Relationship Science: An Overview

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Abstract: *Most human behavior occurs in the causally potent context of relationships. Taking this view, there has been an immense growth of research into interpersonal relationships within social-psychology and allied disciplines, especially in last three decades, resulting in the emergence of a new avenue of knowledge termed as relationship science. The goal of relationship science is to identify the causal conditions responsible for the oscillating rhythm of influence that might be demonstrated in regularities in the interaction pattern of two people. To that effect, relationship researchers engaged in seeking laws governing individuals' interactions with each other—or the influence each person's behavior exerts on his or her partner's behavior. This essay attempts to point out some of these interactional rules and patterns while making an overview of two mostly researched perspectives of relationship science: Relationship Typologies and Relationship Quality.*

Introduction

Although interpersonal relationship had been an important aspect of scholarly inquiry from classical times, it flourished significantly only in contemporary social-psychological research domain. Especially in last three decades, there has been an immense growth of this line of empirical research within social-psychology and allied disciplines, resulting in the emergence of a new avenue of knowledge termed as *relationship* science[1] (for a review, see Perlman, and Duck, 2006). Relationship scholars are collecting impressive evidence that relationships are crucial to our well-being and are among the things we consider most important in life. Early development of infants depends on an adequate relationship with parents or caregivers. Subsequently, relationships with other family members, with peer, with teachers, shape the developing personality of children. In adolescence and across the lifespan, close relationships with peers, and especially with spouses become important. An adequate network of personal relationships forms an important protection against psychological and physical ill health. In addition to having the potential to make people feel good, those with high quality or quantity of social networks have been shown to have a decreased risk of mortality in comparison to those who have low quantity or quality of social relationships [2].

With these kinds of implication in mind, researchers of communication studies and social-psychology, over the years, have developed various lenses to look into different aspects of interpersonal relationship. The purpose of the present paper is to offer a brief overview of some of these aspects with a view to familiarizing this relatively new field of

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knowledge to the Bangladeshi scholarly arena where this line of research is quite infrequent. To that end, this paper begins with an attempt to trace the history of the concept of interpersonal relationship to its philosophical roots. It then attempts to delineate the meaning of this construct which was conceptualized diversely by various scholars. Thereafter, this paper outlines a typology of interpersonal relationship insofar as it serves as the groundwork and anchorage for a relationship science. The remainder of the article focuses on the essential components of relationship quality, an area of immense research interest, introducing different measurement scales to tapping this construct developed by relationship researchers.

Historical Background: In his *Nicomachean Ethics* and treatise on *Rhetoric*, Aristotle [3] was concerned with the functions that relationships serve in our lives, the types of relationships that exist, age and individual differences in friendships, the antecedents of friendship choice, the speed with which relationships develop, how the larger patterning of relationships (e.g., social networks) influences an individual's friendships, and the deterioration of relationships.

The philosophical approach that Aristotle used dominated the analysis of close relationships until the late 1880s[4]. In the remaining part of that century, a number of founding figures in the modern social sciences began developing their viewpoints which were deemed to have implications for the understanding of relationships. These scholars from various disciplines include: Sigmund Freud, William James, Emil Durkheim, Max Weber, and Georg Simmel. One of the major developments of modern research in personal relationships has been the validation and recognition of the insights of these scholars from various disciplines to the whole picture of "relationships."

The first half of the last century evidenced some sporadic empirical studies relating to personal relationships under different labels. It was the latter half of that century that yielded a fair amount of research into interpersonal relationships which resulted in producing multifaceted theoretical perspectives. The leading relationship theorists of that time include: Byrne, Walster, Schachter, Aronson, Berscheid, Davis, Newcomb, and many others.

Especially from the late 1970s "winds of change seemed to be blowing across the field" (Perlman and Duck, 2006, p.19). In the mid 1980's, the publication of the first journal for the field, *Journal of Social and Personal Relationships*, and the establishment of two organizations, International Society for the Study of Personal Relationships (ISSPR) and International Network on Personal Relationship (INPR) gave impetus to the study of personal relationships to make its own way toward an international, multidisciplinary activity. Over the last decade, since ISSPR and INPR merged into International Association for Relationship Research (ISRR) in 2002, relationship science continues to be enriched by theoretical and methodological innovations resulting in establishing it as a specialized area of work.

The Meaning of Relationship: Contemporary scholars, over the years, put forth different definitional approaches to the concept of relationships, and in doing so, they in

one way or another seemed to harken back to the all time great thinkers like Max Weber, Georg Simmel. We might here look at some of these conceptualizations of relationship by early and contemporary scholars.

According to Weber [5], the term social relationship will be used to signify the behavior of a plurality of actors to the extent that, in meaningful content, the action of each takes account of that of the others and is oriented in these terms. Weber proceeded to posit two defining criteria for the existence of a social relationship. First, there must be at least a lowest degree of reciprocal orientation of the action of each to that of the other that can and usually will have consequences for the course of action and the pattern of the relationship. Second, there must be a probability of ongoing social interaction, which makes up the continuation of the social relationship.

Along the lines of Weber's observation, McCall [6] states that "a relationship is at base, the existence of a substantial probability of interaction between two persons" (p. 4). Within this basic definition, McCall figured out social relationships as forms of social organizations with the type of social bonds uniting the members, influencing the pattern the interaction might take on, which, in turn, might propagate and exhibit a distinctive, evolving tradition.

However, other scholars analyzed subtly various facets of relationship and attempted to conceptualize the construct correspondingly.

Simmel [7], one of the leading social thinkers of the last century, viewed interaction as the basis of social order and the legitimate arena for the study of different orders of social relations. He maintained that society appeared to be another name for the interweaving of the multiple array of relationships constituted in the members' forms of interaction with one another. To buttress this proposition, Simmel sketched the circularity of social life in his description of the concurrent interdependency of the visible and invisible threads that are woven between persons in the interaction process, such that relationships would seem to develop upon the basis of shared knowledge, and this knowledge upon the basis of the actual relations.

Simmel's conceptual and epistemological approach to relationship formed a foundation for more current approaches that have secured own positions in relationship science. A central interaction component underlies Hinde's [8] meaning of the nature of social relationships. This researcher defined relationships in the most simplistic term observing that it would seem involve a series of interactions between two individuals known to each other. Hinde states that a relationship implies "some sort of intermittent interaction between two people," "some degree of mutuality," and "some degree of continuity" (p. 14). He added that relationships involve behavioral, cognitive, and affective (or emotional) aspects.

Kelley et. al. [9] highlighted the interaction dimension and observed two preconditions of relationships. According to Kelly and his colleagues, two people are in a relationship with one another if they (i) impact on each other; and (ii) if they are interdependent in the

sense that a change in one person causes a change in the other and vice versa. According to this group of researchers, close relationships can be defined as the interconnections between two peoples' interaction chains that are strong, frequent and diverse interdependence that lasts over a considerable period of time. In contrast, weakly connected, infrequent, limited, and fleeting interaction would characterize distant relationships.

According to Bateson [10] personal relationships lie in the connection between two individuals; not in one or the other but in the between. Thus, the duality of the interconnecting principle based upon systemic or holistic epistemology is an essential feature of the relational perspective and meaning of relationship. The interconnection of difference, what Bateson calls "double description", is necessary for seeing relational pattern. Thus he concluded, "Relationship is always a product of double description" (p. 142). To make the point clear, Bateson set forth this analogy: "It is correct (and a great improvement) to begin to think of the two parties to the interaction as two eyes, each giving a monocular view of what goes on and, together giving a binocular view in depth. "This double view is the relationship" (p. 142).

Rogers [11], summarizing Bateson's and other scholars' account of the meaning of relationship in interpersonal communication, concluded that relationship might be defined as emergent, social structurings conjointly created by the members in the mutually influencing, interrelating process of communication. She identified four central defining themes of this perspective: the temporal pattern, joint construction, socialness, and ecological nature of relationships. In addition, this communication researcher proceeded with the view that the meaning of relationship in relational communication would seem to draw a distinction between individual members and relationship by underscoring the members' perceptions, interpretations, narratives, emotions, reflections, or remembrances. In other words, a relationship and its participants are not of the same making. As Rogers put it:

Relationships do not have feelings, make imputations, engage in sense making, and the like; only the members have these capacities. Relationships do not act, only members act, but out of their combined actions, an essential defining quality of relationship is evident — its social nature. (p. 79)

Relationship Typologies: The researchers, over the years, emphasized that to figure out a classification of relationships is fundamental in building the science of relationships. Hinde [12] argued that the advance of biology as a science, as it is the case with other sciences, was facilitated by the development of taxonomy and other means for systemizing knowledge. Indeed, Hinde pointed out the fact that human relationships would seem to be infinitely more diverse than the chemical elements or the taxonomist's species. By contrast, relationships are thought to be dynamic, involving ongoing processes, and therefore the generalizations we reach are likely to be applicable to some but not to others, and the description we make refers to processes over a slice of time. Consequently, the study field of personal relationships has evolved as a multiparadigmatic science that has a multitude of potential typologies.

The present essay limits itself to look at only the general typologies of human relationships that are termed as those classification schemes that attempt to identify the fundamental features of the whole length and breadth of human relationships. The reason behind such condensation is that a general typology of human relationships should make distinctions that are fundamental or basic to human relationships, and are likely to provide a bridge between the sociological, psychological, and biological factors of human relationships as well. In addition, general typologies would seem to apply cross-culturally, meaning that they might either be found in all cultures or they might explain cross-cultural variation.

The scholars primarily made a division of relationships into *personal* and *social* [13]. The most obvious dimensions on which this distinction is based are intimacy, closeness, or interdependence, with personal relationships being closer, more intimate, and interdependent and social relationships being more superficial and impersonal.

The researchers pointed out another common distinction that is between voluntary (i.e., open field) relationships and those that exist because of exogenous factors (e.g., born into them, employment). Some think that there is a qualitative difference between relationships that people choose for themselves and those that are chosen for them or controlled by exogenous factors (e.g., by law, biology, or external necessity).

From other viewpoints, the typology of relationships has been founded on two types of mutually causal interaction sequences, namely *reciprocity* and *compensation* [14]. In r*eciprocity*, behaviors of similar function are redundantly exchanged, leads to enactment of a *symmetrical* relationship (e.g., reciprocation of affection leading to mutual attraction). On the other hand, in redundant *compensation*, behaviors of maximally different functions are exchanged, which leads to enactment of a *complementary* relationship (e.g., leadership–subordination, teacher–student). Basing on these two sequences, scholars identified a pattern of *parallel* relationship that is characterized by flexible interaction such that, on one hand, the participants engage in both reciprocity and compensation and on the other, when compensatory patterns are enacted, participants do not always perform the same behavioral function.

The Four psychological models proposed by Fiske [15] emerged in last quarter century as one of the most widely researched and often used general typologies of human relationships. Fiske maintained that people in all cultures use just four basic *"models"* to organize their thinking and behavior regarding the motivation, planning, production, comprehension, coordination, and evaluation of human social life. The four models are *communal sharing* (*CS*), *authority ranking* (*AR*), *equality matching* (*EM*), and *market pricing* (*MP*). In a *CS relationship*, people treat all members of a category as equivalent. In other words, Participants in a CS relationship constitute the "in-group" and are seen as belonging together and acting as one social actor. In AR relationships, people attend to their positions in a linear ordering like a "chain of command", meaning that the privileges and responsibilities are based on relative rank here. In *EM relationships*, people keep track of the imbalances among them. Participants in EM relationships perceive

themselves as individuals who are relating with one another as equals. Finally, In MP relationships, people orient to ratio values. These relationships are concerned with socially meaningful ratios such as costs to rewards according to a distributive justice of entitlements in proportion to one's investments. Participants in MP relationships perceive themselves as individuals with potentially dissimilar valuations.

Although, Fiske's scheme would seem to be consistent with distinctions ordinarily made among relationships, Weiss[16] questioned on explanatory capability of this classification and concluded that it might have mistaken "a consequent for a determinant" (p. 673). Weiss then came up with a theory of the determinants of relationships that was described to lead to taxonomy of relationships. In this taxonomy, one class of relationships, *attachments*, includes relationships that are maintained by the incorporation of an image of the other into an emotional system associated with feelings of security, and a cognitive system associated with expectations, understandings. A second class of relationships, *affiliations*, includes relationships that are maintained by a sense of alliance based on common interest and mutual advantage. Weiss emphasized the notion that the attachment styles that children display in relation to their parents (e.g., secure, anxious, or avoidant) seem to be reflected, with modification, in adult relationships later in life. Accordingly, as Weiss suggested, in addition to the *child's attachment to the parents*, adult attachment relationships take three forms: (a) *pair-bond relationships*, (b) *parental relationships*, and (c) *guidance-obtaining relationships*, which connect feelings of security and accessibility with the presence of a specific other. *Pair-bonds* are durable and marked by the identical separation anxiety manifested by children in the absence of the parent. Weiss denoted *the parental relationship* from the perspective of the parents' bonds of attachment to their children identifying the distress that comes with separation or loss of custody and the parents' feelings of protection toward their child. *Adult guidance-obtaining relationships* are relationships in which the adult attaches to another who is seen as stronger or wiser (e.g., a client–therapist relationship).

The relationship literature also focuses on the classification of some types of relationships that are recognized and understood by even laypersons outside the scholarly community. Researchers have frequently proposed specific typologies for these most common groupings.

Family Typologies: In many cases family typologies are grounded on determinations made by the researchers reflecting structural properties of families. For instance, Crouter and Manke [17] identified three groups of dual-earner families based on fathers' and mothers' reports of work hours, job prestige, role overload and job involvement: high-status dual earner families, low-stress dual-earner families, and main-secondary provider families.

Apart from structural properties, family typologies in many cases base their categorizations on communication behaviors and patterns of family members. For instance, Reiss [18] put forward typology of consensus–sensitive, interpersonal distance-sensitive, and environment-sensitive families, in which environment-sensitive families

are best for the mental health of children. Such typologies were also depicted in Baumrind's[19] in the form of *authoritative, authoritarian*, and *permissive* families based on parenting style. The *permissive* parent attempts to behave in a nonpunitive, acceptant and affirmative manner towards the child's impulses, desires, and actions. The *authoritarian* parent attempts to shape, control, and evaluate the behavior and attitudes of the child in accordance with a set standard of conduct, usually an absolute standard, theologically motivated and formulated by a higher authority. The *authoritative* parent attempts to direct the child's activities but in a rational, issue-oriented manner.

This classification also encompasses typology sketched by Olson, Russell, and Sprenkle [20] which was based on the researchers' Circumplex Model of marital and family communication. This model is focused on the relational system and integrates three dimensions that have repeatedly been considered highly relevant in a variety of family theory models and family therapy approaches. Family cohesion, flexibility, and communication, the three dimensions in the Circumplex Model, emerged from a conceptual clustering of over 50 concepts developed to describe marital and family dynamics. According to this model, cohesion, defined as the emotional bonding that couple and family members have toward one another, has five levels ranging from disengaged-disconnected (extremely low) to somewhat connected (low to moderate), to connected (moderate), to very connected (moderate to high), to enmeshed/overly connected (extremely high). Of these, three are central or balanced levels of cohesion (somewhat connected, connected, and very connected) and two are unbalanced levels (disengaged and enmeshed). The Circumplex Model also includes the dimension of flexibility, defined as the amount of change in family's leadership, role relationships, and relationship rules, which has five levels ranging from rigid/inflexible (extremely low) to somewhat flexible (low to moderate), to flexible (moderate), to very flexible (moderate to high), to chaotic/overly flexible (extremely high). Communication, the third dimension in the Circumplex Model, is considered a facilitating dimension. Communication is considered critical for facilitating couples and families to alter their levels of cohesion and flexibility. Couple and family communication is measured by focusing on the family as a group with regard to its listening skills, speaking skills, self-disclosure, clarity, continuity tracking, and respect and regard.

There are also family typologies that are based on perceptions or judgments family members make about their own families rather than on perceptions and judgments made by external observers. An example of this line is the typology developed by Koerner and Fitzpatrick [21] that bases family types on the ways in which family members as individuals think about families. These researchers refer to these ways of thinking as schemas, or more specifically, relational schemas which consist of our knowledge about ourselves, others, and relationships, along with knowledge about how to interact in relationships. In other words, a schema is an organized set of memories that we make use of whenever you interact with other people. Basing on the premise that our interaction with other members of our family at any given time will be directed by relational schema, Koerner and Fitzpatrick grounded their typology on family communication patterns.

According to the typology, families that focus on concepts when creating social reality are conversation-oriented in their family communication, and families that focus on relationships when creating social reality are conformity-oriented in the family communication. In other words, families that have a high-conversation schema like to talk; in contrast, families with a low-conversation schema do not spend much time talking. Families with a high-conformity schema tend to go along with family authorities such as parents, while families low in this variable expect more individuality. Thus, the typology is based on two dimensions (conversation orientation and conformity orientation) that evoke the two dimensions of affiliation and power, which are core aspects of interpersonal relationships. Families that are high in both conversation and conformity have a *consensual* family communication schema. Their interactions are characterized by a tension between conforming to one another on one hand, and open communication and exploring new ideas on the other. Families oriented more toward conversation than toward conformity have a *pluralistic* family communication schema. Their interactions are characterized by open, unconstrained discussions that are open to and involve all family members. Families oriented more toward conformity than conversation have a *protective* family communication schema. Their communication is characterized by an emphasis on obedience to parental authority and by little concern for conceptual matters or for open communication within the family. Finally, families not oriented toward either strategy have a *laissez-faire* family communication schema. Their communication is characterized by fewer, and often uninvolving interactions about only a limited number of topics.

Marital Typologies: The researchers sketch marital typologies mostly on the basis of the differences in behaviors of the spouses, which have substantially increased our understanding of important relational processes and the relational and social consequences of certain types of behaviors and patterns. For example, Rosenfeld, Bowen, and Richman [22] advanced the typology of dual-career families that classified marriages as collapsing, work-directed, and traditional role marriages based on spouses' participation in family activities.

There are also typologies that are based on behavioral differences as well as on how relationships are represented cognitively by participants. Perhaps the most noteworthy in this kind of classification is Fitzpatrick's[23] marital typology. Based on a content analysis of extant statistical and mathematical models, Fitzpatrick specified to assess the essential dimension of married life. The resulting Relational Dimensional Instruments (RDI) yielded eight dimensions. These are: sharing, traditionalism, uncertainty, assertiveness, temporal regulation, conflict avoidance, undifferentiated space, and autonomy. Four of these dimensions ─ sharing, traditionalism, uncertainty, and conflict avoidance ─ came out as to be functional in classifying couples into three types: *Traditionals, Independents, and Separates.* Couples that were classified as traditionals hold conventional values, value stability over spontaneity, are highly interdependent showing a high degree of sharing and companionship in marriage, and do not avoid conflict. Interdependents differ from traditional by holding unconventional values and believing that marriage should not

constrain their individual freedoms. Separates appeared to hold opposing ideological views simultaneously supporting the values of traditionals and independents, but keep a psychological distance from the spouse and avoid conflict.

Parent–Child Typologies: It might be noted here that in relationship literature family typologies are frequently based on parent–child relationships, resulted in much overlap between family typologies and parent–child typologies, and thus it will not be repeated here. Some classification schemes, however, have been more specifically defined for parent–child dyads without concern for the family context. Ainsworth, Blehar, Waters, and Wall [24] categorized children as *secure, anxious–ambivalent*, or *avoidant*.

Bartholomew[25] developed, based on internal working models of self and other, a system of four attachment styles: *secure, preoccupied, fearful, and dismissive avoidant*. Secure individuals display high self-esteem and an absence of serious interpersonal problems. Preoccupied individuals are characterized by an insatiable desire to gain others' approval and a deep-seated feeling of unworthiness. The children of fearful category desire social contact and intimacy, but experience pervasive interpersonal distrust and fear of rejection. Dismissive children passively avoid close relationships; they place much value on independence and assert that relationships are relatively unimportant.

Sibling Typologies: As sibling relationships often last a lifetime and go through significant changes over time, scholars have suggested different typologies for different life stages. For instance, Stewart, Verbrugge, and Beilfuss [26] categorized adult siblings, in terms of the relative warmth, conflict, and rivalry experienced by members of the sibling dyad, as *caretaker*, *buddy*, *casual*, or *loyal*. In addition, Gold [27] described five types of sibling relationships in old age based on their involvement with each other: the *intimate*, the *congenial*, the *loyal*, the *apathetic*, and the *hostile*. Each type was thought to reflect a discrete pattern of instrumental support, emotional support, and contact, as well as a different degree of closeness, envy, resentment, approval, and involvement with the sibling.

There are sibling typologies, as it is the case with family typologies, that are based on structural properties. The examples of such typologies include Gibbs, Teti, and Bond's [28] widely spaced and closely spaced dyads, and those based on birth order.

Stormshak, Bellanti, and Bierman's [29] set out a typology of Sibling relationship that was based on combinations of conflict and warmth, and specified 3 types of sibling dyads: *conflictual* (high levels of conflict, low levels of warmth), *involved* (moderate levels of conflict and warmth), and *supportive* (low levels of conflict, high levels of warmth).

Romantic and Premarital Relationships: The conceptualization of romantic and premarital relationships, as it is the case with other relationships, evidenced a great deal of variance. The reason behind such disagreement might be the fact that in some ways romantic relationships can be conceptualized as occupying a middle ground between friendship and marriage. In other words, a romantic relationship would seem to contain all of the elements of a friendship, plus a mutually acknowledged sexual attraction. On

the contrary, a marriage generally might contain all the elements of a romantic relationship, plus a legally recognized commitment. Consequently, as Shulman and Knafo [30] argued, there might be found parallels between types of friendships and types of romantic relationships on one hand, and between types of romantic relationships and types of marriages on the other. For instance, Shulman and Knafo examined both close friendships and romantic relationships in adolescence using the same methodology as to evaluate and assess the types of these relationships, and set out same two principle types: *interdependent* and *disengaged* (also similar to some marital types). These researchers found interdependent romantic relationships to have greater emotional closeness than disengaged romances.

Gaines [31] conducted a cluster analysis in an attempt to uncover a taxonomy of specific gender-related, trait-role constellations of romantic relationships. The cluster analysis revealed three distinct groups, which were labeled as *respect-giving reversed* (men viewed themselves as respectful of women), *affectionate* (women and men view themselves as affectionate and reject gender roles, men low in respect giving), and *traditional* (both sexes accept gender roles, women expressive, and men instrumental).

Fowers and Olson [32] Identified 4 types of engaged couples using the premarital inventory which was labeled as PREPARE. The four category typology included *vitalized* couples, p*resent-oriented* couples, *future-oriented* couples, and *conflicted* couples.

Relationship Quality: The term relationship quality refers to a good quality marriage or other comparable intimate relationships, as well as various relationships in family or organizational contexts. A vast array of investigations into personal and social relationships incorporated relationship quality either as a primary focus or as a covariate. Correspondingly, numerous measures of this construct have been developed, with multiple methods of assessment. In this essay, a catalogue of these measures is documented. Before advancing, we might here note that this essay limits itself in cataloguing three types of relationship quality measurement marital, parent-child, and sibling relationships.

Perhaps the two most widely used measures of marital quality are the Locke-Wallace Marital Assessment Test (MAT) [33] and the Dyadic Adjustment Scale (DAS) [34]. While the 15-item MAT was designed to assess marital quality as a unitary construct, the 32-item DAS put forth a measurement scale to assess four subcomponents of relationship quality of marriage and other similar dyads — *dyadic satisfaction*, *dyadic cohesion*, *dyadic consensus* and *affectional expression*.

 Norton [35], presenting both semantic and empirical criteria to judge the development of a marital quality index, constructed scale which he claimed to possess several statistical advantages over abovementioned measures. Norton's scale was termed as The Quality Marriage Index, which only focused on marital relationships, setting aside unmarried couples or non-romantic dyads. The Kansas Marital Satisfaction Scale (KMSS) [36] also focused on marital relationships only.

Sibling relationships, a significant dimension of family relationships, have called much attention in the research arena in recent times. Because of increased interest in the sibling relationship and its effects on developmental outcomes in childhood and adolescence, there are now several different questionnaires available to assess sibling relationship quality. Among these scales, the Sibling Relationship Inventory (SRI) [37] and the Sibling Qualities Scale [38] have been used predominantly with children in elementary school and the period of adolescence. The Sibling Relationship Questionnaire was a 17-point scale that was designed to assess four dimensions of sibling relationships — *warmth/closeness*, *relative status/power*, *conflict*, and *rivalry*. The Sibling Relationship Inventory also was a 17-point measurement scale that was designed to assess four dimensions of sibling relationships: affection, hostility, rivalry, and power symmetry. Sibling Qualities Scale (SQS) attempted to measure sibling's conflictual and positive relationship quality including *caring, intimacy, and conflict resolution.*

The factor structure of the Adult Sibling Relationship Questionnaire [39] indicated that sibling relationships in early adulthood were characterized by 3 independent dimensions: *warmth*, *conflict*, and *rivalry*. The Lifespan Sibling Relationship Scale [40] measured three dimensions of the sibling relationship in childhood and adulthood: frequency and positivity of behavior toward the sibling, affect toward the sibling, and beliefs about the sibling and the sibling relationship.

The quality of the relationship between parent and child has been shown to have a substantial impact on the child's functioning. Researchers observed the quality of parent-child relationship through different lenses, and in so doing they emphasized different aspects of such relationships. Sharma and Chauhan [41] set forth parent-child relationship scale that measured this kind of relationship in the form of *rejection* versus *acceptance*, *carelessness* versus *over protection*, *negligence* versus *over indulgence*, *strong realism* versus *expectation*, *freedom* versus *severe discipline*.

The Parent Environment Questionnaire (PEQ) [42], developed by Elkins, McGue, and Iacono, is a 42-item self-report inventory that assesses five factorially derived aspects of the relationship of each parent–child dyad in the family — *conflict*, *parent involvement*, *regard for parent*, *regard for child*, and *structure*. Each item of this inventory is answered on a 4-point scale.

The *Network of Relationships Inventory (NRI): Behavioral Systems Version* [42] was also used to assess adolescents' relationships quality with their primary mothers and fathers on 8 scales: (i) adolescent seeks safe haven, (ii) adolescent provides safe haven, (iii) adolescent seeks secure, (iv) adolescent provides secure base, (v) companionship, (vi) quarreling, (vii) criticism, and (viii). All items were rated on a 5-point Likert scale.

Conclusion: Bersceid [43] argued that relationships would seem to be the context in which most human behavior occurs, and so understanding and predicting that behavior might be difficult, if not impossible, if that context be ignored. Thus the most important potential of relationship science is to improve our understanding of human behavior. In effect, the relationship science has the potential to extend our knowledge of human behavior to

people's daily lives and natural surroundings, as well as to inform many issues of national concern. Consequently the relationship science has emerged as both international in scope and multidisciplinary in nature. It encompasses, for example, psychology, sociology, anthropology, communication studies, marital and family therapy. This field also encompasses many of the health sciences, including epidemiology, traditional and alternative medicine, nursing, pharmacology, and veterinary science with its interest in human-companion-animal relationships.

In summary, the scholars characterized relationship science as an essential science to the effect that it is deemed to be necessary to the further development of the social, behavioral, and biological sciences. Because, as Bersceid concluded, "…relationships with other humans are both the foundation and the theme of the human condition: We are born into relationships, we live our lives in relationships with others, and when we die, the effects of our relationships survive in the lives of the living, reverberating throughout the tissue of their relationships"(p. 261-262).

With such importance of the study of interpersonal relationship in view, the present paper offered a brief sketch of this emerging science. It specially focused on the history, philosophical roots, meaning and typology of this construct, as well as set forth a catalogue of measurement scales of relationship quality. Mapping such significant philosophical and theoretical underpinnings of relationship science might be useful for future research in this arena.

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