair 1 the left eye field sees the hostile surfing slide while the right eye field sees the non-hostile surfing slide and for pair 3 the left eye field sees the non-hostile surfing slide while the right eye field sees the hostile surfing slide. For (1/8), (2/12), (4/10) and (6/9) a counterbalance design was used. While this method helped to control for any eye dominance effect it also provided a measure of individual response consistency.

PLATE II

The Eight Paired Stimuli as Numbered for Presentation, their Respective Monocular Fields and Order.

Monocular Fields

Left Eye



Surfing (H)

Pair 1

Right Eye



Surfing (NH)

PLATE II - Continued

Right Eye



Baseball₁ (H)

Left Eye



Baseball₁ (NH)
Pair 2

PLATE II - Continued

Left Eye



Rodeo (H)
Pair 3

Right Eye



Rodeo (NH)

PLATE II - Continued

Right Eye



Football (H)

Left Eye



Football (NH)

Pair 4

PLATE II - Continued

Left Eye



Hockey (NH)

Pair 5

Right Eye



Hockey (H)

PLATE II - Continued

Left Eye



Right Eye



Baseball (H)

Baseball (NH)

Pair 6

PLATE II - Continued

Left Eye



Hockey (H)
Pair 7 Lie Slides

Right Eye



Hockey (H)

PLATE II - Continued

Left Eye



Tennis (NH)

Pair 17

Right Eye



Tennis (H)

ILLUSTRATION 1

Presentation Format Showing Counterbalanced Stimulus Order for the Eyes and Reversed Stimulus Order for Pairs (1/8), (2/12), (4/10) and (6/9)

MONOCULAR FIELD

Pair	Left Eye	Right Eye
1	Surfing-(H)	Surfing-(NH)
2	Baseball-(NH)	Baseball-(H)
3	Rodeo-(H)	Rodeo-(NH)
4	Football-(NH)	Football-(H)
5	Hockey-(NH)	Hockey-(H)
6	Baseball ₂ -(H)	Baseball ₂ -(NH)
7	Hockey-(H) Lie Slide	Hockey-(H)
8	Surfing-(NH)	Surfing-(H)
9	Baseball ₂ -(NH)	Baseball ₂ -(H)
10	Football-(H)	Football-(NH)
11	Tennis-(NH)	Tennis-(H)
12	Baseball-(H)	Baseball-(NH)

As a control for constant error from the presentation order format the schedule of presentation was rotated for each subject. Subject 1's first trial was pair 1 and the last trial was pair 12. Subject 2's first trial was pair 2 and the last trial was pair 1. Subject 3's first trial was pair 3 and the last trial was pair 2. This procedure was carried out for all subjects according to their position in the testing order.

Each subject viewed the various pairs presented via the stereoscope in a predetermined sequence. While Plate II indicates the paired images, Illustration 1 shows the

actual presentation format of the stimuli arranged in their counterbalanced design. The viewing exposure for each trial was 1.0 seconds. This short exposure time helped to eliminate alternation or confusion of images (Gregory, 1966). The verbal responses of the subjects were recorded on a score sheet shown in Appendix E.

The independent variable was the subject's league or allstar identification class. The dependent variable was the subject's perception of a dominant image.

Testing Procedure

A small research room furnished with a desk, a table, a swivel stool and a few chairs was used as the testing situation. The file cards were numbered and the appropriate slides placed behind them. The slides were marked with an X in the appropriate left or right corner denoting their eventual insertion position for the apparatus.

Each subject was tested individually. One subject at a time was received in the testing situation. He was seated on the swivel stool. The slides in the file box were turned away so the subject could not see them. The subject was then briefed as a participant in the visual perception experiment. By nature each subject was tested twice so a cover story as to the purpose of the experiment was given. The subjects were under the impression that this study was designed to measure eye dominance. A short visual test of eye dominance was given to each subject.

This helped to convince the subjects that the cover story was true and the scores were actually used later to determine any eye dominance effect.

A familiarity trial was given which employed a large black circle and a small white circle as stimuli. In the binocular rivalry situation the two monocular fields were superimposed, the small white circle appeared to be within the large black circle. The subject rested his eyes against the viewer with his hands resting at the base of the stand. This position can be seen in Plate III. Each subject was reminded to keep both eyes open during the one second viewing exposure. Initially the subject turned his back on the apparatus while the experimenter inserted the slides. This procedure prevented many subjects from detecting that two separate slides were being inserted for one trial and it prevented the subject from viewing any slide before the actual test situation.

Subjects were told that the viewing exposure for each subsequent trial would be 1.0 seconds and after viewing they were to describe as best they could what was happening in the picture. The subjects were told they would see activity slides and that it was not necessary to identify the activity unless they felt that reporting it would help them to describe the pictures. The subjects were assured that there were no right or wrong answers but that their responses would depend upon their eye dominance. This

PLATE III The Testing Situation



procedure ensured that subjects would keep both eyes open during testing.

After this, the experiment began. The subject turned away while the experimenter inserted the appropriate pair of slides. After each viewing exposure the subject was asked "What is happening in the picture?" If the subject was not sure what he saw he was allowed a second viewing with the same viewing exposure time (Shelley and Toch, 1962). The subject turned away from the apparatus while the slides were removed. The subject's responses were recorded on the basis of the slide that the subject described. At the end of the 12 pair trial period each subject was asked not to reveal the content he had perceived to any of the other subjects.

At retest (T_2) the familiarity test was not readministered but the instructions were redescribed to each subject. Again the subjects went through the series of 12 trials and the responses were recorded. Finally the subjects were asked again not to reveal the content perceived to any of the other subjects.

Data Processing

The verbal responses describing the stimuli perceived were quantified as frequency tabulations and summarized in graph form. There were two categories for the stimuli perceived, one the (H) or hostile scores and the other the (NH) or non-hostile scores. The nominal scale of measurement was most appropriate for the data provided by this study.

The hypothesis: The perception of hostile athletic stimuli will be greater for the experimental group than for the control group was tested by non-parametric procedures.

A sign test based on the binomial expansion was applied to response differences between trials. A chi square test of significance for two independent samples was applied to response differences between classes. A chi square test of independence was used to determine if an eye dominance effect biased resolution and the perception of the stimuli. The chi square test of significance was also used to determine the individual response consistency for pairs (1/8), (2/12), (4/10) and (6/9). The contingency coefficient (C) was employed to test the association between the variables of identification class and response..

CHAPTER IV RESULTS AND DISCUSSION

Results

As a control for any eye dominance effect, the order of presentation for some stimuli was reversed and both monocular fields were partially exposed to hostile and non-hostile stimuli. Each subject was also tested for any eye dominance effect. This test procedure was elaborated in the Methodology section.

In response to the visual dominance test each subject was scored as right eye dominant (Red), left eye dominant (Led), or non-eye dominant (Ned). These scores are available in Appendix A. A chi square technique was used to determine if the eye dominance effect upon resolution exceeded chance expectations. Table 1 compares the eye dominant and non-eye dominant groups in the chi square test of independence.

TABLE 1

Association Between Response and
Eye Dominance Effect

Class (N= 13)	League (<u>Ss</u>)	Allstar (<u>Ss</u>)	χ^2	p.
Eye Dominant	7	9		
Non-Eye Dominant	6	4		
For all cases df= 1			2.00	n.s.

For the control group there were 7 eye dominant and 6 non-eye dominant league Ss; for the experimental group there were 9 eye dominant and 4 non-eye dominant allstar Ss. The resulting $\chi^2 = 2.00$ is not significant. Both league and allstar classes' responses may be assumed to be independent of monocular field dominance since no significant differences exist between the eye dominant and non-eye dominant categories.

This lack of significance between league and allstar classes indicates that eye dominance was not a factor affecting binocular resolution in this study.

In Appendix B the frequency scores over trials for all groups are available. These scores are represented graphically in Illustration 2, which consists of distinct graphs labelled 2.1, 2.2, 2.3, and 2.4 respectively. The ordinate axis on each graph represents a trial number for which the data was accumulated. The abscissa represents the Ss responses, either hostile or non-hostile. The hostile responses are inversely proportional to the non-hostile responses. If on any given trial for which 13 Ss responded, a score of 9 Ss responding hostile would be the same as 4 Ss responding non-hostile. Graph 2.1 is a comparison of scores for the control group at T_1 and the experimental group at T_1 . Graph 2.2 is a comparison of scores for the control group at T_1 and the control group at T_2 . Graph 2.3 is a comparison of scores for the experimental group at T_1 and the experimental group at T_2 . Graph 2.4 is a comparison of scores for the control group at T_2 and the experimental group at T_2 . The comparative results of the scores exemplified by Illustration 2 are summarized in Table 2. The sign test based on the binomial expansion was used to determine if the perception of hostile athletic stimuli was greater for the experimental group than for the control group.

Illustration 2- Graphic Representation of Response Frequencies for Trials 1 Through 12, excluding 7.

Hostile Responses

Non-Hostile Responses

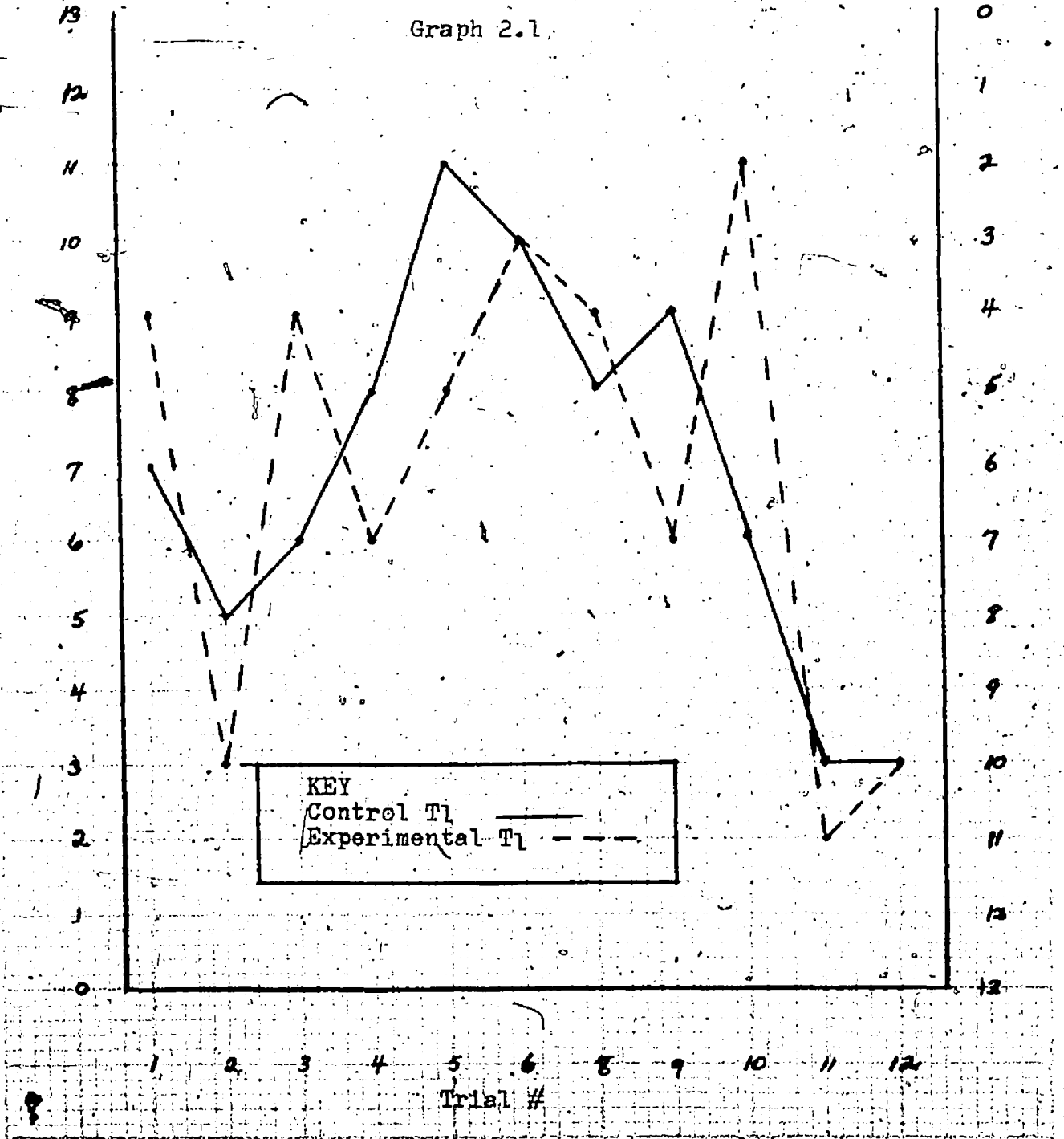


Illustration 2-Continued

Graph 2.2

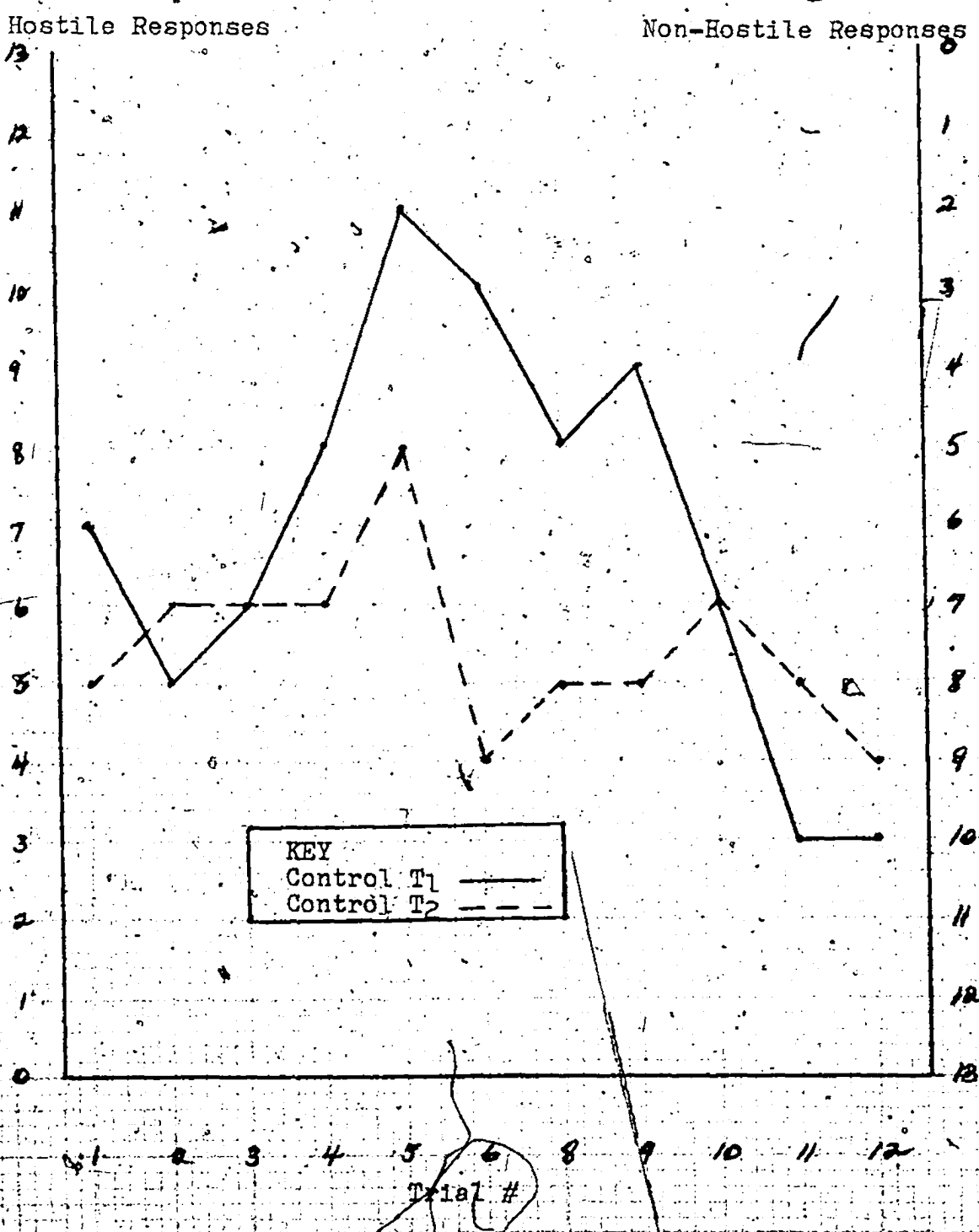


Illustration 2--Continued

Graph 2.3

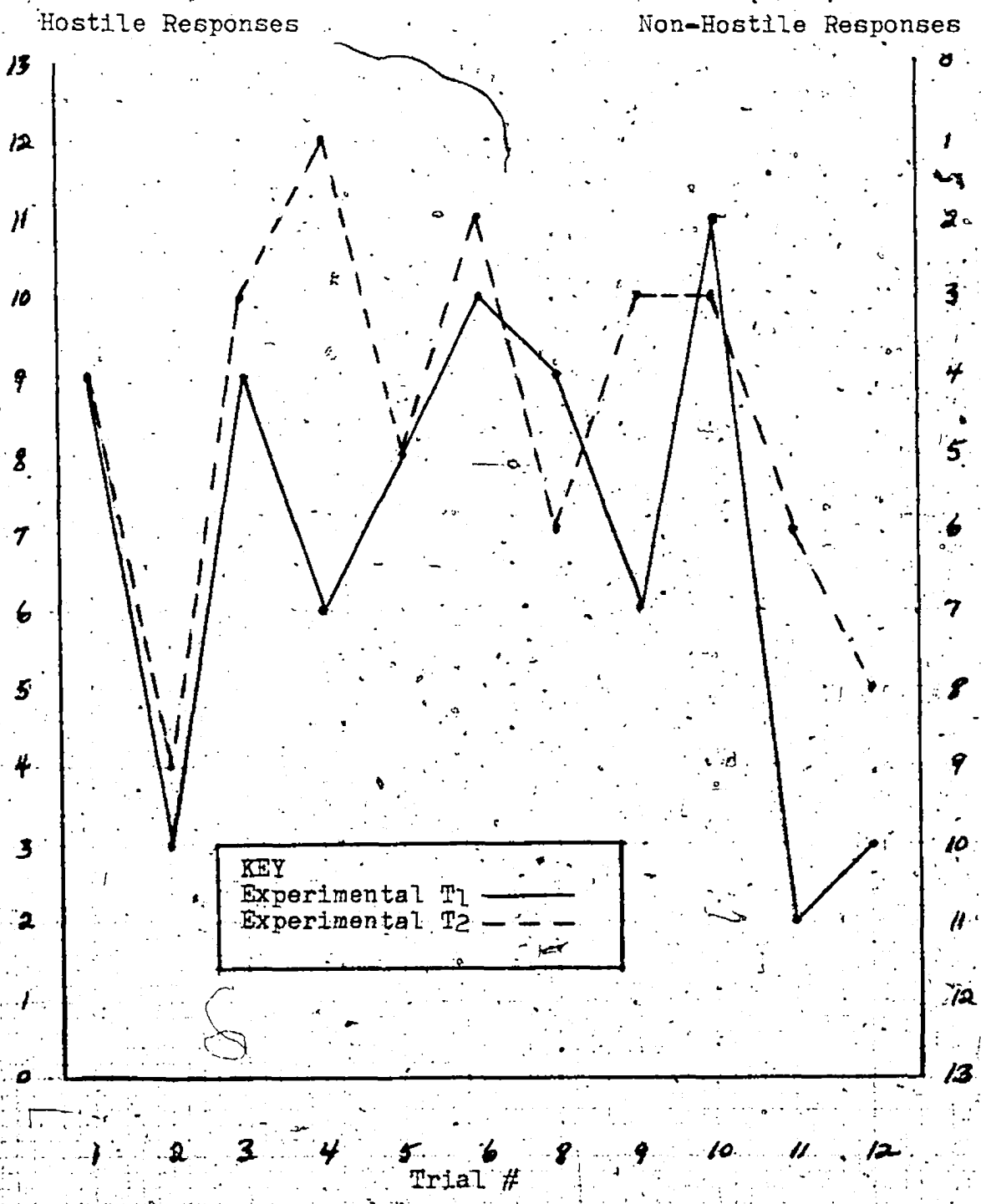


Illustration 2- Continued

Graph 2.4

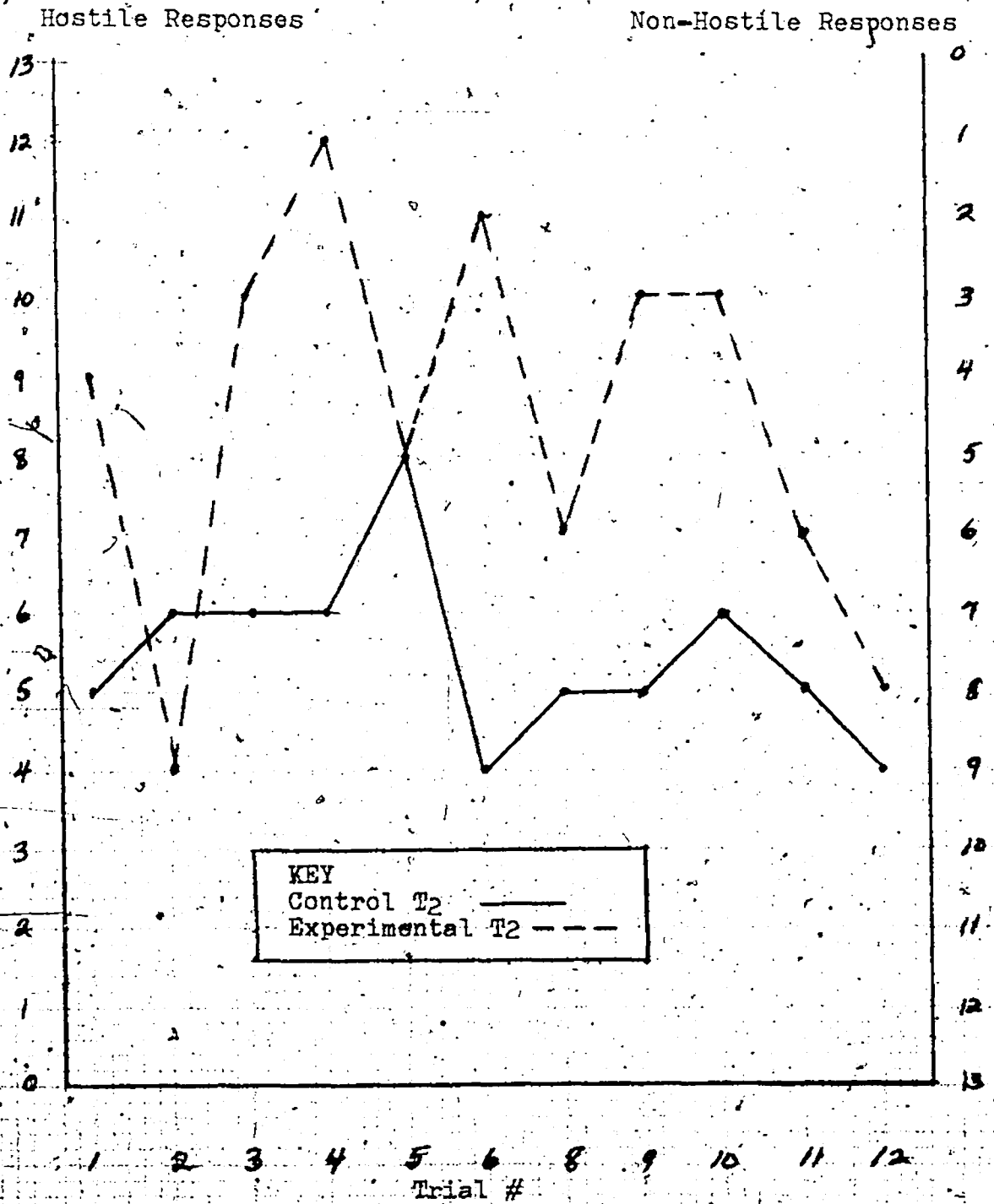


TABLE 2

Sign Test Based On The Binomial Expansion

Trial	(H) Scores For Groups				$(T_2 - T_1)$		Predictions
	CT ₁	CT ₂	ET ₁	ET ₂	C	E	Observed
1	7	5	9	9	-2	0	E>C
2	5	6	3	4	1	1	E=C
3	6	6	9	10	0	1	E>C
4	8	6	6	12	-2	0	E>C
5	11	8	8	8	-3	0	E>C
6	10	4	10	11	-1	1	E>C
8	8	5	9	7	-3	-2	E>C
9	9	5	8	10	-4	4	E>C
10	6	6	11	10	0	-1	E<C
11	3	5	2	7	2	5	E>C
12	3	4	3	5	1	2	E>C

The experimental group perceived hostile athletic stimuli 9½ times more than the control group. Based on the binomial expansion for 11 trials this difference is significant at the .01 level of probability. Thus for the experimental (allstar) group the perception of hostile athletic stimuli is significantly greater than for the control (league) group.

Table 3 reveals how the 13 Ss from each identification class are distributed on the basis of their response

frequencies for all the hostile and non-hostile athletic stimuli. By summing the number of Ss who perceive a given hostile athletic stimulus and comparing this total with the number of Ss not perceiving the same image the significance of response differences for each activity pair was calculated.

TABLE 3

Differential Class Responses to Athletic Stimuli

Stimulus	Class—	Subject Classification		χ^2	p.
		(H)	(NH)		
Surfing	CT ₁	15	11	.616	n.s.
	ET ₁	18	8	3.846	.05
	CT ₂	10	16	1.384	n.s.
	ET ₂	16	10	1.384	n.s.
Baseball ₁	CT ₁	8	18	3.846	.05
	ET ₁	6	20	7.538	.01
	CT ₂	10	16	1.384	n.s.
	ET ₂	9	17	2.462	n.s.
Rodeo	CT ₁	6	7	.078	n.s.
	ET ₁	9	4	.770	n.s.
	CT ₂	6	7	.078	n.s.
	ET ₂	10	3	3.768	n.s.
Football	CT ₁	14	12	.154	n.s.
	ET ₁	17	9	2.462	n.s.
	CT ₂	12	14	.154	n.s.
	ET ₂	22	4	12.462	.01
Hockey	CT ₁	11	2	6.230	.05
	ET ₁	8	5	.692	n.s.
	CT ₂	8	5	.692	n.s.
	ET ₂	8	5	.692	n.s.
Baseball ₂	CT ₁	19	7	5.538	.05
	ET ₁	16	10	1.384	n.s.
	CT ₂	9	17	2.462	n.s.
	ET ₂	21	5	9.846	.01
Tennis	CT ₁	3	10	3.768	n.s.
	ET ₁	2	11	6.230	.05
	CT ₂	5	8	.692	n.s.
	ET ₂	7	6	.078	n.s.

For all cases df= 1

For the control group, at test time (T_1), Table 3 shows that for three pairs of slides there were significant differences in the perception of hostile or non-hostile athletic stimuli. The control group significantly perceived the non-hostile aspect of baseball pair 1, the hostile aspect of hockey and the hostile aspect of baseball pair 2.

For the control group at retest (T_2) there were no significant differences in the perception of hostile or non-hostile athletic stimuli for any of the pairs of slides.

At test time (T_1) the experimental group perceived significant differences for three pairs of slides. They significantly perceived the hostile aspect of surfing, the non-hostile aspect of baseball pair 1 and the non-hostile aspect of tennis.

For the experimental group at retest (T_2) it can be seen from Table 3 that a significant difference was perceived in the hostile aspect of the football and baseball pair 2 stimuli.

Table 4 presents the significance of intraclass response differences. According to the number of choices made Ss were classified as hostile (H), undecided (U) or non-hostile (NH). Hostile Ss were those perceiving 7-11 hostile athletic stimuli; undecided Ss perceived 5-6 hostile or non-hostile athletic stimuli; and non-hostile Ss perceived 7-11 non-hostile athletic stimuli.

Appendix C shows the actual response distribution.

for the scores in Table 4.

TABLE 4

Contingency Coefficient Between Identification Class
and Dominant Stimulus Response

Class(N= 26)	Subject Classification (T ₁)			Total χ^2	p.	
	(H)	(U)	(NH)			
Control (League)	6	2	5	13		
Experimental (League)	3	7	3	13		
	9	9	8	n=26	4.41 n.s.	
Class (N=26)	Subject Classification (T ₂)			Total χ^2	p.	C
	(H)	(U)	(NH)			
Control (League)	2	5	6	13		
Experimental (Allstar)	9	4	0	13		
	11	9	6	n=26	11.22	.01 .51*

For all cases df=2; (H)= Hostile (U)= Undecided, (NH)= Non-Hostile; *significant

At test time (T₁) in the response categories there were 9 hostile Ss, 9 undecided Ss and 8 non-hostile Ss. These scores resulted in a non-significant $\chi^2 = 4.41$. There were no significant differences in the amount of perceived hostility between the control group and the experimental group.

At retest (T₂) in the response categories there were significantly more hostile Ss than undecided or non-hostile Ss. The responses of 11 hostile Ss, 9 undecided Ss and 6

non-hostile Ss resulted in a significant (.01) chi square of 11.22. There were significant differences in the amount of perceived hostility between the control group and the experimental group. This difference when investigated by a contingency coefficient showed a value of .51 which is significant beyond chance. The contingency coefficient (C), $C = \sqrt{.51}$, is a function of chi square. With the chi square significant at the .01 level of probability, the value of C is significantly greater than 0, revealing an association between one's identification class and the dominant stimulus reported (Edwards; 1961). These results confirm the association between identification class differences and dominant stimulus response categories.

Subjects were exposed to stimulus pairs twice. The second viewing was a reversed eye order presentation which, as discussed in the Methodology section, provided a control for eye dominance. It also permitted an analysis of subject response consistency to identical items presented to the right and left monocular fields. The relationship between the first viewing responses (For items 1, 2, 4, 6) and those of the second viewing (items 8, 12, 10, 9) was investigated and is presented in Table 5.

Since each item pair was physically identical (1/8, 2/12, 4/10, 6/9), a subject was scored as consistent if he responded H/H or NH/NH. Similarly, an inconsistent subject was one who responded either H/NH or NH/H on the

TABLE 5

Subject Response Consistency on Identical
Stimulus Item Pairs

Experimental Group (Allstar Class)	Consistent	Inconsistent	χ^2	p.
1/8	18	8	3.846	.05
2/12	19	7	5.538	.05
4/10	15	11	.616	n.s.
6/9	21	5	9.846	.01

Control Group (League Class)	Consistent	Inconsistent	χ^2	p.
1/8	25	1	22.154	.01
2/12	22	4	12.462	.01
4/10	24	2	18.616	.01
6/9	20	6	7.538	.01

For all classes $df = 1$

stimulus pair. The control group was significantly consistent for all item pairs. The experimental group was significantly consistent for all items except 4/10.

The hostile or non-hostile stimuli used in the experiment derived from the judgements made by a panel of 52 judges. A total of 68 potentially hostile or non-hostile athletic images were presented to the panel. Table 6 shows those images that received a 75% majority or hostile or non-hostile responses.

The nature of the binocular rivalry experiment necessitated equating physical qualities of hostile athletic stimuli with those of non-hostile athletic stimuli. From the images chosen in Table 6, only those with non-differential physical properties were matched. Thus

perceptual dominance was not influenced by any particularly outstanding characteristics. The actual matched pairs are exhibited in the Methodology section, Plate II.

TABLE 6

Determination of Stimuli

Image	Response (H)	Image	Response (NH)
Football	48	Surfing	48*
Tennis	47	Baseball	45
Swimming	41	Hockey	44*
Hockey	48*	Football	43
Sailing	46	Basketball	43
Baseball	45*	Track & Field	44
Basketball	44	Swimming	45
Baseball	40	Tennis	51*
Rodeo	47*	Skating	46
Football	45	Dance	47
Surfing	46*	Hockey	44
Baseball	47	Track & Field	44
Hockey	45	Rodeo	45*
Lacrosse	50	Curling	50
Football	46*	Golf	48
Track & Field	41	Fishing	43
Baseball	52*	Surfing	46
Hockey	49*	Basketball	42
Baseball	42	Riding	48
Hockey	50*	Football	44*

TABLE 6- Continued

Image	Response (H)	Image	Response (NH)
		Tennis	47
		Baseball	44*
		Hockey	40
		Baseball	48
		Riding	49
		Football	47
		Swimming	46
		Dance	51
		Baseball	50*
		Football	43

* - images included on the basis of similar characteristics

Discussion

The research hypothesis was confirmed by the results. The perception of hostile athletic stimuli was greater for the experimental group than for the control group. Variance in results due to an eye dominance effect was shown to be absent, enabling the hypothesis of independence between eye dominance and response to be accepted. That is, the tendency for one of the Ss two monocular fields to exert visual dominance did not contribute significantly to perceptual resolution and dominance of images. Other variables such as mood and set, probably contributed to selections of image dominance. The contingency coefficient based upon a significant chi square ($p = .01$), confirmed that a respondent's identification class and his perception and resolution of dominant images were associated. Hostility in a dominant athletic image is associated with the allstar identification class; non-hostility in a dominant athletic image is associated with the league identification class.

At test time (T_1) the control group and the experimental group were made up of boys in the league situation. Campbell and Stanley (1963) state :

"the more similar the experimental and control groups are in their recruitment and the more similarity is revealed in scores in the pretest, the more effective this control becomes."

The subjects were equated by the coaches in terms of physical abilities, maturational level and achievement orientation. Their comparative scores in the pretest (T_1) were very similar. The identification class differences reflected at retest (T_2) can only be attributed to the treatment effect allstar.

The boys who played allstar became more ego-involved with their situation. Losing a game was no longer an acceptable social norm in that loss of a game would disqualify the team from any further play (Little League Baseball Handbook and Manual, 1972). As Sherif and Sherif (1969) state "for persons highly involved in an issue the threshold of acceptance for relevant stimuli is heightened while the threshold of rejection is lowered." The allstar situation provided relevant cues that influenced the threshold of acceptance for the hostile athletic stimuli. Familiarity, with the intrinsic and extrinsic rewards associated with success, and the punishments and negative sanctions associated with failure, added to this perceptual framework of recognition. The hostile athletic stimuli transmitted relevant meaning to the allstar identification class.

What an individual is and what he feels himself to be are largely conditioned by the particular constellation of values he learns and that become a part of him (Sherif and Cantril, 1947). Conflict within the Little League organization arises from incongruity between individual ideas and structures (University of Windsor, [CAR for CSM], 1974). The Little League structure creates conflict when it permits two separate and different systems to operate; one, the league, reflects the amateur sport dimension and the other, the allstar, reflects the professional athletic dimension. These two divergent approaches cause stress. Goals are not achieved and tasks remain unfulfilled (University of Windsor, [CAR for CSM], 1974). Not only is this diverse policy dysfunctional and ineffective for the organization but it places undue strain upon its participants. This combined goal blocking and threat component provides individuals with specific internalized values and significates. In this case it provided the allstar identification class the necessary cues to perceive significantly more hostile athletic stimuli than non-hostile athletic stimuli. The league identification class, only associated with league play, did not perceive significantly more hostile athletic stimuli than non-hostile athletic stimuli.

Transactional functionalism interprets perception according to the familiarity, significance and meaning of cues (Kilpatrick, 1961). Significant stimuli are readily

perceived in stimulus-ambiguity situations. Both Engel (1956) and Bagby (1957) established how such meaningful cues determined the dominant stimulus responses during binocular rivalry. Pettigrew, Allport and Barnett (1958) explained that responses represented a heightened concern and deep involvement in relevant issues. They were content to establish the fact that cultural memberships, certain particular expectancies and subjective attitudes play a part in the resolution of binocular rivalry. In 1959 Hastorf and Myro concluded that when two monocular stimuli had definite meaningful content, what was observed was no longer a function merely of the formal stimulus properties. An individual resolves binocular rivalry in such a way as to perceive that content which is most meaningful to him.

All of these studies support the notion that in this case hostile athletic content served as meaningful, familiar cues for members of the allstar identification class. Allstar subjects selected hostile athletic pictures as dominant over non-hostile athletic pictures. League subjects did not discriminate between the two types (H, NH) of pictures in this way.

Many studies have recognised that sports involvement is an agency for socialization (Helanko, 1957, Luchen, 1967, Dunlap, 1971). The societal-functionalism model whereby an occurrence does not become an event until some significance is given to it clearly exemplifies this. A societal event

is the sharing of significances (Mastorf and Cantril, 1967) and social situations are learned societal events within sports participation. In this study social learning at the league and allstar levels are shown to be important aspects of this process.

The allstar experience is different from the league experience. The organization's approach to the allstar situation shifts to the professional athletic dimension. More monies are appropriated for the allstar situation and successful participation is expected (University of Windsor, [CAR for CSM], 1974). Role modelling becomes a fundamental manifestation of performance (Bandura, 1969). If the allstar situation is to be treated like that of professional athletics, it is posited that allstar players will role model professional athletes. The most successful professional athletes are given much recognition, prestige and material gains. Allstar players recognise that if they are successful, social and material gains will be awarded them. Failure then is to be avoided at all costs and winning or success becomes the major desirable goal.

The emphasis, at the allstar level, shifts from the players to the primary ways of the coaches and managers and to the ambitions of the parents and spectators (University of Windsor, [CAR for CSM], 1974). Winning becomes an important necessary condition. Social reinforcers such as in attention and recognition, social approval

and material rewards are made available to successful allstar players. The goals for the allstar become less attainable and more easily blocked. The community as a whole is now a threat to any failure at this level. Perceptions about hostility are easily created from the dimensions of these new experiences.

At the league level, excluding the play-off situation, winning is less emphasized and participation of players is required by league rules (Little League baseball Handbook and Manual, 1972). The goals for league players are more attainable and disappointments are created mainly by the players themselves. There is much less to gain for community satisfaction and much more to gain for personal satisfaction. Relevant cues concerning hostility are less likely to be available to league players. The league identification class did in fact perceive no significant differences between the hostile athletic stimuli and the non-hostile athletic stimuli.

Within the theoretical model socialization builds up "assumptions" associated with past experiences from participation at the allstar level. The significance of allstar participation within the allstar identification class was demonstrated by this classes' perception of the hostile athletic stimuli.

Binocular rivalry presents a disguised situation and thus eliminates responses felt to be desirable by the

subject for the experimenter. This indirect method is valuable in attitude assessment. Response to the stimulus-ambiguity situation is both spontaneous and undistorted. Internal factors, significant in psychological patterning, are best revealed through such techniques (Sherif and Sherif, 1969).

Overall, results verified the hypothesis that allstar identification class resolves binocular rivalry by perceiving hostile athletic stimuli as dominant. In this stimulus-ambiguity situation league players perceived no difference between hostile athletic stimuli and non-hostile athletic stimuli. In an exactly similar stimulus situation, children who were exposed to league play for the same period of time as children who were exposed to allstar play, perceived no differences in hostile or non-hostile athletic stimuli. Such children have clearly not been sensitized or habituated to hostility in their sport situation. The transactional functionalism model of perceptual response is capable of explaining these findings in terms of sports activity and consequent identification class differences. Studies that are to follow should essentially apply these findings to a more complex analysis of youth sport organizations.

CHAPTER V SUMMARY AND CONCLUSIONS

Summary

The University of Windsor, [CAR for CSM] (1974) study, concentrating on Little League involvement, has confirmed the postulate that the allstar experience is dissimilar to the league experience in that the allstar situation, by reflecting the professional athletic dimension, is ineffective and inefficient for organizational functioning and dysfunctional for its participants. These conflicting goals were identified by audio interviews and written opinionnaires. Research on involvement and values in this study found that hostility in sports was a significant aspect of the allstar subculture. The same was not true however for league players.

In Canadian society research into the area of the role or function of hostility in sports or athletics is just beginning to surface. By applying involvement-response results the main research hypothesis of this present study was formulated: A subject's identification class will determine perception and resolution of certain hostile athletic stimuli in a binocular rivalry situation. Allstar and league perceptual selectivity, with hostile athletic slides serving as stimulus cues, was tested. Each league and allstar identification class was represented by thirteen volunteer subjects. These subjects were divided into the control group and the experimental group. They were tested before and after the treatment condition allstar. Parents, coaches, managers and Little League administrators are also important in the area of hostility in sports and athletics.

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Their involvement and response class differences would have contributed to the understanding of the role or function or hostility in sports had they been considered in the present study.

Six hostile athletic stimuli (surfing, baseball, rodeo, football, hockey and tennis) were paired with six non-hostile athletic stimuli of the same activities. Hostile or non-hostile athletic stimuli were previously determined by judges. Each stimulus pair was viewed through a modified stereoscope inducing a binocular rivalry situation. A modified "View-Master" served as the stereoscope. Eye dominance was tested and any eye dominance effect was controlled for by repeated trials presentation and order of stimuli presentation to the right and left monocular fields. Verbal responses by subjects were recorded for each stimulus pair indicating binocular resolution and stimulus dominance.

Perceptual selectivity functioned in determining hostile or non-hostile athletic stimulus dominance. Results were interpreted from principles of transactional functionalism. Significant past experiences which direct the perception of objects, events and situations is the basic propositional fundamental of this theoretical model. Socialization and structural-functionalism were assessed in light of the results and identification class differences that were detected. Analysis of the results indicated that the

allstar identification class perceived hostile athletic stimuli in an either/or choice situation significantly more times than did the league identification class.

This outcome was attributed to allstar familiarity and ego-involvement with hostility in sports and athletics, and the relative meaningful perceptual cues of hostile athletic stimuli for the allstar identification class. The inference that hostile athletic stimuli lacked significance for the league identification class was supported by the non-significant differences in the perception of hostile or non-hostile athletic stimuli for that class.

Conclusions

Conclusions based upon data analysis and interpretation are as follows:

1. At test time (T_1) in the binocular rivalry situation, the control (league) group and the experimental (league) group were not significantly different in their perception of hostile athletic stimuli; they were of the same identification class. The control group and the experimental group were similar in achievement orientation, maturational level and physical skill capabilities. Both groups were exposed to the league situation where the amateur sport dimension is emphasized (University of Windsor, [CAR for CSM], 1974). At this level cooperation and individual fulfillment are the goals to be attained. As Jersild (1960) stated, an atmosphere of genuine

cooperation is likely to be more relaxed, friendly and pleasant than an atmosphere of intense competition.

At the league level there are fewer limitations placed on who is eligible to play; also losing a game at this level does not disqualify a team from competing. Helanko's study (1957) established sport's function as an agency for the socialization of males. Through participation, cultural norms designating behaviour patterns emerge and become incorporated into the male repertory. The league players were socialized to the league situation, which provided less goal blocking and less threat so that the perceptual set of a league player was less receptive to hostile athletic cues.

2. At retest (T_2) in the binocular rivalry situation, the control (league) group and the experimental (allstar) group were significantly different in their perception of hostile athletic stimuli; they were of different identification classes. The experimental group was exposed to the treatment condition allstar. The perceptual dominance choice of hostile athletic stimuli in the stimulus overload situation confirms allstar ego-involvement (Sherif and Sherif, 1969) with the allstar subculture. Varied past experiences in the allstar situation persisted in terms of socio-psychological significances. There are the transactional "assumptions" governing perception. As a societal structure, sports involvement

is a means for male actualization of societal expectations. The professional athletic dimension is emphasized by the Little League organization for the allstar level. The societal expectations are very high in terms of success for allstar players. Excellence and winning are stressed as attainable goals (University of Windsor; [CAR for CSM], 1974). The intense nature of the competition for allstar players interferes with this goal attainment. With the league and the community dependent upon the allstar team for a successful image, failure and the fear of failure become very threatening variables. These circumstances give rise to increased tensions and hostility. The allstar players are also familiar with the forms of hostility so readily acceptable for professional athletes. These highly regarded and overtly rewarded professionals provide a model that the allstar players will readily imitate (Bandura, 1969). The relevant meaning ascribed to the hostile athletic stimuli in this study derives from the allstar players familiarity and ego-involvement with accepted forms of hostility. The allstar situation provides allstar players with relevant significances regarding the perception of hostility. The league players who were not exposed to this treatment condition allstar did not assert significances to the hostile athletic stimuli.

3. Variables of dominant response and identification

class were significantly associated: a contingency coefficient of .51 was significant at the 0.01 level.

Hostile athletic responses and the allstar identification class were significantly related. The lack of significance for the league identification class shows that the league players were not associated with hostile or non-hostile athletic responses.

4. Active involvement in the allstar situation was not the sole determinant of a hostile perceptual dominance for subjects. (See Table 3) Several of the league subjects at T_1 perceived hostile athletic stimuli as dominant. Determination of resolution and perceptual dominance also involves meaning content attached to hostility. While the goals for league players are more attainable some no doubt are unfulfilled. The league situation is not free from hostile interpretation but the lack of significance found in the overall results indicate that the hostility framework is of a less intense nature.

Recommendations

The modification of an electric timer to the light source for the modified stereoscope alleviated two problems that are commonly experienced in other binocular rivalry studies. By controlling and limiting the viewing exposure time alternation was controlled. It was also possible to

retain an element of disguise in the study. Subjects were unaware of the true purposes of the study and so did not elicit responses they felt were desirable to the experimenter but were able to give responses that were spontaneous and representative of their perceptual set.

Verbal descriptions are often difficult to interpret. A more elaborate technique of response indication should be investigated. Studies in binocular rivalry have shown that possibly some colours or non-descript markings exist that would not influence response differentiations (Engel, 1958). By discovering these, a subject might respond to the dominant stimulus by identifying one of these non-essential variables. Such a technique would be valuable to binocular rivalry studies.

Data on attitudes and identification class preferences concerning hostility in sports can be supplemented by post test interviews or attitude opinionnaires. Inference regarding the degree of ego-involvement and familiarity can then be drawn from this information. This type of analysis would show how extensive externally socialized variables are in influencing perceptual set.

Having goals in the allstar situation that are different from the avowed goals in the Little League Constitution is organizationally dysfunctional for Little League Baseball. This atmosphere also places undue strain upon its participants. Perhaps it is not the structure that is at

fault but the people who are involved with the program. Further research is definitely needed to decide whether the allstar situation should be discontinued or at least to decide what necessary changes would correct the problems that exist. Studies have shown that violence perception was linearly related to age (Moore, 1966). Aggression expression becomes socialized with age and directed toward culturally reinforced avenues. If the allstar situation is to remain unaltered, research would at least show what age group would be least affected by the ordeal of the present situation. The allstar program then would only need to be discontinued for the affected age groups.

The present study showed that the allstar situation provided allstar players with the perceptual set to recognise hostile athletic stimuli in the binocular rivalry situation. There remains the question as to how lasting an effect this is. It is suggested that future studies make their investigations more longitudinal in nature.

APPENDICES

1

1

APPENDIX A

Response Distribution for
Eye Dominance Effect

<u>Control Group (Ss)</u>	<u>Experimental Group (Ss)</u>
1. Red	1. Ned
2. Ned	2. Ned
3. Ned	3. Red
4. Red	4. Red
5. Ned	5. Led
6. Ned	6. Red
7. Ned	7. Ned
8. Ned	8. Led
9. Red	9. Red
10. Red	10. Led
11. Led	11. Red
12. Led	12. Ned
13. Red	13. Red

Red=Right Eye Dominance, Led=Left Eye Dominance,
Ned=No Eye Dominance

Red= 5

Led= 2

Ned= 6

Red= 6

Led= 3

Ned= 4

APPENDIX

Response Distribution for Dominant Stimuli Between Groups

Slide #	H	NH	H	NH	H	NH	H	NH
1	2	6	3	4	5	8	9	4
2	5	3	3	10	6	7	4	9
3	5	7	9	4	7	7	10	3
4	6	5	6	7	6	7	12	1
5	11	2	2	5	4	5	3	5
6	10	3	10	3	4	9	11	2
7	3	5	9	4	5	8	7	6
8	3	4	7	7	5	8	10	3
9	3	4	6	7	5	8	10	3
10	6	7	11	2	4	7	10	3
11	3	10	2	11	5	8	7	6
12	3	10	3	10	4	8	5	8
Total	75	67	76	67	80	83	93	50
Class	CT ₁	ET ₁	CT ₂	ET ₂				

APPENDIX C

Response Distribution for
Dominant Stimuli Within Groups

N/N Response	G ₁ -Groups		G ₂ -Groups	
	C	E	C	E
11/0				
10/1		1	1	
9/2	2			1
8/3	2			5
7/4	2	2	1	3
6/5	1			3
5/6	1	1	5	1
4/7	3	2	2	
3/8	1	1	2	
2/9	1		2	
1/10				
0/11				
	n=13		n=13	

n=13 n=13

n=13 n=13

APPENDIX D

Judges Score Sheet

NAME			AGE			M		F	
SCHOOL			ORGANIZATION						
SLIDE	H	NH	SLIDE	H	NH	SLIDE	H	NH	
1			24			47			
2			25			48			
3			26			49			
4			27			50			
5			28			51			
6			29			52			
7			30			53			
8			31			54			
9			32			55			
10			33			56			
11			34			57			
12			35			58			
13			36			59			
14			37			60			
15			38			61			
16			39			62			
17			40			63			
18			41			64			
19			42			65			
20			43			66			
21			44			67			
22			45			68			
23			46			TOTAL			

APPENDIX E
Score Sheet

TRIAL SUBJECT	1	2	3	4	5	6	7	8	9	10	11	12	T
1													
2													
3													
4													
5													
6													
7													
8													
DATE													

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